

Canadian Environmental NGO Perspectives on a Global POPs Treaty

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0. EXECUTIVE SUMMARY

In Canada, tens of thousands of substances are in commercial use and many more are introduced for commercial applications each year. While a small minority of these substances are naturally occurring, a significant majority are anthropogenic in origin. Exposure to some of these substances has been linked to a variety of health effects in wildlife and humans, including cancers, immune system problems, feminization in males and masculinization in females, and reproductive and other developmental effects. Children appear to be at greatest risk from exposure to these substances.

The Canadian environmental non-governmental organization (NGO) community has been advocating for effective action on toxic substances for many years through involvement in the development and implementation of government programs, policies and legislation. Members of the Canadian Environmental Network (CEN) Toxics Caucus have prepared this paper as a guide for participation in negotiating a global Treaty on Persistent Organic Pollutants (POPs) under the auspices of the United Nations Environment Programme (UNEP). The negotiations for a global Treaty on POPs provide an opportunity for a legally binding global Agreement to ban and/or eliminate sources and releases of POPs.

Through research and action within Canada's borders and beyond, much knowledge has been gained on the generation, transport, fate and effects of POPs and other toxic substances. UNEP has identified twelve POPs for priority action including some of the most toxic anthropogenic substances ever produced. All twelve substances are chlorinated chemicals. Many are pesticides but others are industrial chemicals and unwanted, unintentionally produced by-products of industrial processes or combustion of materials containing chlorine. All twelve are known endocrine disruptors and most are known carcinogens.

The persistent nature of these substances, their inability to degrade and their ability to bioaccumulate up the food chain have contributed to the increases observed in the levels found in human tissues since the pre-industrial era. All Canadians carry a significant body burden of these substances and no-one is immune from exposure. There are two major geographical regions within Canada where a significant body of POPs research have been developed over time - the Arctic and the Great Lakes. The grasshopper effect (repeated evaporation and re-deposition of the substance) can explain why substances such as DDT are found far from their sources such as the Arctic regions.

Sources of POPs include PCBs which are still used in electric equipments in Canada; Noranda's Magnolia magnesium plant in Quebec which, when it is brought into production is projected to be a significant source of hexachlorobenzene, dioxins, furans, and PCBs; any other future magnesium production facilities using the chlorine-based process; waste incinerators; pulp and paper mills; production and disposal of PVC plastic (also known as vinyl); by-products of pesticide production and contaminants in

chlorinated pesticides; any metallurgical processes involving chlorine chemistry; accidental fires such as the PVC fire at Plastimet Inc. in Hamilton, Ontario, in July 1997; and contaminated soils and sediments.

The legislative framework at the federal level in Canada to address toxic substances such as POPs includes the Toxic Substances Management Policy (TSMP) and the *Canadian Environmental Protection Act* (CEPA). CEPA is currently under review by the federal government. In the past, members of the CEN Toxics Caucus have highlighted a number of issues of concern with respect to the TSMP and CEPA review, in particular regarding the definition of virtual elimination (VE). The most contentious debate in Canada regarding toxic substances is whether or not a control or an elimination approach should be taken. Integral to this debate is an appropriate definition for virtual elimination of persistent toxic substances. However, implementation efforts should be undertaken immediately to eliminate persistent toxic substances in a timely manner. It is feared that the Canadian delegation to the POPs negotiations will be constrained in this debate due to domestic policy and legislation, such as the TSMP and CEPA.

The CEN Toxics Caucus highlighted a number of points critical in guiding negotiations for a global Treaty on POPs. These points include:

- * The need for the Canadian government to provide a transparent process for timely and effective input and feedback from various stakeholders for the Canadian delegation on issues relating to POPs;
- * The need for the Canadian government to press for a global Treaty requiring elimination of the twelve listed POPs;
- * The development and implementation by the Canadian government of an action plan to eliminate the twelve listed POPs and other POPs not on the initial UNEP list;
- The development of a solid science based set of criteria for proposed additions to the initial list of twelve substances;
- * The use of a definition of VE that takes a pollution prevention approach by addressing the use, release, generation and production of substances, instead of the TSMP definition;
- * The mandatory reporting of all the listed POPs through improvement of the National Pollutants Release Inventory (NPRI);
- * The need for significant support for non POPs generating technology transfer; and
- * The need for alternatives research and implementation for key POPs of concern in southern countries (e.g., DDT).

Environmental NGO representatives, who participated in a stakeholder meeting held in December 1998, expressed concerns about the statement made by delegation officials that the global Treaty negotiations would not change current toxic substances management in Canada, but that they were designed to bring other countries up to Canadian standards. In Canada, of the twelve POPs currently on the UNEP list for

initial action, PCBs, hexachlorobenzene, dioxins and furans still pose significant threats to the health of Canadians and the environment from domestic sources. The development of action plans by the Canadian government for the elimination of these POPs would provide concrete evidence that Canada takes a global Treaty on POPs seriously enough to demonstrate international leadership by example. However, if an approach such as the one embodied by the POPs and heavy metals Protocol to the United Nations Economic Commission for Europe(UNECE) Convention on Long-range Transboundary Air Pollution is adopted for the global Treaty on POPs, it will serve only to legitimise the continued production, use and release of some of the most dangerous substances.

There are key components that must be incorporated into an effective Treaty on POPs, including:

- * the list of substances targeted for elimination; and
- * how exceptions from immediate elimination will be outlined in the Treaty.

The members of the CEN Toxics Caucus propose that all twelve of the initial POPs be listed on the elimination list.

Finally, the CEN Toxics Caucus are concerned that the negotiations towards a global Treaty on POPs will merely put a stamp of approval on a deeply flawed system for managing substances that are by their very nature unmanageable. By extending CEPA and/or the TSMP to the international stage, without domestic actions to put our own house in order, will merely send the message that northern countries such as Canada do not take a POPs Treaty seriously enough. The global Treaty on POPs will be seen as merely a license to continue the status quo at the international level - a status quo that is increasingly unacceptable to people around the world.

1.0 OVERVIEW

1.1 Historical Perspectives On Toxic Pollution

Since the dawn of the industrial revolution, and more particularly since World War II, the global human and wildlife population and their environment have been exposed to continuous releases of toxic substances from a rapidly expanding manufacturing and industrial sector. In Canada, tens of thousands of substances are in commercial use and many more are introduced into commercial application each year. While a small minority of these substances are naturally occurring, a significant majority of these substances are anthropogenic in origin. Exposure to some of these substances have been linked to a variety of health effects in wildlife and humans, including cancers, immune system problems, feminization in males and masculinization in females, and reproductive and other developmental effects.¹ Children appear to be at greatest risk from exposure to these substances.

In a recent report by the Commission on Environmental Co-operation (CEC) Taking Stock: North American Pollutants Releases and Transfers 1995 the releases and transfers of pollutants from U.S. and Canadian facilities reporting totalled just below 3.0 billion kilograms (kg) of pollutants.² Canadian facilities accounted for 394 million kg of the pollutants into the environment. The U.S. Toxic Release Inventory (TRI) and the Canada's National Pollutants Release Inventory (NPRI), the databases that form the basis of CEC report have determined that approximately 195 million kg of these releases are substances which are known or suspected carcinogens. In 1996, Canadian industries reported the release of 22,679.089 tonnes of carcinogenic pollutants.³ The NPRI and TRI inventories report on some 169 common substances. It is estimated that the inventories may account for only five percent of total releases.⁴ These inventories provide limited information and do not provide information on some key pollutants such as dioxin and furans which are known to impact on health and the environment, due in part to the reporting thresholds such as amount of substance released into the environment.⁵ The absence of such information begins to take on more significance for substances which are considered persistent and toxic because of their ability to remain in the environment for a very long period of time.

Numerous studies show the insidious nature of toxic substances. For instance, human and wildlife populations found distances from the source of pollution have been greatly impacted. The Arctic region evidently has provided ideal conditions (i.e., colder climate) for the deposition of some of the most dangerous substances, such as DDT, dioxin and PCBs. In some cases, humans have exhibited higher levels of certain substances in their body tissues than those humans living in southern regions. Increases in human tissues levels of toxic substances have mainly been attributed to the persistent nature of some of these substances, their inability to degrade and their ability to bioaccumulate up the food chain. The grasshopper effect (it works on the basis of repeated evaporation and deposition of the substance) explains why substances such as DDT

are found far from their sources, but deposition can be dependent on temperature and wind patterns.⁶

Nowhere in the world has there been more documentation on the issue of toxic pollution than in the Great Lakes Basin. The protection of the Great Lakes ecosystem is the responsibility of the Canadian and U.S. government. The bi-national body, the International Joint Commission (IJC) has played a significant role in providing advice to the governments in developing policy decision to manage persistent toxic substances in the Great Lakes ecosystem. The work of the IJC has been pivotal in highlighting the impacts on human and wildlife population and their environment. Recognising the destructive nature of persistent toxic substances, the IJC recommended that the U.S. and Canadian governments adopt a policy framework of zero discharge and virtual elimination (VE) for persistent toxic substances. In its Sixth Biennial Report the IJC defines zero discharge in this way:

Zero discharge means just that: halting all inputs from all human sources and pathways to prevent any opportunity for persistent toxic substances to enter the environment as a result of human activity. To prevent such releases completely, their manufacture, use, transport and disposal must stop; they simply must not be available. Thus, zero discharge does not mean less than detectable. It also does not mean the use of controls based on best available technology, best management practices, or similar means of treatment that continue to allow the releases of some residual chemicals.⁷

Further, an IJC task force published a two-volume report in 1993 prior to the Seventh Biennial Meeting. Investigating a variety of strategies for implementing VE, the task force recommended that a VE framework had to be based on the following elements:

- * The tactic of zero discharge from human activity.
- * An integrated multi-media approach.
- * Consideration of the full life cycle of products and processes.
- * The weight of evidence approach.
- * The reverse onus approach.⁸

Finally, the IJC's implementation of a VE strategy for persistent toxic substances in the Great Lakes Basin had to integrate several interdependent components. They are elimination; adoption of a product/materials use policy; use reduction; and control, treatment, and remediation.⁹

Globally, the recognition of the effects of toxic substances has resulted in a number of international, bi-national and regional Agreements and Treaties, including regional

Agreements in Europe (OSPAR), Africa (Bamako Convention) and the signing of the United Nations Economic Commission for Europe (UNECE) Protocols on Long Range Transport of Air Pollutants (LRTAP) which includes a list of sixteen persistent organic pollutants (POPs) and a supplementary Protocol that addresses five heavy metals of concern. The Protocols were signed in Arhuus, Denmark in June 1998. Canada has recently ratified both Protocols. Governments from sixteen countries will need to ratify the Protocols before LRTAP enters into force.

1.2 Purpose Of This Paper

The Canadian government has recognised the need for input into the United Nations Environment Programme's (UNEP) global POPs process from environmental non-governmental organisations (NGOs). This paper fulfils, in part, a commitment between Environment Canada and the Canadian Environment Network (CEN) Toxics Caucus. The Canadian environmental NGO community has been advocating for effective action on toxic substances for many years through involvement in the development and implementation of government programs, policies and legislation. Through research and action within Canada's borders and beyond, much knowledge has been gained on the generation, transport, fate and effects of POPs and other toxic substances.

Initiatives by the federal government such as the *Canada-Ontario Agreement* respecting the Great Lakes Ecosystem, the recent review of the *Canadian Environmental Protection Act* (CEPA), and the Toxic Substances Management Policy (TSMP) to name a few have not, and may not in the future, significantly curtail the impact of these toxic substances on human and wildlife populations.

The UNECE Convention on the LRTAP indicate that concern about POPs and other toxic substances is sufficient to warrant coordinated action by governments internationally. However, the provisions negotiated under the LRTAP Convention have merely served to perpetuate the status quo with respect to pollution control versus pollution prevention, obsolete production processes versus material substitution and clean production alternatives.

The UNEP POPs Treaty provides an opportunity for a legally binding global Agreement to ban and/or eliminate sources and releases of POPs. The Treaty negotiations are scheduled to be completed by the end of 2000, and a concluding diplomatic conference has been scheduled for Stockholm early in 2001. If this Treaty fails to break new ground and provide a legally binding global instrument that will actually **eliminate** sources of POPs, an opportunity to provide political, market and other incentives towards clean production will be lost for perhaps another generation. Community and market-based solutions involving processes and products that are not harmful to the environment and human health are the preferred outcomes for a successful and meaningful Treaty. A Treaty that simply enshrines the principle of substituting one

harmful POP for another toxic substance based on obsolete risk assessment principles is not, in our opinion, an acceptable course of action.

The members of the CEN Toxics Caucus have prepared this paper as a guide for its participation in negotiating a global Treaty on POPs. In June of 1998, the Caucus was invited to prepare a preliminary paper outlining concerns and goals for the negotiations.

The report titled, Persistent Organic Pollutants: Making A Treaty for Global Elimination was released at the first meeting of the Intergovernmental Negotiating Committee (INC) in June 1998 in Montreal, Quebec. A copy of this paper has been included as Appendix A.

2.0 WHAT ARE PERSISTENT ORGANIC POLLUTANTS?

The initial list of twelve POPs identified by UNEP for priority action in this process include some of the most toxic anthropogenic substances ever produced. All twelve on the initial list are chlorinated chemicals. Many are pesticides but others are industrial chemicals and unwanted, unintentionally produced by-products of industrial processes or combustion of materials containing chlorine. All twelve are known endocrine disruptors and most are known carcinogens.

Initial List of 12 POPs For Inclusion Into The New Treaty
DDT, PCBs, Dieldrin, Endrin, Aldrin, Chlordane, Mirex, Toxaphene, Dioxin, Furans, Heptachlor, Hexachlorobenzene.

POPs exhibit a number of common characteristics; they are persistent, bioaccumulative and toxic. In addition, many of these substances have the ability to travel long distances from their original source via the Agrassshopper effect[®] mechanism. POPs generally resist degradation in water and air and build up readily in the fatty tissue of mammals - especially top predator species including humans.

In literature surveys, the IJC and others have found impacts of POPs to be wide ranging. They include:

- * population decline and reproductive effects;
- * egg shell thinning;
- * metabolic changes;
- * deformities;
- * tumours, including cancers of numerous sites;
- * behavioural changes;
- * hormonal changes;
- * immune suppression; and more.

Often the damage from exposure to POPs is seen not in the exposed generation, but in their off-spring.¹⁰ Exposure to very small amounts in the parts per trillion range - of these endocrine disrupting substances at an important stage in foetal or infant development can be more harmful than larger doses later on. Such effects are known to occur at levels many times lower than the currently accepted No observable effect levels (NOEL).¹¹ This underlines the need for a pollution prevention-based approach to these substances where their production, use and generation is prevented through process changes and product substitution. The simple setting of emission limit values (ELVs) for the most dangerous POPs will generally only ensure their continued production and/or generation.

Finally, the pervasiveness of POPs is evident by their presence in remote regions such as the Arctic and in glacial waters from mountain regions,¹² indicating gross contamination of areas far from major POPs sources. In some cases, POPs may degrade into more persistent and hazardous break down products. This is the case with DDT which breaks down into DDE, a metabolite which has been detected in the Arctic. There is little, if any, record of DDT use in the Arctic. Earlier in 1998, hermaphroditic Polar bears were discovered on the Polar Archipelago of Svalbard.¹³ Such an occurrence may be associated with exposure to PCBs, a key class of POPs. In 1997, Indian and Northern Affairs Canada reported levels of PCBs in Polar Bears on Prince Patrick Island (in the Western Arctic) of 20 micrograms per gram in fat.¹⁴ In human samples collected from Inuit women, total PCB levels were elevated approximately five-fold when compared to a Southern, non-aboriginal women.¹⁵ PCBs and other POPs are stored in breast and other fatty tissue and intergenerational transfer of POPs takes place during pregnancy and lactation. The average breast fed baby in Canada exceeds World Health Organisation's (WHO) maximum tolerable daily intake for dioxin by a factor of fifteen.¹⁶ Recent studies among Inuit infants and children in Northern Quebec have associated exposure to PCBs with a greater susceptibility to infection, reduced attention spans or learning ability, and reduced I.Q..¹⁷ Despite these worrisome trends, experts remain unanimously in favor of breast feeding because of the numerous benefits - but it is entirely unacceptable that breast and body tissue remains polluted by these man-made substances.

2.1 Sources of POPs

There are two major geographical regions within Canada where a significant body of POPs research has developed over time - the Arctic and the Great Lakes. Although POPs are found in all environmental media - water, air, and land, for most Canadians the main exposure pathway is through food,¹⁸ especially high fat foods such as dairy products, fish, meat and marine mammal fat.

Despite legislative action by the Canadian government to ban the use of several substances including DDT and PCBs, and to reduce stockpiles, these substances are still present in humans and wildlife at levels high enough to cause concern in Canada and elsewhere. PCBs were used widely between 1940-1977 for industrial applications

such as electrical transformers coolants, fire extinguishers, plasticizers and in paints. In 1970s, the use of PCBs were severely restricted. However, PCBs continue to enter the environment through volatilising stockpiles, leaking transformers, the burning of PCBs, the generation of PCBs as unintentional by-products of incineration,¹⁹ and the deliberate use of PCBs as a component of dust suppressants on roads.²⁰ Currently, efforts to keep up-to-date inventories of PCBs in Canada are weak and require further attention.²¹

According to the Canadian Arctic Contaminants Assessment Report, world wide use of many POPs was most significant between the period 1930-1992, when global production of PCBs was 1.2 megatonnes, DDT 2.6 megatonnes, and chlordane 5.6 megatonnes.²²

Production of certain POPs remain a problem within Canada. It is estimated that Noranda's Magnolia magnesium plant located in Asbestos, Quebec could increase Canadian industrial air emissions because the figure excludes emissions resulting from HCB as a pesticide contaminant of hexachlorobenzene (HCB) by 5 to 50 per cent, when the plant goes on line in 2000. Canadian dioxin emissions to land/landfill from this sole facility could increase total Canadian emissions by 12%.²³ Dioxins, furans, HCB and PCBs are also produced and/or released as by-products of other industrial sectors across Canada.^{24, 25} Recent preliminary studies have cited the Great Lakes region as a significant source of POPs to the Arctic, via the grasshopper effect.²⁶

In the Southern hemisphere, perhaps one of the biggest challenges for any elimination strategy for the initial list of twelve POPs is the pesticide DDT. Its use for vector control in the fight against malaria -- which claims the lives of an estimated 3,000 people per day world wide²⁷ -- underlines the need to ensure that proven, viable alternative strategies for malaria control are in place before this POP can be safely phased out. However, one cannot help but observe that one of the earliest advocates for the Arational and limited application²⁸ of DDT, Rachel Carson, first highlighted her concern in 1962,²⁹ some 36 years ago. It seems that without an imperative for elimination being negotiated into the current Treaty, DDT elimination is far from a certainty.

The WHO currently endorses the use of DDT for indoor house spraying against malarial mosquitoes. Concerns about increasing insect resistance to DDT; the exposure of pesticide applicators and home dwellers; its entry into the environment and subsequent transport and bioaccumulation in organisms (including humans) distant from the point of entry; and its health effects on humans and wildlife have led to a call by World Wildlife Fund for its phase-out by the year 2007.³⁰ Currently, the annual production of DDT is estimated to be 30,000 tonnes per year - with at least Russia, Mexico and China producing and exporting DDT. As of 1995, forty-nine countries eliminated all uses of DDT.³¹

In Northern countries continued production of POPs by-products, notably dioxins, furans, hexachlorobenzene and PCBs continues largely unabated in certain areas. Rather than focus on elimination strategies, new international or regional Protocols have set ELVs for incinerators and domestic policy and legislation is in danger of enshrining quasi ELVs for a number of other POPs through inappropriate definitions of VE. In Canada, the dioxin inventory lists municipal solid waste incinerators, bio-medical waste incinerators and hazardous waste incinerators as the largest contributors to Canada's dioxin burden. However, dioxin emissions also continue from both older chlorine industries (e.g., pulp and paper mill production where the bleaching agents are chlorinated and PVC production of PVC plastic (also known as vinyl)) and new facilities (e.g., the Magnolia magnesium smelter in Quebec). Stockpiles of PCBs as well as contaminated soils and sediments also pose an ongoing hazard that have yet to be effectively addressed. Although deliberate production of PCBs has largely been eliminated around the world, the Russian government announced as part of the LRTAP negotiations that they still continue to produce certain PCBs to support the Russian electrical grid system.

<p>Domestic sources for POPs include:</p> <ul style="list-style-type: none"> • PCB laden transformers still in use and in storage; • emissions from municipal solid waste incinerators, hazardous waste incinerators and medical waste incinerators; • pulp and paper mills using chlorine gas or chlorine dioxide bleaching technologies; • Polyvinyl Chloride (PVC plastic or vinyl) production and disposal; • by-products of pesticide production (e.g. , Pentachlorophenol); • contaminants in pesticides; • metallurgical processes involving chlorine chemistry; • accidental fires - including industrial fires such as the PCB fire at Ste. Basile-le-Grande, Quebec; and the PVC fire at Plastimet Inc., Hamilton, Ontario; and • contaminated soils and sediments.
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2.2 Recipients of POPs

The wide use of pesticides and industrial substances globally has had a profound impact on the Canadian environment and its population. Currently, Canada is considered a net recipient of POPs, although evidence has recently emerged that the Great Lakes region can still be considered a significant POPs source to the Canadian environment.³² The problems associated with persistent toxics are evident across all environmental media. All Canadians now carry a significant body burden of these toxic chemicals and no-one is immune from exposure. However, some sections of society

are at higher risk. In particular children, nursing mothers, and aboriginal persons in both the Arctic and the Great Lakes regions whose diet includes high levels of contaminated fish and meat are at higher risk.

3.0 LEGISLATIVE FRAMEWORK IN CANADA TO ADDRESS POPS

At the federal level, a number of laws and policies address toxic substances in general and POPs more specifically. Key among these is the Government of Canada's TSMP, CEPA, and the *Pest Control Products Act* (PCPA).

Within Canada, the most contentious debate concerning toxic substances over the past few years has been regarding whether or not a control approach - limiting emissions of substances to the environment should be taken, or an approach that ensures that the most dangerous substances are removed from use and production, or prevented from being generated as by-products. This control vs. elimination debate is a crucial one in the international arena. It is feared that the Canadian delegation to the POPs negotiations will be greatly constrained in this debate due to domestic policy and legislation.

3.1 Toxic Substances Management Policy

The TSMP was announced in 1995 to address the most persistent toxic substances in Canada. Using a two track approach, substances which meet the criteria for persistence, toxicity, bioaccumulation, and being primarily anthropogenic in origin will be targeted for virtual elimination (VE) under Track 1. Substances that are of concern, but do not meet the strict criteria set out for Track 1, are put on Track 2 - a life cycle management approach. The TSMP states that the TSMP will be used as the basis for the Canadian positions in international negotiations³³ including the global negotiations for a POPs Treaty.

When the TSMP was released, the environmental community expressed its concerns³⁴ regarding several key issues, including:

- * **the definition of virtual elimination (VE) was based on the notion of no measurable release to the environment.** This definition contradicts the definition provided by the *Great Lakes Water Quality Agreement* (GLWQA), the Standing Committee on Environment and Sustainable Development, a parliamentary committee responsible for the current review of CEPA (see below), and the federal government's own Pollution Prevention: A Federal Strategy for Action. A VE definition based on no measurable release will continue to permit the use of pollution control techniques that aim to reduce pollution only at the point of release from a facility.

- * **attempts to determine Any measurable release limits will greatly depend on the control technology used.** Setting limits and identifying appropriate technology to set limits may be controversial.
- * **a misinterpretation of the concept of Precautionary principle and reverse onus.** The TSMP provides industry with an opportunity to argue for continued use and generation of a persistent toxic substance even after it has been identified for VE under Track 1. The TSMP place(s) the responsibility on those who generate or use Track 1 substances to demonstrate that these substances will not be released into the environment in measurable concentration at any point in their life cycles,...³⁵ Agenda 21, the consensus document from the 1992 Rio Earth Summit, sets out the rationale for action in the face of uncertainty:

Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.³⁶
- * **addresses substances in Track 1 only if the majority of its release to the environment is proven to be of human origin.** Sources of release to the environment of some key substances, particularly metals, are controversial. Nevertheless many of these substances have the characteristics of toxicity, persistence, and bioaccumulative ability - and therefore pose a significant threat to the environment and human health. This characteristic is seen to be a significant barrier to action on these substances.
- * **puts into place the High wall approach to action on substances.** Criteria for persistence, bioaccumulation, CEPA-toxicity and primarily anthropogenic origins are so strict that only a handful of substances actually qualify for Track 1. Continuation of this High wall approach will ensure that only a very small number of substances, most of which are no longer produced in Canada, will be assured of the highest level of action.³⁷

While it is recognised that domestic policy and legislation should inform actions by Canada at the international level, imposing the TSMP as a high water mark for supportable action by Canada in the development of a global POPs Treaty will send the message to other countries that Canada will still allow the continued generation and use of some of the most dangerous substances known.

3.2 Canadian Environmental Protection Act

The Canadian government began a review of its main legislation on toxic substances, the CEPA, in September 1994. The CEPA review process has offered a unique opportunity for decision makers to ensure that impacts of toxic pollution on human

health and the environment can be effectively addressed. The current CEPA provides a complex, cumbersome, resource-intensive framework for identifying, assessing, and regulating toxic substances. As a result, only a handful of substances have been regulated under CEPA.

The Standing Committee on Environment and Sustainable Development, a parliamentary committee responsible for reviewing CEPA, held cross-country hearings on the weaknesses of CEPA. The Standing Committee released its report, It's About Our Health: Towards Pollution Prevention in June 1995.³⁸ The report listed 141 recommendations to overhaul CEPA. Among the recommendations outlined by the Standing Committee included a definition of VE that is consistent with definitions provided by the GLWQA and IJC; a framework for operationalising the precautionary principle, as it could apply to the users of toxic substances; and citizens rights provisions that include right-to-know provisions on toxic emissions and a process for taking citizen action against polluters. More importantly, the Standing Committee articulated its concerns with the TSMP. If the recommendations made by the Standing Committee had been adopted in a revised CEPA, the problems toxic substances pose to Canadians and the environment would have been reduced significantly.

The government response to the report, which was released in December 1995, was weak in many areas but, in particular, it supported the weak VE definition provided for in the TSMP. Furthermore, the government supported efforts to harmonize environmental regulations with provincial governments. These weaknesses were reflected in Bill C-74: A New CEPA, when it was introduced into the House of Commons in December of 1996. However, the Bill died on the order paper with the dissolution of the House for the June, 1997 federal election. The Bill was re-introduced into House of Commons in March 1998 as Bill C-32.

As outlined in many submissions by environmental,³⁹ labour and health care organisations, Bill C-32 is unable to protect the health and environment of Canadians. Among the greatest concerns expressed during the public hearings on Bill C-32 include the need for an improved definition of VE; absence of a phase-out regime for the most hazardous substances; an inadequate assessment process for substances selected for further action; weak provisions for citizen rights on environmental matters; the lack of framework to address the threats posed by endocrine disrupting substances; a provision that would allow CEPA to apply only when no other federal statute governed the matter in question - thus ensuring that CEPA would become a residual statute; and provisions requiring that CEPA be administered to comply with interprovincial Agreements. The effectiveness of CEPA would be reduced dramatically with the release of the *Canada-wide Harmonization Accord* (Accord) signed in January 1998. The Bill is currently under clause-by-clause review by the Standing Committee on Environment and Sustainable Development, which would be followed by third reading of the Bill in the House, reference to the Senate, and final passage.

Recently, a number of amendments have been proposed to the Bill by the government that address some of the concerns outlined above. None of the amendments, however, would result in a substantial improvement of the regime governing toxic substances in Canada. It is recognised that the process of revision and review of the Bill is not yet complete.

As is evident with the TSMP, the present and proposed CEPA have a similar constraining effect on Canada's ability to promote a strong, effective global POPs Treaty. Key elements of the TSMP have been incorporated into Bill C-32. Because of the primacy that legislation takes over policy, Bill C-32, if passed as currently outlined, will only serve to further constrain Canada at the international negotiating table.

4.0 INTERNATIONAL ACTIVITIES ON POPs

As a result of the 1992 Earth Summit, in Rio, over 170 governments committed to eliminating the emissions and discharge of organohalogen and other synthetic compounds that could cause harm to humans and the environment. A series of UNEP-convened meetings and conferences ensued, leading to the commencement of negotiations for a global Treaty in 1998.

This series of meeting included:

- * The initiation of an expedited assessment of POPs and their alternatives at UNEP's May 1995 Governing Council;
- * A June, 1995 International Experts Meeting on POPs held in Vancouver, British Columbia, co-sponsored by Canada and the Philippines. The consensus document from the meeting concluded that: "There is enough scientific information on the adverse human health and environmental impacts of POPs to warrant coherent action at the national, regional and international level. This will include bans, phase-outs and provisional severe restrictions for certain POPs;"⁴⁰
- * A UNEP conference on protection of the marine environment from land-based activities, in Washington in November, 1995, that called for a global, legally binding instrument on POPs; and
- * The February, 1997 endorsement by UNEP's Governing Council of recent recommendations by the Intergovernmental Forum on Chemical Safety to move forward on Treaty negotiations.

Negotiations for the global Treaty complement and build upon a number of key activities regarding POPs and toxic substances in general, including:

- * The Barcelona Convention for the Protection of the Mediterranean Sea, which aims to reduce and gradually eliminate discharges of persistent substances to the marine environment;

- * The UN Economic Commission for Europe's Convention on Long-Range Transboundary Air Pollution POPs Protocol, signed in June 1998 (which Canada has recently ratified), which aims to control, reduce, or eliminate sixteen POPs, (the twelve POPs in the global Treaty negotiations, plus lindane, hexabromobiphenyls, PAHs and chlordecone); and
- * The Prior Informed Consent Procedure for Certain Chemicals and Pesticides in International Trade (PIC Convention), concluded and opened for ratification in June 1998, which mandates greater information sharing on chemicals of concern, and asserts the rights of importing countries to require labelling of products and the disclosure of health and environmental effects information.

The current global negotiations are scheduled to be completed by the end of the year 2000, with a diplomatic conference scheduled for Sweden in 2001.

5.0 GUIDING PRINCIPLES/KEY POINTS TO GUIDE CANADIAN PARTICIPATION

At the opening of the current negotiations, UNEP Executive Director Dr. Klaus Topfler declared that the ultimate goal for this Treaty must be the elimination of POPs= production and use, not simply better management. Dr. Topfler cited the central role that NGOs have played in the run-up to the negotiations, their ongoing role in bringing new information to light regarding the threats posed by POPs, and the urgency with which NGOs had stressed the need for concrete action.

The Intergovernmental Negotiating Committee (INC) sessions to negotiate a global Treaty on POPs represent a unique opportunity to operationalise some key concepts. The CEN Toxics Caucus participants support the principles for POPs elimination outlined in the platform of the International POPs Elimination Network, which is attached as Appendix B. In addition, Caucus participants consider the following points to be critical in guiding negotiations for a global Treaty:

- * The need for the Canadian government to provide a transparent process for timely and effective input and feedback from various stakeholders for the Canadian delegation on issues relating to POPs. While we applaud the recent multi-stakeholder meeting (December 1998) in advance of INC2, it is hoped that regular sharing of positions and other information will be normalized throughout the INC process;
- * The need for the Canadian government to press for a global Treaty requiring elimination of the twelve listed POPs, with the TSMP serving as a minimal basis for its negotiating position;
- * The development and implementation by the Canadian government, in accordance with Environment Minister Christine Stewart's announcement at INC1, of an action plan to eliminate the twelve listed POPs;
- * The development of a solid science based set of criteria for proposed additions to the initial list of twelve substances;

- * The use of a definition of VE that takes a pollution prevention approach by addressing the use, release, generation and production of substances, instead of the TSMP definition;
- * The mandatory reporting of all the listed POPs through improvement of the NPRI;
- * The need for significant support for non POPs generating technology transfer - especially for the destruction of stockpiles of pesticides, PCBs, and contaminated soils and sediments in the South; and
- * The need for alternatives research and implementation for key POPs of concern in southern countries (e.g., DDT).

5.1 Canadian Positions Regarding INC2

At a recent multi-stakeholder meeting held in December 1998 regarding Canadian preparations for INC2, a number of draft positions were presented by government officials for input from participants. Many of these were based on a draft outline of a legally binding instrument, recently drafted and circulated by the UNEP secretariat (UNEP/POPS/INC2./2).

Environmental NGO participants were concerned by the statement by delegation officials at the outset of the meeting that the global Treaty negotiations would not change anything on the ground in Canada - that they were designed to bring other countries up to Canadian standards. Additionally, documents recently distributed to the multi-stakeholder Hazardous Air Pollutants Task Group regarding the INC process stated that Canada's domestic house was in order with regard to POPs.

Of the twelve POPs currently on the UNEP list for initial action, four still pose a significant threat to the health of Canadians and the environment from domestic sources. PCBs remain in use and storage in Canada; while hexachlorobenzene, dioxins and furans are released into the environment as contaminants of pesticides (e.g., Pentachlorophenol); are generated through controlled and uncontrolled combustion (e.g., unsafe incineration processes and industrial fires such as Plastimet Inc. in Hamilton, Ontario); and are generated by other industrial processes (e.g., use of chlorine in pulp and paper production and PVC production). The Environment Minister's recent commitment to eliminate the twelve POPs domestically must be accompanied by a concrete plan of action that Canada can present at the INC negotiations. This would provide concrete evidence that Canada takes a global Treaty on POPs seriously enough to demonstrate the international leadership by example.

Regarding Canadian positions on the UNEP draft outline for a legally binding instrument, environmental NGOs are concerned about the Secretariat's approach to the global Treaty. It was stated by Canadian officials at the December 1998 briefing that the approach closely reflects the one used for the LRTAP POPs Protocol process. Such an approach, if realised, will serve only to legitimise the continued production, use and release of some of the most dangerous substances, with very few exceptions.

More specifically, the success of a proposed system of annexes will hinge on a number of key factors, including:

- * which substances are named to Annex 1 - the elimination list; and
- * how exceptions from immediate elimination will be outlined in the Treaty.

We propose that all twelve of the initial POPs be listed in Annex 1, with the clear goal of elimination. Timelines may vary according to the availability of alternatives for vector control agents for DDT and for process changes or materials substitution for dioxin, furans and HCB. Annexes for restriction and reduction in release (2 and 3) should only be considered as a «waiting room» for additional POPs while elimination timelines are being finalized.

6.0 CONCLUSIONS

As the INC process progresses, environmental NGOs have witnessed both forward and backward steps towards an effective global POPs Treaty. Central to our concerns include signs that the Treaty will merely put a stamp of approval on a deeply flawed system for managing substances that are by their very nature unmanageable. Recent statements and actions by Canadian officials reinforce our concerns.

Merely extending CEPA and/or the TSMP to the international stage, without domestic actions to put our own house in order,⁶ will merely send the message that northern countries such as Canada do not take a POPs Treaty seriously enough to make the sacrifices that are necessary to ensure that it is effective. When daunting challenges exist such as the battle to prevent deaths from malaria, North-South equity issues, and the placement of the POPs issue up against myriad other immediate priorities, southern countries need to see serious action on the part of the north. Otherwise, an eventual POPs Treaty may not be a force for change that protects the long-term health of humans and the environment, but merely a license to continue the status quo at the international level - a status quo that is increasingly unacceptable to people around the world.

APPENDIX A - CEN TOXICS CAUCUS INC1 PAPER

**APPENDIX B - PLATFORM OF THE INTERNATIONAL POPs
ELIMINATION NETWORK (IPEN)**

ENDNOTES

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