

Persistent Organic Pollutants (POPs) and Obsolete Pesticide Stocks - A Background Paper-

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Introduction

Countries are currently developing a Convention for the control of Persistent Organic Pollutants (POPs). This paper provides a brief overview of POPs and the international negotiating process underway to develop the Convention, and concludes by identifying the links between POPs and Obsolete Pesticide Stocks (OPS).

The nature of the POPs issue

POPs are toxic substances, predominately human-made, that persist within the environment and accumulate within living organisms, including humans. There are 3 broad categories of POPs: pesticides such as DDT, chlordane, toxaphene and mirex; industrially-produced chemicals such as PCBs; and by-products and contaminants such as dioxins, furans and PAHs that come from combustion, incineration and industrial processes.

After their release into the environment, POPs can quickly be transported great distances through a series of evaporation, transportation and condensation cycles. As a result of global circulation patterns and the low evaporation rates in cold climates, POPs tend to accumulate in arctic regions where they bio-accumulate in living organisms. Scientific evidence shows that POPs cause significant adverse effects to human health and wildlife. Exposure to even low doses of certain POPs can lead to cancer, damage to the central and peripheral nervous systems, diseases of the immune system, reproductive disorders, and interference with normal infant and child development. One of the major concerns about POPs, particularly for people who eat "wild" foods, is that they move through the food chain to humans. For example, they are passed from mother to child across the placenta and through breast milk. In Canada's arctic region, the level of POPs in the breast milk of Inuit women has been found to be up to 9 times higher than in women who live in southern Canada.

Because of their ability to be transported long distances globally by water and air, controlling POPs requires global commitment and action. Many countries have already taken steps to ban or severely restrict certain POPs. However, as long as they continue to be produced and used anywhere, they will continue to be transported and accumulate throughout the world. In an attempt to gain global commitment to resolve the problem, an international process is currently underway to develop a Convention for international action to control certain POPs.

The POPs Convention

In response to international recognition of the hazards of POPs, in 1997 the United Nations Environment Program mandated an Intergovernmental Negotiating Committee (INC) to prepare an international legally binding instrument for implementing international action on certain POPs, beginning with an initial list of 12 substances. These 12 substances are: aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, hexachlorobenzene, mirex, toxaphene, polychlorinated biphenyls (PCBs), dioxins and furans. These 12 initially targeted POPs were identified and agreed upon as being of global threat by the Intergovernmental Forum of Chemical Safety, UNEP Governing Council and the World Health Assembly. The INC was also requested to establish an expert group for the development of science-based criteria and a procedure for identifying additional POPs as candidates for future international action.

The goal of the future POPs Convention is to protect human health and the environment through measures that will reduce and/or eliminate the emissions and discharges of POPs and, where appropriate, eliminate production and subsequently the remaining use of those POPs that are intentionally produced.

Status of the negotiations

Negotiations for a POPs Convention began in July 1998, with the goal to have it developed by the end of this year (2000). The most recent negotiating session (INC-4) took place in March 2000 in Bonn, with the participation of approximately 500 representatives from 121 countries, international organizations, and non-governmental organizations. At this stage, most of the text of the Convention has been drafted. However, much of it remains in square brackets as there are several important issues on which consensus must still be reached.

The final negotiation session (INC-5) is scheduled to take place in South Africa from 4-9 December 2000.

What's in the Convention

The draft Convention sets out proposed commitments for controlling POPs of concern and includes provisions to address the requirements of developing countries and countries with economies in transition for assistance to build their capacity to control POPs chemicals.

Specifically, the Convention sets out articles relating to measures to reduce or eliminate the release of POPs into the environment, the creation of national implementation plans, the listing of substances, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, and financial resources and mechanisms.

The Convention targets an initial list of 12 priority POPs and sets out measures for listing new substances. The targeted POPs are listed in various Annexes. Annex A lists chemicals for elimination, Annex B lists chemicals for reduction, and Annex C lists chemicals subject to release reduction.

Key issues in the negotiations

Parties are still seeking consensus on several important issues, namely: the provision of technical and financial assistance, how the Convention will reflect the precautionary principle, measures to reduce or eliminate releases, and how new substances will be added. Much of the text surrounding these issues remains in square brackets, and will require further negotiation at the next INC. Some of these issues are outlined below.

Financial and Technical Assistance

There is agreement that adequate financial and technical assistance must be made available to developing countries and countries with economies in transition in order to assist them to meet their obligations under the Convention. However, there is still much debate around the mechanisms through which such assistance should be channelled. Developing countries have proposed a new independent, mandatory fund to secure future funding for the Convention. Donor countries want to strengthen and utilize existing mechanisms, such as the Global Environment Facility (GEF), and have focused on the need to build on current efforts to manage POPs.

The Precautionary Principle

The precautionary principle proposes that, if scientific evidence shows an activity to be a threat to human health, wildlife, or the environment, protective measures be taken to guard against it, even in the absence of full scientific certainty. The Chair's text for the Preamble includes a reference to precaution, which is based on Rio Principle 15. There is still much debate around how the principle should be operationalized within other parts of the Convention.

Control Measures

Consensus is still to be reached on the obligation of Parties to eliminate the production and/or use of listed chemicals. Debate centres around the degree of commitment of the Convention to the elimination of POPs. Proposed language remains varied and includes such options as "total" elimination or qualifying elimination with words such as "where technically and economically feasible". All of the intentionally produced POPs are listed in the elimination annex (A), although DDT and PCBs are also listed on the restriction annex (B). However, it remains understood that DDT should only be produced and used for disease (malaria) vector control, and that PCB production should be banned, and PCBs should only be in use until the transformers in which they are employed are replaced.

One of the most contentious issues relates to control measures for POPs by-products. While there is general agreement on obligations to continuously reduce emissions of these by-products, some countries want the text to reflect a commitment to their ultimate elimination.

Use of Trade Measures

Much debate also remains around the trade and transit of listed substances between Parties and non-parties. There is a proposal that the import and export of Annex A (elimination) chemicals be prohibited, except for the purposes of environmentally sound destruction.

How does the POPs Convention specifically address the issue of OPS?

Issues concerning pesticides and OPS are addressed in various articles in the draft text, although much of it remains bracketed. A summary of the key issues relevant to pesticides and OPS is provided below.

Article D - Measures to reduce or eliminate releases of POPs into the environment

The draft text would commit Parties who sign on to the Convention to develop strategies for identifying POPs stockpiles, to ensure that stockpiles are properly managed, and to develop strategies for identifying contaminated sites and remediate them if feasible. It is also proposed that stockpiles be handled, transported and stored in an environmentally sound manner, consistent with the Basel Convention on the Transboundary Movements of Hazardous Wastes and their Disposal, and that Parties with existing regulatory schemes for new pesticides take measures to avoid the production and use of newly developed chemicals which exhibit the characteristics of POPs.

Article J - Technical Assistance

The identification, inventory, and destruction of existing stockpiles of obsolete POPs is currently (in brackets) on the list of priority activities for technical assistance for implementation of this Convention.

Importance of the POPs Convention to the issue of OPS

There is a strong link between OPS and POPs. Preliminary estimates from UNEP Chemicals indicate that about 30% of the old pesticides stored throughout developing countries are POPs¹. A successfully negotiated POPs Convention will help address the problem of OPS, at least for the listed chemicals (9 of the 12 targeted POPs are pesticides, and others may be added in the future). For example, the POPs convention will:

- 1. Raise awareness of the issue of POPs and OPS through public information and education.*** The Convention will require that Parties designate a national focal point in order to exchange information relevant to the reduction or elimination of POPs. To facilitate the exchange of such information, a clearing house mechanism will be established in the Secretariat. Parties to the Convention will also make a commitment to promote and facilitate the provision of information related to POPs to the public;
- 2. Document the extent of the OPS problem.*** Parties to the Convention will be required to develop strategies for identifying POPs stockpiles;
- 3. Require Parties to prepare National Implementation Plans,*** indicating how countries that sign on to the Convention plan to deal with their current inventory of POPs;
- 4. Provide technical and financial assistance to developing countries and countries with economies in transition.*** New and additional resources will be made available to help these countries meet their commitments under the future Convention. For example, Canada has already created a \$20 million POPs fund. The Canada POPs fund, administered by the World Bank, will help build the capacity of developing countries and countries with economies in transition to address their POPs issues;

5. *Link demand for technical and financial assistance with supply* through a proposed Capacity Assistance Network function of the Secretariat;

6. *Help prevent future problems.* Prevention is a more cost-effective, permanent solution to the problem of OPS. The POPs Convention will serve to avoid the creation of future stockpiles by avoiding the production of new POPs, eliminating the use and production of listed chemicals, and outlining a process for adding new chemicals to the list of POPs for international action.

Conclusion

The goals of the POPs Convention and those working to eliminate the problem of OPS are mutually supportive. Resolving both the POPs and OPS problems will require global commitment. A successfully negotiated and rapidly implemented POPs Convention will help address current OPS problems, and prevent future ones. The POPs Convention is a critical tool to give international profile to these issues and provide an instrument for international action to control these dangerous substances.

References

1. UNEP Chemicals Newsletter. Vol. 4, No. 2. August 2000.
2. UNEP final report INC-4. March 2000. (UNEP document UNEP/POPS/INC.4/5)
3. Earth Negotiations Bulletin. Vol. 15, No. 34. March 27, 2000.

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Additionally, coverage of the POPs negotiations is provided by the Earth Negotiations Bulletin (published by the International Institute for Sustainable Development (IISD)).

Web site: <http://www.iisd.ca/linkages/>