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## The Hazardous Chemicals and Wastes Conventions

Three conventions developed under UNEP auspices together provide an international framework governing the environmentally sound management of hazardous chemicals throughout their lifecycles.



***The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*** was adopted in 1989 in response to concerns about toxic waste from industrialized countries being dumped in developing countries and countries with economies in transition. During its first decade, the Convention's

principal focus was the elaboration of controls on the "transboundary" movement of hazardous wastes, that is the movement of such wastes across international frontiers, and the development of criteria for environmentally sound management of the wastes. More recently the work of the Convention has emphasized full implementation of treaty commitments and minimization of hazardous waste generation. As of 15 July 2002, there were 151 Parties to the Basel Convention.

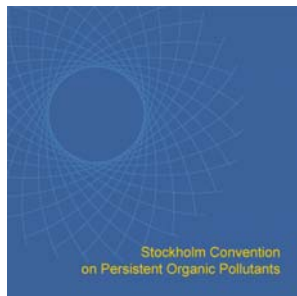


***The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade***

was adopted in 1998. Dramatic growth in chemicals production and trade during the past three decades had highlighted the potential risks posed by hazardous chemicals and pesticides. Countries lacking adequate

infrastructure to monitor the import and use of such substances were particularly vulnerable. In the 1980s, UNEP and FAO developed voluntary codes of conduct and information exchange systems, culminating in the Prior Informed Consent (PIC) procedure introduced in 1989. The new Convention will replace this arrangement with a mandatory PIC procedure. As of 15 July 2002, the Rotterdam Convention had 73 signatories and 22 Parties. It will enter into force after the 50<sup>th</sup> ratification.

UNEP provides the secretariats for the Basel and Stockholm Conventions in Geneva. UNEP and the UN Food and Agriculture Organization (FAO) jointly provide the Rotterdam secretariat, which is located in Geneva and in Rome.



***The Stockholm Convention on Persistent Organic Pollutants (POPs)*** was adopted in 2001 in response to the urgent need for global action to protect human health and the

environment from "POPs". These are chemicals that are highly toxic, persistent, bioaccumulate and move long distance in the environment. The Convention seeks the

elimination or restriction of production and use of all intentionally produced POPs (i.e. industrial chemicals and pesticides). It also seeks the continuing minimization and, where feasible, ultimate elimination of the releases unintentionally produced POPs such as dioxins and furans. Stockpiles must be managed and disposed of in a safe, efficient and environmentally sound manner. The Convention imposes certain trade restrictions. As of 15 July 2002, the Stockholm Convention had 151 signatories and 12 Parties. It will enter into force after the 50<sup>th</sup> ratification.

## A framework for lifecycle management

Together the Basel, Rotterdam and Stockholm Conventions cover key elements of “cradle-to-grave” management of hazardous chemicals, most comprehensively in the case of POPs, which are covered by all three treaties.

**Existing chemicals.** The **Rotterdam Convention** (Article 5), obliges Parties to notify the secretariat of final regulatory actions taken in respect of banned or severely restricted chemicals, for the information of other Parties and possible listing under the Convention. Developing countries and countries with economies in transition may also propose the listing of severely hazardous pesticide formulations (Article 6). The **Stockholm Convention** (Article 4.4) requires Parties with regulatory and assessment schemes to take into consideration the POPs screening criteria set out in Annex D of the Convention when assessing pesticides or industrial chemicals currently in use. Parties must eliminate from production and use certain chemicals already listed in the Convention (Article 3).

**New chemicals.** The **Stockholm Convention** (Article 4.3) requires Parties with regulatory and assessment schemes to regulate with the aim of preventing the production and use of new pesticides or new industrial chemicals which exhibit the characteristics of POPs.

**Import/export controls.** The original prior informed consent procedure of the **Basel Convention** (Article 4.1) was strengthened by Parties' subsequent decisions to prohibit the export of hazardous wastes from OECD to non-OECD countries (Decisions II/12 and III/1). The Basel Convention imposes strict conditions on the transboundary movement of hazardous wastes (Articles 4 and 6). Trade with non-parties is generally not permitted (Article 4.5). The **Rotterdam Convention** (Articles 10 to 12) will establish a Prior Informed Consent Procedure based on the earlier voluntary guidelines. The **Stockholm Convention** (Article 3.2) restricts the import and export of POPs to cases where, for example, the purpose is environmentally sound disposal. It also requires that POPs not be transported



across international boundaries without taking into account relevant international rules, standards and guidelines (Article 6.1).

**Waste management.** The **Basel Convention** (Article 4) requires each Party to minimize waste generation and to ensure, to the extent possible, the availability of disposal facilities within its own territory. The objective of environmentally sound management of hazardous wastes underpins the Convention. At its fifth meeting in December 1999, the Conference of the Parties adopted the Basel Declaration on Environmentally Sound Management. The **Stockholm Convention** (Article 6) obliges Parties to develop strategies for identifying POPs wastes, and to manage these in an environmentally sound manner. The POPs content of wastes is generally to be destroyed or irreversibly transformed. The Basel Convention Technical Working Group is developing technical guidelines on POPs wastes as part of its work programme and at the request of the Conference of Plenipotentiaries that adopted the Stockholm Convention.

**Environmental releases.** The **Stockholm Convention** requires Parties to take measures to reduce or eliminate releases of POPs from intentional production and use (Article 3), unintentional production (Article 5) and stockpiles and wastes (Article 6). Concepts of Best Available Techniques (BAT) and Best Environmental Practices (BEP) are to be further elaborated by the Conference of the Parties.

**Hazard communication.** Provision is made for the obligatory communication of hazard information under the **Basel Convention** (Article 4.2 f), the **Rotterdam Convention** (Article 5.1) and the **Stockholm Convention** (Article 10).

**Replacement.** The **Stockholm Convention** requires information exchange and research on POPs alternatives (Articles 9 and 11). It obliges each Party using DDT to develop an Action plan, including for implementation of alternative products (Annex B).

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## Substances covered by the Conventions

The **Basel Convention** covers hazardous wastes that are explosive, flammable, poisonous, infectious, corrosive, toxic, or ecotoxic. The categories of wastes and the hazardous characteristics are set out in Annexes I to III of the Convention. Lists of specific wastes characterized as hazardous or non-hazardous are in Annexes VIII and IX.

The **Rotterdam Convention** subjects to the Prior Informed Consent procedure the following 22 hazardous pesticides: 2,4,5-T, aldrin, captafol, chlordane, chlordimeform, chlorobenzilate, DDT, 1,2-dibromoethane (EDB), dieldrin, dinoseb, fluoroacetamide, HCH, heptachlor, hexachlorobenzene, lindane, mercury compounds, and pentachlorophenol, plus certain formulations of methamidophos, methyl-parathion, monocrotophos, parathion, and phosphamidon. It also covers five industrial chemicals: crocidolite, polybrominated biphenyls (PBBs), polychlorinated

biphenyls (PCBs), polychlorinated terphenyls (PCTs), and tris (2,3 dibromopropyl) phosphate.

The chemicals slated for elimination under the **Stockholm Convention** are the pesticides aldrin, chlordane, dieldrin, endrin, heptachlor, hexachlorobenzene (HCB), mirex and toxaphene, as well as the industrial chemical polychlorinated biphenyls (PCBs). Continued use of the pesticide DDT is allowed for disease vector control until safe, affordable and effective alternatives are in place. Countries must make determined efforts to identify label and remove PCB-containing equipment from use by 2025. The Convention also seeks the continuing minimization and, where feasible, elimination of the releases of unintentionally produced POPs such as the industrial by-products dioxins and furans.

## Future development of the Conventions

The three Conventions provide for amendments in the usual manner of international treaties. In the case of the **Basel Convention**, the so-called "Ban Amendment" was adopted in 1995 under Decision III/1 and will enter into force when ratified by 62 of the Parties present at the time of adoption. The Amendment will prohibit the export of hazardous wastes, for any purpose, from countries listed in a proposed new annex ("Parties and other States which are members of OECD, EC, Liechtenstein"), to States not listed in the annex. In 1998, the Conference of the Parties adopted lists of specific wastes characterized as hazardous or non-hazardous, thereby clarifying the scope of the Convention. In 1999, a Protocol on Liability and Compensation was adopted and it will enter into force after 20 ratifications.

The **Rotterdam Convention** provides for the future establishment, by the Conference of the Parties, of a subsidiary body, the *Chemicals Review Committee*. This group of government-designated experts will be responsible for assessing whether additional banned or

severely restricted chemicals or severely hazardous pesticide formulations should be made subject to the Prior Informed Consent procedure. The Committee will make recommendations to the Conference of the Parties in this regard. Pending entry into force of the Convention, an *Interim Chemicals Review Committee* is operating under mandate of the Conference of Plenipotentiaries that adopted the Convention. At its third meeting in February 2002, the interim committee recommended that three widely-used pesticides (monocrotophos, Granox TBC/Spinox T and DNOC) and all forms of asbestos should be added to the Convention.

Similarly, the **Stockholm Convention** provides for the future establishment, by the Conference of the Parties, of a subsidiary body to be called the *Persistent Organic Pollutants Review Committee*. When it comes into existence this committee will assess chemicals that have been proposed for addition to the Convention and will make recommendations to the Conference of the Parties.

## Technical assistance & regional centres

All three Conventions address the technical assistance needs of developing countries. The **Basel Convention** (Article 14) and the **Stockholm Convention** (Article 12) provide for regional centres for training and technology transfer. Subject to views of Conferences of Parties, there may be potential for some common use of the existing network of Basel Centres. **Basel** has a Technical Cooperation Trust Fund, while **Stockholm** (Articles 13 & 14) envisages a "financial mechanism", to be operated by the Global Environment Facility on an interim basis. "Enabling activities" such as the development of National Implementation Plans are a key initial GEF focus.



Photo / Steve C. Delaney



## “Clustering” the Conventions

In the course of deliberations by the UNEP Intergovernmental Group on International Environmental Governance, support was expressed for the concept of programmatic clustering of related Multilateral Environmental Agreements. In November 2001, at the request of the Group, the secretariats of the Basel, Rotterdam and Stockholm Conventions prepared an issues paper outlining current cooperation and the potential for closer cooperation in future (subject to endorsement by respective governing bodies). The paper covered the areas of capacity-building, science and technology, legal affairs, institutional matters, monitoring and reporting, information and awareness-raising, and programme support services. The Group’s final report, adopted by UNEP Governing Council in February 2002, supported more consideration of clustering measures and the undertaking of pilot projects. Such clustering may facilitate an integrated life-cycle approach to management of the substances covered by the three Conventions.



Photo / James B. Willis

## A selection of relevant regional agreements

- Convention on Long-range Transboundary Air Pollution (1979) and its Aarhus Protocol on POPs (1998) [www.unep.org/env/lrtap/](http://www.unep.org/env/lrtap/)
- Barcelona Convention for the Protection of the Mediterranean Sea Against Pollution (1976) and its Izmir Protocol (1996) [www.rempec.org/barcelona.html](http://www.rempec.org/barcelona.html)
- Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region (1995) [www.forumsec.org.fj/docs/wc.htm](http://www.forumsec.org.fj/docs/wc.htm) & [www.basel.int/Mislinks/waigani.html](http://www.basel.int/Mislinks/waigani.html)
- Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement of Hazardous Wastes within Africa (1991) [www.londonconvention.org/Bamako.htm](http://www.londonconvention.org/Bamako.htm)
- Cartagena Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (1983) [www.cep.unep.org/law/cartnut.html](http://www.cep.unep.org/law/cartnut.html)
- Central American Regional Agreement on Transboundary Movements of Hazardous Wastes (1992) [www.basel.int/Mislinks/Centroamerica.html](http://www.basel.int/Mislinks/Centroamerica.html)

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