



The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal



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



The Stockholm Convention on Persistent Organic Pollutants (POPs)

The Hazardous Chemicals and Wastes Conventions

The **Basel, Rotterdam and Stockholm Conventions** are multilateral environmental agreements which share the common objective of protecting human health and the environment from hazardous chemicals and wastes. These agreements can assist countries to safely manage chemicals at different stages of their life-cycle: the **Stockholm Convention** is focused on production and use of chemicals, the **Rotterdam Convention** on their trade and the **Basel Convention** on their disposal. Some of the same chemicals are listed in their respective annexes and their Secretariats undertake complementary technical assistance activities at the regional and national levels with a range of partners. This cooperation and coordination will be enhanced as a result of decisions adopted at the ninth session of the Conference of the Parties (COPs) to the **Basel Convention** and the fourth sessions of the COPs of the **Rotterdam and Stockholm Conventions**.

The Basel Convention

was adopted in 1989. 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, promotion of the environmentally sound management of hazardous wastes, a lifecycle approach, and minimization of hazardous waste generation. The Convention entered into force 5 May 1992. The Convention website is www.basel.int

The Rotterdam Convention

was adopted in 1998. 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 Convention replaced this arrangement with a mandatory PIC procedure and information exchange mechanism on hazardous chemicals and pesticides. The Convention entered into force 24 February 2004. The Convention website is www.pic.int

The Stockholm Convention

was adopted in 2001. POPs are chemicals that are highly toxic, persistent, bio-accumulate 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. The Convention entered into force 17 May 2004. The Convention website is www.pops.int



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 may be 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 3.4) 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 listed in the Convention (Article 3).

New chemicals, the **Stockholm Convention** (Article 3.3) requires Parties with regulatory and assessment schemes to regulate with the aim of preventing the production and use of new pesticides or industrial chemicals which exhibit the characteristics of POPs.

Import/export controls, 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 original prior informed consent procedure of the **Basel Convention** (Article 4.1) was strengthened by Parties' subsequent decisions to adopt an amendment which would prohibit the export of hazardous wastes from OECD to non-OECD countries (Decisions II/12 and III/1 as at 10 August 2009, the Amendment had not entered into force). The **Rotterdam Convention** (Articles 10 to 12) establishes a prior informed consent procedure concerning the future import of certain hazardous chemicals. The **Stockholm Convention** (Article 3.2) restricts the import and export of POPs to certain situations such as for environmentally sound disposal. It also requires that



POPs or their wastes 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 Conference of the Parties at its ninth meeting in June 2008 decided to extend its Strategic Plan for the implementation of the Basel Declaration to 2011 until a new Strategic Framework is adopted by COP10 in 2011. 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 has developed technical guidelines on POPs wastes as part of its work programme.

Environmental releases, the **Stockholm Convention** requires Parties to reduce or eliminate releases of POPs from intentional production and use (Article 3), unintentional production (Article 5) and stockpiles and wastes (Article 6). At its third meeting (2007), the Conference of the Parties adopted provisional Guidelines on Best Available Techniques (BAT) and Best Environmental Practices (BEP) have been 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).

The three conventions together provide an international framework governing the environ

Substances covered by the Conventions

The **Basel Convention** covers 45 categories of wastes that are listed in **Annex I** (Y1-Y45). These categories, to be included in Annex I, have to display the hazardous characteristics listed in **Annex III**. It also covers wastes that are defined as, or are considered to be, hazardous wastes by the domestic legislation of the Party of export, import or transit. Additionally, wastes that belong to any category contained in **Annex II** that are subject to



transboundary movement shall be “other wastes” for the purposes of the Basel Convention. Hazardous wastes are those wastes that are *explosive, flammable, poisonous, infectious, corrosive, toxic, or ecotoxic*. Further clarification of the wastes subject to the Convention's controls is contained in Annexes VIII and IX.

The information exchange provisions of the **Rotterdam Convention** apply to any chemical that is banned or severely restricted by a Party. The Prior Informed Consent procedure applies to 40 chemicals including 29 pesticides and 11 industrial chemicals.

Pesticides: *2,4,5-T, aldrin, binapacryl, captafol, chlordane, chlordimeform, chlorobenzilate, DDT, 1,2-dibromoethane (EDB), dieldrin, dinoseb, DNOC and its salts, ethylene dichloride, ethylene oxide, fluoroacetamide, HCH, heptachlor, hexachlorobenzene, lindane, mercury compounds, monocrotophos, parathion, pentachlorophenol, toxaphene and all tributyltin compounds, plus certain formulations of methamidophos, methyl-parathion, phosphamidon, and a combination of benomyl, carbofuran and thiram.* **Industrial chemicals:** *asbestos (actinolite, anthophyllite, amosite, crocidolite, tremolite), polybrominated biphenyls (PBBs), polychlorinatedbiphenyls (PCBs), polychlorinated terphenyls (PCTs), tris (2,3 dibromopropyl) phosphate and tetraethyl lead (TEL) and tetramethyl lead (TML).* A subsidiary body, the Chemical Review Committee (CRC), is responsible for assessing whether additional banned or severely restricted chemicals or severely hazardous pesticide formulations should be made subject to the PIC procedure. The CRC makes recommendations to the Conference of the Parties.

The **Stockholm Convention** aims to eliminate, restrict or minimize the production and use of 21 chemicals that are listed in three Annexes. **Annex A (Elimination)** contains: *aldrin; chlordane; chlordane; dieldrin; endrin; heptachlor; heptabromodiphenyl and hexabromodiphenyl ethers; hexabromobiphenyl; hexachlorobenzene (HCB); alpha hexachlorocyclohexane; beta hexachlorocyclohexane; lindane; mirex; pentachlorobenzene; tetrabromodiphenyl and pentabromodiphenyl ethers; toxaphene; and polychlorinated biphenyls (PCBs).* For PCBs, countries must make determined efforts to identify, label and remove PCB containing equipment from use by 2025 and efforts to lead to environmentally sound waste management no later than 2028. **Annex B (Restriction)** contains: *perfluorooctane sulfonic acid (PFOS) its salts and perfluorooctane sulfonyl fluoride (PFOSF) as well as DDT* is allowed for disease vector control until safe, affordable and effective alternatives are in place. **Annex C (Unintentional Production)** contains: the by-products *dioxins; furans; HCB; PCBs and pentachlorobenzene.* Parties are to minimize and, where feasible, eliminate the releases of these unintentionally produced POPs. A subsidiary body, the Persistent Organic Pollutants Review Committee (POPRC), is responsible for assessing whether new chemicals are POPs and should be subject to the Convention. The POPRC makes recommendations to the Conference of the Parties.

Future development of the Conventions

The Conferences of the Parties to three Conventions adopted decisions on enhancing cooperation and coordination among the three Conventions (Basel decision IX/10; Rotterdam decision RC-4/11 and Stockholm decision SC-4/34). The decisions included elements related to creating or strengthening joint activities, management and services across the secretariats of the Conventions and made reference to specific areas for increased cooperation and coordination such as:

- the need for increased coordination at the national level;
- the coordinated use of regional offices;
- harmonization of national reporting;
- increased cooperation on compliance;
- cooperation on technical and scientific issues;
- information management and public awareness and
- resource mobilization and coordinated meetings.

A key outcome of these decisions will be an improved program delivery in the coordinated implementation of the three Conventions at the national and regional levels.

Technical assistance & regional centres

All three Conventions address the technical assistance needs of developing countries and countries with economies in transition. The **Basel Convention** (Article 14) and the **Stockholm Convention** (Article 12) provide for regional centres for training and technology transfer. The **Basel Convention** has a Technical Cooperation Trust Fund to provide assistance to developing countries, and countries with economies in transition while Stockholm (Articles 13 & 14) establishes a "financial mechanism", the principal entity of which is the Global Environment Facility. The **Rotterdam Convention** (Article 16) provides for technical assistance between Parties for the development of infrastructure and the capacity to manage chemicals. The **Rotterdam Convention** also has a voluntary trust fund to provide assistance to countries in line with the program of work adopted by the Conference of the Parties.



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