

October 2006

## International Treaties and Initiatives **Chemical and Waste:** **Multinational Environmental Initiatives**

### INTRODUCTION

The occasional series of international fact sheets on this web page provides summary information on selected topics relevant to the functions and activities of the EPA programs that manage waste, clean up contaminated sites, promote the productive use of land, and address emergencies. An important purpose of the papers is to promote a fuller understanding of actions around the world to protect the environment in relation to these subject areas. The international fact sheets do not establish policy or represent the views of EPA. Each fact sheet provides information and electronic links to other sources of information that can provide the reader with a fuller understanding of the material. For organizational purposes, the fact sheets have been placed in four broad categories:

- Treaties, Directives, and Policies
- New Directions in Program Management
- Innovative Approaches to Environmental Protection
- Emerging Issues

### TOPIC SUMMARY AND BRIEF BACKGROUND

This fact sheet provides information on [multinational initiatives related to chemical production, use, disposal, and reuse](#). During the last quarter of the 19<sup>th</sup> century, important multilateral environmental agreements, which together cover key elements in the “production-to-disposal” management of hazardous chemicals with toxic, persistent, and bioaccumulative characteristics, were negotiated. In addition, a number of important regional multilateral environmental agreements have been included in this fact sheet, which provides brief summary information and links for each entry. The fact sheet also identifies a number of [international organizations and programs](#), as well as some U.S. activities, that address international chemical and waste hazards. The fact sheet is not comprehensive; rather it provides a starting point for readers interested in investigating the topic.

### MULTILATERAL ENVIRONMENTAL AGREEMENTS

- [Aarhus Convention](#) on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters
- [Basel Convention](#) on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
- Convention for the Protection of the Marine Environment of the North-East Atlantic ([OSPAR Convention](#))
- Convention on the Ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa ([Bamako Convention](#))
- Convention on Long-Range Transboundary Air Pollution ([LRTAP Convention](#))
- Convention on the Prevention of Dumping of Wastes and Other Matter ([London Convention](#))
- Convention to Ban the Importation into Forum Countries of Hazardous Waste and to Control the Transboundary Movement and Management of Hazardous Wastes within the Pacific Region ([Waigami Convention](#))
- International Convention on Oil Pollution Preparedness, Response and Co-Operation ([OPRC Convention](#))

- [Montreal Protocol](#) on Substances that Deplete the Ozone Layer
- [Rotterdam Convention](#) on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- [Stockholm Convention](#) on Persistent Organic Pollutants

## **AARHUS CONVENTION ON ACCESS TO INFORMATION, PUBLIC PARTICIPATION IN DECISION-MAKING, AND ACCESS TO JUSTICE IN ENVIRONMENTAL MATTERS**

United Nations Economic Commission for Europe <http://www.unece.org/env/pp/>

The Aarhus Convention of the United Nations Economic Commission for Europe (UNECE) was adopted on 25 June 1998, in the Danish city of Aarhus at the Fourth Ministerial Conference in the 'Environment for Europe' process, and entered into force on 30 October 2001. 39 European nations are Parties to the Convention, which [aims to improve public access to environmental information](#). It provides a forum for developing protocols to strengthen democratic interactions between the public and public authorities, and addresses processes for public participation in the negotiation and implementation of international agreements.

The Aarhus [Protocol on Pollutant Release and Transfer Registers](#) (PRTR) was adopted on 21 May 2003 during the fifth 'Environment for Europe' Ministerial Conference in Kiev. See <http://www.unece.org/env/pp/prtr.htm>. The Protocol has 37 Signatories and two Parties to date. It is the first legally binding international instrument on pollutant release and transfer registers. [PRTRs are inventories of pollution released to all media by industrial sites and other sources](#). The Protocol covers releases and transfers of greenhouse gases, acid rain pollutants, ozone-depleting substances, heavy metals, and certain carcinogens (e.g., dioxins). Releases and transfers from certain types of major point source (e.g., thermal power stations, mining and metallurgical industries, chemical plants) are covered. Under the protocol, information is publicly accessible via the internet free of charge.

## **BASEL CONVENTION ON THE TRANSBOUNDARY MOVEMENT OF HAZARDOUS WASTES AND THEIR DISPOSAL**

U.S. EPA <http://www.epa.gov/epaoswer/osw/internat/basel.htm>

U.S. Department of State <http://www.state.gov/g/oes/env/c18124.htm>

Secretariat of the Basel Convention <http://www.basel.int/>

[The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal](#) was adopted in Basel, Switzerland, on 22 March 1989 and entered into force on 5 May 1992. The Basel Convention includes [hazardous wastes that are explosive, flammable, poisonous, infectious, corrosive, toxic, or eco-toxic](#). Annexes I-III identify the categories of waste and characteristics that the Convention covers. Annexes VIII and IX list specific wastes identified as hazardous or non-hazardous. The Convention has 168 Parties. Although the U.S. has not ratified the Treaty and is not a voting Party, US representatives participate in the meetings of the Convention.

During its first decade, a principle focus of the Convention was to establish a control system for transboundary movements of hazardous waste. Additionally, a number of environmentally sound management guidelines were developed under the Convention. More recently, work of the Convention has focused on capacity building and technical assistance. In 1995 the "Basel Ban" was adopted. This amendment to the Convention bans hazardous waste exports from Basel Annex VII countries (members of the EU, OECD, or Liechtenstein) to all other Basel Convention Parties. The Basel Ban will not come into force until ratified by three-fourths of the Parties that accepted it. [A 1999 Protocol on Liability and Compensation](#) also has not yet come into force. The objective of this Protocol is to provide for a

comprehensive liability regime, as well as adequate and prompt compensation, for damage resulting from the transboundary movement of hazardous and other wastes, including incidents occurring because of illegal traffic in those wastes. More recently, the Basel Convention formed a [Mobile Phone Partnership Initiative](#) with industry that addresses the environmentally-sound management of end-of-life mobile phones. See <http://www.basel.int/industry/mppi.html>.

## **CONVENTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT OF THE NORTH-EAST ATLANTIC (OSPAR CONVENTION)**

OSPAR Commission

<http://www.ospar.org/eng/html/convention/welcome.html>

The 1992 [Convention for the Protection of the Marine Environment of the North-East Atlantic \(the “OSPAR Convention”\)](#) provides for the application of binding decisions concerning best available techniques (BAT) and best environmental practice (BEP) to address marine pollution. It was established in response to a growing general awareness of the dangers associated both with marine pollution by dumping and marine pollution by discharges of dangerous substances from multiple land-based sources or pipelines. The Convention includes a series of annexes to address pollution from land-based sources, dumping or incineration, and offshore sources. The OSPAR Convention has been signed and ratified by all of the Contracting Parties to the original 1972 Oslo or 1974 Paris Conventions (Belgium, Denmark, the European Community, Finland, France, Germany, Iceland, Ireland, the Netherlands, Norway, Portugal, Spain, Sweden, and the United Kingdom of Great Britain and Northern Ireland) and by Luxembourg and Switzerland.

The OSPAR Commission has adopted strategies, including a [Hazardous Substances Strategy](#), to achieve cessation of discharges, emissions and losses of hazardous substances to the marine environment by the year 2020. See <http://www.ospar.org/eng/html/strategies/strategy-03.htm>. The OSPAR Hazardous Substance Strategy includes a [List of Chemicals for Priority Action](#) and a [List of Substances of Possible Concern](#). The latter list consists of substances selected on the basis of their intrinsic hazardous properties - primarily persistence, toxicity, and likelihood to accumulate. The substances on the List of Chemicals for Priority Action are those which the OSPAR Commission has to date determined require priority action, based primarily on a ranking process and expert judgment. Under the OSPAR Hazardous Substance Strategy, the Commission will develop programs and measures to identify, prioritize, monitor and control emissions, discharges, and losses of hazardous substances to the marine environment.

## **CONVENTION ON THE BAN ON THE IMPORT INTO AFRICA AND THE CONTROL OF TRANSBOUNDARY MOVEMENT AND MANAGEMENT OF HAZARDOUS WASTES WITHIN AFRICA (BAMAKO CONVENTION)**

<http://www.londonconvention.org/Bamako.htm>

The [Bamako Convention](#), adopted under the auspices of the Organization of Africa Unity (OAU), [prohibits hazardous waste imports into Africa](#). It was adopted at the Conference of Environmental Ministers in Bamako, Mali, on 30 January 1991. Only members of the OAU are eligible to become Parties to the Bamako Convention. The Convention includes categories of wastes listed in Annex I. The Convention covers wastes possessing any of the characteristics listed in Annex II, as well as any waste considered hazardous under the domestic laws of the State of import, export, or transit.

## **CONVENTION ON LONG-RANGE TRANSPORT OF TRANSBOUNDARY AIR POLLUTANTS (LRTAP)**

United Nations Economic Commission for Europe

<http://www.unece.org/env/lrtap/>

U.S. EPA (POPs Protocol)

<http://www.epa.gov/oppfead1/international/lrtap2pg.htm>

U.S. EPA (Heavy Metals Protocol)

<http://www.epa.gov/mercury/international.htm>

U.S. Department of State (POPs Protocol)

<http://www.state.gov/r/pa/prs/ps/2005/58340.htm>

Aimed initially at reducing the effects of acid rain through control of sulfur emissions, **LRTAP was the first international legally-binding instrument to deal with a range of air pollution problems on a broad regional basis.** LRTAP, which came into force in 1983, has 50 Parties: members of the United Nations Economic Commission for Europe (UNECE), including the United States and Canada. The Convention lays down the general principles of international cooperation for air pollution abatement and establishes an institutional framework to help achieve it. The scope of the Convention's later was expanded through eight protocols.

The **Protocol on Persistent Organic Pollutants** controls, reduces, or eliminates discharges, emissions, and losses of persistent organic pollutants (POPs) . The **Protocol on Heavy Metals targets three toxic metals: cadmium, lead and mercury.** The Protocol on Pops entered into force in October of 2003, while the Protocol on Heavy Metals entered into force in December of that year. The U.S. is a Signatory, but not a Ratifying Party, for both of these protocols.

## **CONVENTION ON THE PREVENTION OF DUMPING OF WASTES AND OTHER MATTER (LONDON CONVENTION)**

U.S. EPA

<http://www.epa.gov/owow/ocpd/icnetbri.html>

Office of the London Convention

<http://www.londonconvention.org/>

The **London Convention is a 1972 international treaty that limits the discharge of wastes that are generated on land and disposed of at sea.** The U.S. is among 81 Parties to the Convention. **The 1996 Protocol** is a separate agreement to modernize and update the London Convention. Upon its entry into force, the 1996 Protocol will replace the London Convention. The objective of the 1996 Protocol is to protect the marine environment from all sources of pollution. Contracting Parties shall take effective measures to prevent, reduce, and, where practicable, eliminate marine pollution caused by dumping or incineration at sea. So far, 22 Parties(not including the U.S.,) have acceded to the 1996 Protocol; four more Parties are needed before the Protocol will enter into force.

## **CONVENTION TO BAN THE IMPORT INTO FORUM COUNTRIES OF HAZARDOUS WASTE AND TO CONTROL THE TRANSBOUNDARY MOVEMENT AND MANAGEMENT OF HAZARDOUS WASTES WITHIN THE PACIFIC REGION (WAIGAMI CONVENTION) <http://www.basel.int/misclinks/waigani.html>**

The Convention to Ban the Importation into Forum Countries of Hazardous Waste and to Control the Transboundary Movement and Management of Hazardous Wastes within the Pacific Region (the Waigami Convention) is a 1995 multilateral regional treaty adopted in Waigami, Papua New Guinea. The Waigami Convention establishes hazardous waste and radioactive waste import and export ban requirements for the South Pacific Region. The Convention covers a broad range of hazardous wastes, excluding those derived from the normal operations of a vessel, and some radioactive wastes.

## **INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION OF SHIPS (MARPOL 73/78)**

U.S. EPA

<http://www.epa.gov/owow/OCPD/marpol.html>

International Maritime Organization

[http://www.imo.org/Conventions/contents.asp?doc\\_id=678&topic\\_id=258](http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258)

The 1973 MARPOL Convention, subsequently modified by a Protocol in 1978 on stricter regulations for the survey and certification of ships, is the most important global treaty for the prevention of pollution from the operation of ships. **MARPOL 73/78 includes provisions aimed at preventing and minimizing pollution from ships** - both accidental pollution and pollution from routine operations - and currently includes six annexes covering technical aspects of pollution from ships, except the disposal of waste into the sea by dumping: oil (Annex I); noxious bulk liquids carried in bulk (Annex II); harmful substances carried in package form (Annex III); sewage from ships (Annex IV); garbage from ships (Annex V); and air emissions (Annex VI). The United States is a Party to the Convention and to mandatory Annexes I and II, as well as Annexes III, V, and VI.

## **INTERNATIONAL CONVENTION ON OIL POLLUTION PREPAREDNESS, RESPONSE AND CO-OPERATION (OPRC)**

International Maritime Organization

[http://www.imo.org/Conventions/contents.asp?topic\\_id=258&doc\\_id=682](http://www.imo.org/Conventions/contents.asp?topic_id=258&doc_id=682)

Parties to the 1990 **International Convention on Oil Spill Preparedness, response, and Cooperation** (OPRC Convention) are required to establish **measures for dealing with pollution incidents**, either nationally or in co-operation with other countries. These measures include a shipboard oil pollution emergency plan. The Convention entered into force on 13 May 1995. A Protocol to extend the Convention to cover hazardous and noxious substances was adopted in 2000: **the Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances** (See [http://www.imo.org/Conventions/mainframe.asp?topic\\_id=258&doc\\_id=683](http://www.imo.org/Conventions/mainframe.asp?topic_id=258&doc_id=683)). Like the OPRC Convention, the Protocol aims to provide a global framework for international co-operation in combating major incidents or threats of marine pollution. The Protocol will enter into force on 14 June 2007.

## **MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER**

[http://ozone.unep.org/Treaties\\_and\\_Ratification/2B\\_montreal\\_protocol.asp](http://ozone.unep.org/Treaties_and_Ratification/2B_montreal_protocol.asp)

<http://www.epa.gov/ozone/intpol/>

**The purpose of the Montreal Protocol is to protect the stratospheric ozone layer.** The Protocol has 189 Parties, including the United States. It came into force in January 1989 to address **chlorofluorocarbons (CFCs), halons, carbon tetrachloride, methyl chloroform, methyl bromide, and hydrochlorofluorocarbons**. The Protocol stipulates that the production and consumption of these compounds be phased out and establishes schedules to achieve this goal. **The Vienna Convention for the Protection of the Ozone Layer** (1985), which outlines States' responsibilities for protecting human health and the environment against the adverse effects of ozone depletion, established the framework under which the Montreal Protocol was negotiated. The Montreal Protocol was amended in 1990, 1992, 1997, and 1999.

## **THE ROTTERDAM CONVENTION ON THE PRIOR INFORMED CONSENT PROCEDURE FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES IN INTERNATIONAL TRADE (PIC)**

<http://www.epa.gov/oppfead1/international/agreements.htm#A3>  
<http://www.state.gov/r/pa/prs/ps/2005/58340.htm> <http://www.pic.int/>

The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC ) promotes shared information and responsibility in the international trade of certain hazardous chemicals. Under PIC, importing countries should receive shipments of banned or severely restricted substances only after they have had an opportunity to make an informed decision. A total of 39 chemicals currently are subject to the PIC procedure: 24 pesticides, 11 industrial chemicals and 4 severely hazardous pesticide formulations. The Convention establishes a process for listing new chemicals. Signed by 110 countries, not including the U.S., the Convention entered into force on February 24, 2004

## **THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS**

(POPS <http://www.epa.gov/oppfead1/international/pops.htm>  
<http://www.state.gov/r/pa/prs/ps/2005/58340.htm> <http://www.pops.int/>

The United States is among over 150 Signatories to the Stockholm Convention on Persistent Organic Pollutants (POPs). Under the Convention, countries commit to reduce and/or eliminate release of the 12 POPs of greatest concern (the “dirty dozen”) into the environment. The Treaty came into force on May 17, 2004. A mechanism by which other chemicals may be added is included in the Treaty.

## **INTERNATIONAL ORGANIZATIONS AND PROGRAMS**

A number of international bodies have significant roles in formulating and implementing policies to reduce hazards associated with the production, use, disposal, and reuse of chemicals. Below are links to some of these organizations.

- Food and Agriculture Organization of the United Nations [http://www.fao.org/index\\_en.htm](http://www.fao.org/index_en.htm).
- Global Environment Facility <http://www.gefweb.org/>.
- Strategic Approach to International Chemicals Management (SAICM) <http://www.who.int/ifcs/saicm/en/index.html>
- International Maritime Organization (IMO) <http://www.imo.org/home.asp>
- Inter-Organization Programme for the Safe Management of Chemicals (IOMC) <http://www.who.int/iomc/en/>
- International Program on Chemical Safety (IPCS) <http://www.who.int/ipcs/en/>
- International Labor Organization – InFocus Programme on Safety and Health <http://www.ilo.org/public/english/protection/safework/chemsfty/index.htm>
- North American Commission on Environmental Cooperation - (CEC)
  - Environmentally-Sound Management and Tracking of Hazardous Waste [http://www.cec.org/programs\\_projects/law\\_policy/project/index.cfm?varlan=english&projectID=30](http://www.cec.org/programs_projects/law_policy/project/index.cfm?varlan=english&projectID=30)
  - North American Release and Transfer Registry [http://www.cec.org/programs\\_projects/pollutants\\_health/project/index.cfm?varlan=english&projectID=26](http://www.cec.org/programs_projects/pollutants_health/project/index.cfm?varlan=english&projectID=26)
  - Sound Management of Chemicals [http://www.cec.org/programs\\_projects/pollutants\\_health/project/index.cfm?varlan=english&projectID=25](http://www.cec.org/programs_projects/pollutants_health/project/index.cfm?varlan=english&projectID=25)
- Organization for Economic Cooperation and Development (OECD) Chemical Safety Program

[http://www.oecd.org/topic/0,2686,en\\_2649\\_34365\\_1\\_1\\_1\\_1\\_37465,00.html](http://www.oecd.org/topic/0,2686,en_2649_34365_1_1_1_1_37465,00.html)  
Waste [http://www.oecd.org/topic/0,2686,en\\_2649\\_34395\\_1\\_1\\_1\\_1\\_37465,00.html](http://www.oecd.org/topic/0,2686,en_2649_34395_1_1_1_1_37465,00.html)

- United Nations Development Program – Energy and Environment/Chemicals Management  
<http://www.undp.org/energyandenvironment/chemicals.htm>
- United Nations Economic Commission for Europe (UNECE) – Environment, Housing and Land Management Division  
<http://www.unece.org/env/welcome.html>
- United Nations Environment Program (UNEP)  
Chemicals <http://www.chem.unep.ch/irptc/default.htm>  
Mercury Programme <http://www.chem.unep.ch/mercury/default.htm>
- United Nations Industrial Development Organization (UNIDO) – Energy and Environment  
<http://www.unido.org/doc/51262>
- United Nations Institute for Training and Research (UNITAR) - Chemicals, Waste and Environmental Governance  
<http://www.unitar.org/>.
- World Bank – Environmental and Natural Resources Law/Chemicals.  
<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTLAWJUSTICE/EXTENVIRONMENTNATRESLAW/0,,contentMDK:20477611~menuPK:1736790~pagePK:148956~piPK:216618~theSitePK:1001743,00.html>

## **SOME U.S. ACTIVITIES AND ADDITIONAL RESOURCES**

Below are links to information on EPA international activities related to chemicals:

### **ACCIDENTS**

- Chemical Emergency Preparedness and Response: International Partnerships  
<http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/internationalpartnerships.htm?opendocument>

### **AIR**

- Global Warming – International  
<http://yosemite.epa.gov/oar/globalwarming.nsf/content/VisitorCenterInternational.html>
- International Air and Climate Programs  
<http://www.epa.gov/international/airandclimate/aboutair.html>
- Ozone Depletion  
<http://www.epa.gov/ozone/>
- Methane - International Activities  
<http://www.epa.gov/methane/international.html>

### **CLEANER PRODUCTION**

- International Cleaner Production Program – EnviroSenSe  
<http://es.epa.gov/cooperative/international/>

### **IMPORT/EXPORT**

- Foreign Trade Imports Initiative: Scrap Metal Recycling

- <http://www.epa.gov/radiation/cleanmetals/foreign.htm>
- Importing and Exporting New Chemicals  
<http://www.epa.gov/oppt/newchemicals/pubs/import.htm>
- International Import and Export  
<http://www.epa.gov/compliance/international/importexport.html>
- Waste: Import/Export Requirements  
<http://www.epa.gov/epaoswer/osw/international/imp-exp.htm>

## **INDUSTRIAL ECOLOGY**

- Material Outflows from Industrial Economies  
<http://www.epa.gov/industrialecology/documents/weightofnations.html>

## **MERCURY**

- International Actions for Reducing Mercury Emissions and Use  
<http://www.epa.gov/mercury/international.htm>

## **PESTICIDES**

- Regulating Pesticides: International Issues  
<http://www.epa.gov/oppfead1/international/index.htm>

## **RIGHT TO KNOW**

- Toxics Release Inventory - International  
<http://www.epa.gov/tri/programs/prtrs.htm>

## **TOXICS**

- Gateway to Innovative Best Practices and Innovations: Chemicals and Toxic Substances  
<http://www.epa.gov/innovation/international/chemicals.htm>
- Great Lakes Binational Toxics Strategy  
<http://www.epa.gov/bns/>
- Great Lakes Pollution Prevention and Toxics Reduction  
<http://www.epa.gov/glnpo/p2.html>
- International Affairs: Toxics  
<http://www.epa.gov/oia/toxics/index.htm>
- OPPT International Activities  
<http://www.epa.gov/opptintr/international/>

## **WASTE**

- International Waste Activities  
<http://www.epa.gov/epaoswer/osw/international/index.htm>
- U.S. Mexico Border 2012  
<http://www.epa.gov/usmexicoborder/>

## **WATER**

- EPA's Role in Transboundary Water Programs  
<http://www.epa.gov/international/water/transboundary/transboundary.html>
- International Affairs – Water  
<http://www.epa.gov/international/water/>