



**UNITED NATIONS  
ENVIRONMENT PROGRAMME**

**Chemicals**



**MASTER LIST OF ACTIONS**

**On the Reduction and/or Elimination of the Releases  
of Persistent Organic Pollutants**

*Fifth Edition*



**Prepared by UNEP Chemicals  
June 2003**

**IOMC**

**INTER-ORGANIZATION PROGRAMME FOR THE SOUND MANAGEMENT OF CHEMICALS**  
A cooperative agreement among UNEP, ILO, FAO, WHO, UNIDO, UNITAR and OECD

**This publication is produced within the framework of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC)**

The Inter-Organization Programme for the Sound Management of Chemicals (IOMC), was established in 1995 by UNEP, ILO, FAO, WHO, UNIDO and OECD (Participating Organizations), following recommendations made by the 1992 UN Conference on Environment and Development to strengthen cooperation and increase coordination in the field of chemical safety. In January 1998, UNITAR formally joined the IOMC as a Participating Organization. The purpose of the IOMC is to promote coordination of the policies and activities pursued by the Participating Organizations, jointly or separately, to achieve the sound management of chemicals in relation to human health and the environment.

The photograph on the cover page was provided courtesy of ABB Environmental Services. It shows the preparation of a PCB containing transformer prior to its environmentally sound disposal.

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**UNEP  
CHEMICALS**



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## ***OVERVIEW***

In response to the Governing Council of the United Nations Environment Programme decision 19/13C, which requests UNEP to develop a global, legally binding instrument on persistent organic pollutants (POPs), UNEP initiated a number of activities. There are also activities undertaken by Governments and organizations at the national, regional and international levels. It became clear that there is a need to co-ordinate work being done to eliminate releases of POPs to help ensure effective and efficient use of resources. To facilitate such co-ordination, UNEP has developed the Master List of Actions on the Reduction and/or Elimination of Releases of POPs. This overview of the Master List of Actions demonstrates, in geographical maps, countries' contributions to the Master list of Actions.

The data included below is a summary of what was provided from Governments without verification as to their accuracy. The data is generally insufficient to assess global use patterns; future editions will require more complete reporting, especially of those countries not having reported.

### **1.1**

#### ***OBJECTIVE***

This overview aims at helping visualizing country activities (ongoing, planned and concurrent) on POPs.

This document includes maps where, due to the scale, not all countries/states are visible. Details on countries that do not appear on these maps can be found in the Master List of Actions.

The following 15 maps were developed based on information from countries' contribution. All maps are accompanied with a short summary and legend:

- **Map 1:** Overview on signatories and Parties of the Stockholm Convention
- **Map 2:** Overview on all reporting countries to the Master List
- **Map 3:** Countries having planned, ongoing or concurrent monitoring & assessment activities
- **Map 4:** Countries having National Action Plans on POPs
- **Map 5:** Legal status Aldrin
- **Map 6:** Legal status Chlordane
- **Map 7:** Legal status DDT
- **Map 8:** Legal status Dieldrin
- **Map 9:** Legal status Dioxins/Furans
- **Map 10:** Legal status Endrin
- **Map 11:** Legal status Heptachlor
- **Map 12:** Legal status Hexachlorobenzene
- **Map 13:** Legal status Mirex
- **Map 14:** Legal status PCBs
- **Map 15:** Legal status Toxaphene



**MAP 2: OVERVIEW ON REPORTING COUNTRIES TO THE MASTER LIST**

Over 100 countries' submissions are discussed in the 2003 edition of the Master List of Actions on the Reduction and/or Elimination of the Releases of Persistent Organic Pollutants. Since the 2002 edition there has been an increase in nations reporting, particularly from Sub-Saharan Africa, although there continues to be a lack of reporting from Southern Asia. Map 1 illustrates the geographical distribution of reporting nations.





**MAP 3: COUNTRIES HAVING PLANNED, ONGOING OR CONCURRENT MONITORING & ASSESSMENT ACTIVITIES**

72 countries are currently planning, undertaking or recently finishing monitoring and assessment activities. There has not been a significant net change in the number of states represented since the last edition of the Master List, despite a decrease in the number of nations reporting new projects. Reports include a wide range of POPs-specific projects, research programs, monitoring programs, etc and are targeted at regional, national or sub-national levels. Included among the most common of these monitoring activities are projects focused on water and food quality, PCBs and pesticides specific programs.



**MAP 4: NATIONAL ACTIVITIES TO ELIMINATE OR REDUCE RELEASES OF POPS**

59 countries are continuing established or currently undertaking new activities aimed at the reduction and/or elimination of the releases of POPs into the environment. All countries which reported on actions were included in the Master List and represented on map 4. The ongoing and planned activities show a wide variety of projects, ranging from awareness raising activities chemical management and monitoring systems, modification of national legislation, conducting of inventories to the actual disposal of POPs stockpiles and POPs waste. No country has developed and established a National Implementation Plan, as required in the Stockholm Convention; however many nations are in the process of developing such a plan.



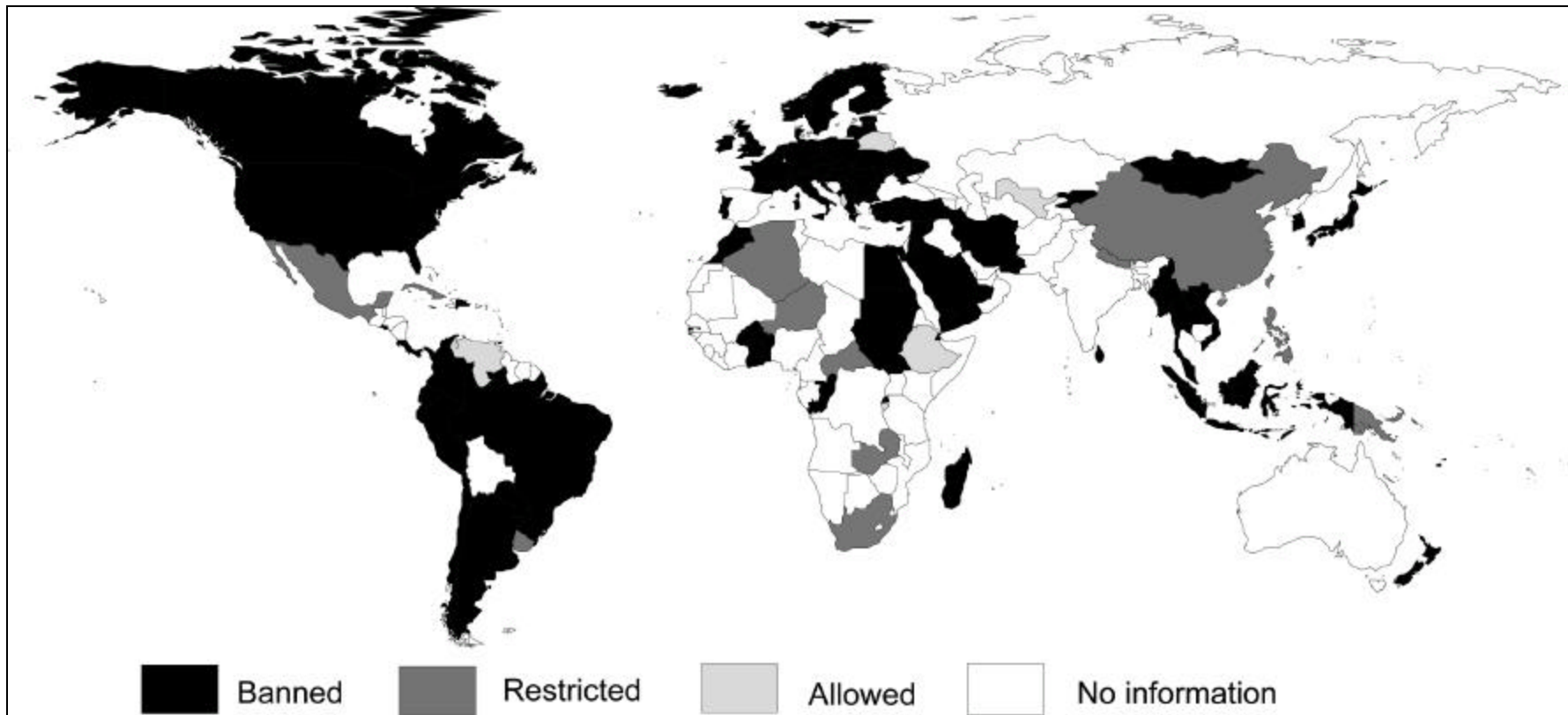
**MAP 5: LEGAL STATUS ALDRIN**

As reported in earlier editions, Aldrin is banned for all uses in most countries of Europe, North and Latin America, and South-East Asia. In general, there are a limited number of countries reporting "Allowed" for use. In this edition, while the status of Aldrin legislation has changed in a few countries, this shift is likely a reflection of more efficient reporting practices rather than legislative changes.



**MAP 6: LEGAL STATUS CHLORDANE**

Chlordane is banned for all uses in most countries of Europe, North and Latin America, and South-East Asia that reported, however to a lesser extent than Aldrin. When the Convention has entered into force, Chlordane will be one of two insecticides that can be produced and used according to specific exemptions detailed in Annex A of the Stockholm Convention. Therefore, a complete reporting on production of use of Chlordane on a global basis is essential.



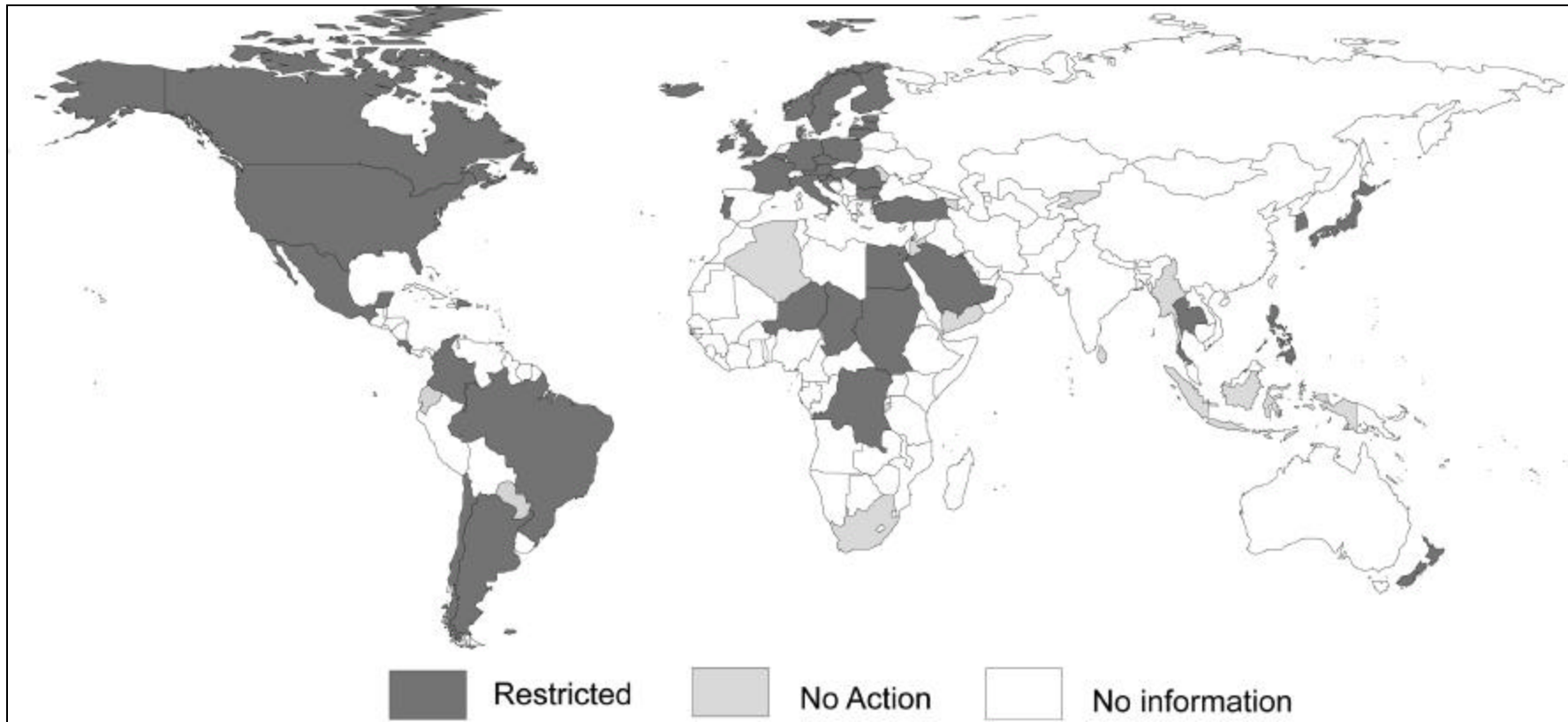






**MAP 9: LEGAL STATUS DIOXINS AND FURANS**

Dioxins and Furans are not produced for commercial purposes but produced unintentionally as a byproduct of industrial or combustion processes. The control of Dioxins and Furans will remain an ongoing task for countries becoming Parties of the Convention and their release will never be eliminated completely. However, they can be limited through various means including establishing emission standards. 47 countries reported having enacted such release standards for the 2003 edition of the Master List of Actions, a significant increase in the number of nations reporting legislative controls.



**MAP 10: LEGAL STATUS ENDRIN**

Endrin is banned for all uses in most of the responding countries of Europe, North and Latin America and South-East Asia. There is no significant change in national legislation since the last edition. The production and use of Endrin will be prohibited for all Parties of the Convention (Annex A of the Stockholm Convention).





**MAP 11: LEGAL STATUS HEPTACHLOR**

Heptachlor is banned in most reporting countries of Europe, South-East Asia and Latin America. The legal status is similar to that of Aldrin, Chlordane, Dieldrin and Endrin. Since the last edition, it appears that there has been a trend in Heptachlor regulations from restricting to banning the chemical. Some countries continue to allow the use of the chemical for very specific purposes of pest control. Based on the exemptions given in Annex A of the Convention, Heptachlor is one of the chemicals which can be used for termite control, wood treatment and for the protection of underground cable boxes after the Convention has entered into force.





**MAP 13: LEGAL STATUS MIREX**

Mirex use is banned in most countries of North and Latin America as well as of North and Eastern Europe and South-East Asia that reported. That is similar to the last edition of the Master List. Moreover, there has been a significant increase in the number of South American nations that have banned the chemical. After the convention enters into force, production and use will be allowed for termite control, as detailed in Annex A.



**MAP 14: LEGAL STATUS PCBS**

PCBs are banned in approximately 25 of the reporting countries; nonetheless this result may reflect a misunderstanding of the term “banned”, since supporting documentation indicates that only one country, Sweden, has actually banned PCB use. In other nations, although PCBs are being reduced, the chemical remains to be allowed in very specific circumstances, i.e. existing electrical transformers. Handling, transport and disposal is generally restricted by applicable regulations. By 2025 the use of PCBs must be eliminated and, by 2028, nations must provide environmental sound disposal practices, according to Annex A, part II of the Convention.



**MAP 15: LEGAL STATUS TOXAPHENE**

Toxaphene use is banned for all purposes across Europe, North and Latin America, and South-East Asia amongst nations that responded. Overall, its legal status is similar to Aldrin, Chlordane, Dieldrin, Endrin and Heptachlor. Since the last edition, a number of additional countries have banned the use of the chemical. The Convention stipulates a complete ban of production and use.





## **Introduction**

### **Background**

The first Master list of Actions on the Reduction and/or Elimination of Releases of POPs was distributed at the third session of the Intergovernmental Negotiating Committee (INC 3) for an International Legally Binding Instrument for Implementing International Action on Certain POPs in September 1999. Subsequently, UNEP Chemicals has provided an updated version at each of the INC meetings. This current version (5<sup>th</sup> edition) has been prepared for the Inter-governmental Negotiation Committee (INC 7) meeting (Geneva, 14-18 July 2003). All editions of the Master list are made available on the UNEP Chemicals website under <http://www.pops.int/mastlist/mastlist.htm>.

To collect information for this fifth edition of the Master List, the Interim Secretariat of the Stockholm Convention sent on 13 December 2002 a letter to

- The Stockholm Convention Focal Points,
- The UNEP Official Contact Points (only relevant for countries which had not yet designated Stockholm or POPs Focal Points),
- The POPs INC-6 Heads of Delegation, and
- Selected intergovernmental and non-governmental organizations.

All submissions received up until May 2003 were included in the present document.

### **Objective**

This edition of the master list consists of actions aiming at reducing and/or eliminating of releases of POPs including concrete and time constrained projects, national action plans and legislation on POPs related issues, e.g. national bans. The goal of the Master List is to facilitate co-ordination and co-operation between and among countries, inter-governmental organizations and non-governmental organizations on a national, regional and international level. It shall help to avoid duplication of efforts and therefore improve the efficiency of resource use. Due to the high commitment and participation of many countries, inter-governmental and non-governmental organizations, the present master list can become a dynamic tool for ensuring successful global action on POPs. The Master List is frequently updated in order to keep it useful and applicable. All ongoing and planned projects or those completed by 2000 are included in the current edition. A summary of selected issues, such as the legal status on the 12 POPs, are summarized in the Executive Summary.

Countries and organizations are encouraged to use the update forms (Annex 1 to 3) to provide new and/or revised information on

- 1) monitoring and assessment projects (Annex 1),
- 2) activities aiming at the reduction and or elimination of releases of POPs into the environment (Annex 2), and
- 3) the legal status of POPs (Annex 3).

## Organization and Structure of the Tables of the Master List

The information collected from international organizations, governments and non-governmental organizations was entered into a database, summarized and structured according to the following chapters:

- 1 Activities by International-Governmental Organizations (IGOs) aiming at the reduction and/or elimination of the releases of POPs
  - 1.1 Global Activities
  - 1.2 Regional Activities

- 2 Activities by Countries
  - 2.1 Projects on the assessment and monitoring of POPs chemicals
  - 2.2 National Action Plans aiming at the reduction and/or elimination of the releases of POPs
  - 2.3 Regulatory Status of POPs on bans, restrictions, legally permitted use or no actions

- 3 Activities by Non-Governmental Organizations (NGOs) aiming at the reduction and/or elimination of the releases of POPs

Data on activities undertaken by IGOs (chapter 1), NGOs (chapter 3) and on country-driven projects (chapter 2.1) were collected using the Annex 1 questionnaire. Chapter 2.2 on the national action plans of the countries refer to the data which were collected by the Annex 2 questionnaire. Chapter 2.3 information on the regulatory status are related to the Annex 3 questionnaire.

The tables, based on the Annex 1 and 2 questionnaires, include information on 11 different categories:

1. Reporting organization or country
2. Title of the project or activity
3. Objective of the project or activity
4. Timeframe
5. Status
6. Responsible organization(s) or department(s) or ministry/ies
7. Partner(s)
8. Project Funder(s)
9. Data sources
10. Publications
11. Comment(s)

The tables in chapter 2.3 which are based on Annex 3 questionnaire include

1. Information on the legal status (banned, restricted, allowed) of each of the 12 POPs addressed by the convention,
2. The year legislation was set in place, and
3. Further comments.



# **1. Activities by International-Governmental Organizations (IGOs) aiming at the reduction and/or elimination of the releases of POPs**

1.1 Global Activities.....	pg. 23
1.2 Regional Activities.....	pg. 37



## 1.1 Global Activities

Updated information included from the following IGOs:

1. FAO, Food and Agriculture Organization
2. IPCS, The International Programme on Chemical Safety
3. SBC, Secretariat of the Basel Convention
4. UNEP, United Nations Environment Programme
5. UNITAR, United Nations Institute for Training and Research
6. WHO, World Health Organization



**FAO**

<b>Title</b>	FAO summary obsolete pesticide data
<b>Objective(s)</b>	A complete Summary of existing Obsolete Pesticide Data
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	FAO
<b>Project Funder(s)</b>	FAO
<b>Data Source</b>	Alemayehu Wodageneh (Ph.D) Co-ordinator, Chief Technical Advisor Plant Production and Protection division Via delle Terme di Caracalla FAO 00100, Rome, Italy B646
<b>Comments</b>	<p>Obsolete Pesticide data from 82 countries (46 from Africa, 13 from Asia, 8 from Near East and 15 from Latin America/Caribbean)</p> <p>Please note the summary is only an indication. Taking into consideration, all types of pesticides, the billions of empty pesticide containers left yearly at the farm gate, heavily contaminated soil at storage sites, or in the open, buried pesticides in an open pit or otherwise, the summary might only be the tip of the iceberg.</p> <p>For related or other information you may wish to refer to the website given. <a href="http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/Disposal/index_en.htm">http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/Disposal/index_en.htm</a></p>

**FAO, UNEP, Secr. of the Basel Convention**

<b>Title</b>	Unwanted stocks of pesticides and other chemicals, including POPs
<b>Objective(s)</b>	To build on the work already undertaken in Africa, inventory stockpiles of unwanted pesticides and other chemicals including POPs in other areas, including Latin America and Russia. The next step will be to develop guidance and training on the management and disposal of such stockpiles and to seek bilateral and other partners for actual management and disposal projects.
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	FAO, UNEP and SBC
<b>Partner(s)</b>	Bilateral and other donors of financial and technical assistance
<b>Data Source</b>	UNEP Chemicals
<b>Comments</b>	FAO will continue to serve as the lead for this work with UNEP Chemicals and SBC providing expertise and other resources in support.

**Secr. of the Basel Convention**

<b>Title</b>	National Programme for the environmentally sound management of PCB's on Cote D'Ivoire
<b>Objective(s)</b>	1. To complete a national inventory. 2. To draft a national regulation. 3. To develop a national plan for the management of PCB's.
<b>Timeframe</b>	1999 (8 months) - tentative

**Responsible Organisation(s)**  
**Partner(s)**  
**Comments**

Ministere de l'Environnement - Abidjan SBC  
IAGU - Centre Regional de la Convention de Bale a Dakar  
Field: Public Health, Occupational Health, Environmental Protection

**Secr. of the Basel  
Convention**

**Title**

Prevention of the degradation of the quality of inland water systems and of the marine environment from the adverse effects of the generation of hazardous wastes.

**Objective(s)**

1. To assess effects of persistent organic wastes on human health and environment. 2. To prioritize action on persistent organic wastes in the Caribbean. 2. To prepare a Regional Action Programme.

**Timeframe**

To be decided further - 1999 (tentative)

**Responsible Organisation(s)**

CARIRI - SBC

**Partner(s)**

UNEP - Regionally based assessment of Persistent toxic substances Project.

**Comments**

Field: Environmental Protection  
Substances covered: Persistent organic substances

**Secr. of the Basel  
Convention**

**Title**

International Forum for the environmentally sound management of PCB's

**Objective(s)**

To review/assess conditions of the development of national/regional action plans on the management of PCB's

**Timeframe**

01-05 November 1999 - tentative

**Responsible Organisation(s)**

Centre regional de formation et Transfert de Technologie - Dakar

**Partner(s)**

UNEP - Chemicals, UNEP - IE, Chamber of Commerce and Industry, Private sector and NGO's

**Comments**

Field: Public Health, Occupational Health, Environmental Protection.

**UNEP**

**Title**

Information Exchange and Information Clearinghouse on POPs

**Objective(s)**

To facilitate information, on both POPs themselves as well as on alternatives and techniques that may represent options for replacing or reducing/eliminating releases of POPs.

**Status**

Concurrent

**Responsible Organisation(s)**

UNEP-Chemicals

**Data Source**

UNEP Chemicals

**UNEP**

**Title**

POPs Global Monitoring Programme to support the effectiveness evaluation of the Stockholm Convention.

**Objective(s)**

UNEP Chemicals has initiated a global network for the monitoring of chemical in the environment focusing initially on POPs. A workshop to develop a Pops Global Monitoring Programme was held in March 2003 in Geneva. The workshop proceedings are available on the POPs website. In follow up to the workshop guidance for a global POPs monitoring programme would be developed and laboratories that could participate in such a programme identified. Funding for the activities comes from the United States of America and Canada.

**Timeframe** April 2002 to 2004  
**Status** Concurrent  
**Responsible Organisation(s)** Implementing agency: UNEP  
**Project Funder(s)** USA, Canada, POPs Fund  
**Comments** Advisory Group meeting in May 2002. Workshop held in Geneva, Switzerland, March 2003. Meeting to draft guidance document in September-October 2003.

**UNEP**

**Title** Medium-sized project to conduct subregional workshops on support for the implementation of the Stockholm Convention.

**Objective(s)** UNEP and the Global Environmental Facility (GEF) have organized a series of 9 sub-regional and inter-regional workshops to support the implementation of the Convention. The workshops were funded through a GEF Medium Sized Project with co-funding from the Governments of Sweden, Canada and Switzerland. The workshops were primarily aimed at providing assistance to developing countries in strengthening their national chemicals management programs with regard to their implementation and ratification of the Stockholm Convention on POPs and related instruments. The primary target groups are senior government managers and decision-makers from environment and other government authorities. Representatives from international organizations, industry, academia and environmental NGOs have also participated.

**Timeframe** November 2001 to April 2003  
**Status** Concurrent  
**Responsible Organisation(s)** Implementing agency: UNEP  
**Project Funder(s)** GEF, Sweden, Canada, Switzerland  
**Comments** Workshops held in Manama, Bahrain (November 2001), Bangkok, Thailand (November 2001), Ouagadougou, Burkina Faso (February 2002), Montevideo, Uruguay (March 2002), Bratislava, Slovakia (April 2002), Port of Spain, Trinidad and Tobago (June 2002), Kiev, Ukraine (October 2002), Livingstone, Zambia (November 2002) and St. John's, Antigua (April 2003).

**UNEP**

**Title** Persistent Toxic Substances (PTS)- Assessment of National Management Needs of PTS (PDF-B)

**Objective(s)** The primary deliverable of the full project will be to develop widely applicable guidelines for assessing national level problems related to persistent toxic substances and the need of countries in terms of managing them and to develop a Strategic Action Plan (or strengthening of) for the management of chemicals, particularly PTS

**Timeframe** December 1999- September 2000  
**Status** Finished  
**Responsible Organisation(s)** Implementing agency: UNEP  
 Executing agency: UNEP  
**Project Funder(s)** PDF-B funding (GEF, UNEP and other UN-Agencies)  
**Data Source** Persistent Toxic Substances and UNEP, in the Global Environment Facility  
**Comments** It is proposed that a limited number of country case studies be conducted to assess how developing countries might undertake an assessment of, and identify potential problems related to, persistent toxic chemicals and what actions are required to address and prevent these problems. This bottom-up approach would complement the Regionally Based Assessment and would be comparable to the country studies that were carried out in

the initial phases of work under the Montreal Protocol, the Framework Convention on Climate Change, and the Convention on Biological Diversity. The selected countries should be representative of the different regions of the world, different stages of economic development, and the extent of present use of PTS. The PDF-B will be executed with the collaboration of a number of partners including the World Bank, UNDP, FAO, and the Organization for Economic Co-operation and Development (OECD).

**UNEP**

**Title**  
**Objective(s)**

**Timeframe**  
**Status**  
**Responsible Organisation(s)**  
**Project Funder(s)**

**Data Source**  
**Comments**

Regionally-based Assessment of Persistent Toxic Substances

This regionally-based assessment is being undertaken to enable policy-makers to evaluate the priorities in addressing these substances, to provide a framework for GEF interventions, to complement the negotiations on an international legal agreement on POPs and with the ultimate goal of prioritizing issues and areas for future GEF interventions.

2000-2003

Concurrent

Implementing agency: UNEP  
 Executing agency: UNEP

GEF, UNEP, SBC  
 Australia, Canada, France, Germany, Sweden, Switzerland and the United States of America

Persistent Toxic Substances and UNEP, in the Global Environment Facility

The current data on the origins, production, use, pathways and deposition of persistent toxic substances in most regions of the world, is deficient. There is little information, particularly in developing countries, on environmental levels and trends, threats to, and exposure of, humans and the environment to these substances. This assessment is complementary to, and supportive of, the Global International Waters Assessment, giving special in-depth consideration to the issue of persistent toxic substances.

**UNEP**

**Title**  
**Objective(s)**

**Status**  
**Responsible Organisation(s)**  
**Project Funder(s)**  
**Data Source**  
**Comments**

Chemicals Information Exchange Network(CIEN)

-To strengthen capacity to access electronic sources of chemical information by providing equipment and training for chemicals management decision makers and officials in developing countries

-To establish a national chemical information exchange network that can support the implementation of chemicals related conventions (Basel, Stockholm and Rotterdam Conventions).

-To promote the development of national chemical information system.

-To promote the establishment of a regional/global network for chemical information exchange.

Concurrent

UNEP-Chemicals, USEPA

Canada POPs Fund, US State Department, USEPA, the Swiss confederation

UNEP Chemicals

The project has been implemented in over 26 countries of the Economic Community of West African States (ECOWAS) countries, the Southern African Development Community (SADC), Central Africa and Central



America and Mexico.

**UNEP**

**Title** Alternatives Approaches (Chemical and Non-Chemical) to POPs pesticides  
**Objective(s)** To provide guidance on and facilitate access to information and expertise on alternatives and techniques that may represent options for replacing or reducing/eliminating releases of POPs.  
**Timeframe** number of information products and guidance materials are available through the POPs Web-site and in hardcopy format  
**Status** Concurrent  
**Responsible Organisation(s)** UNEP-Chemicals  
**Partner(s)** WHO and FAO  
**Project Funder(s)** United States of America and Canada POPs Fund  
**Data Source** UNEP-Chemicals

**UNEP**

**Title** Regional and Sub-regional POPs Management Workshops  
**Objective(s)** To encourage countries to initiate development of national strategies and action plans for reducing/ eliminating releases of POPs, to assist national officials, including POPs national focal points to UNEP, in implementing immediate national and/or regional actions determined to protect against the risks of POPs and to prepare countries for technical implementation of a future global convention on POPs.  
**Status** Finished  
**Responsible Organisation(s)** UNEP Chemicals  
**Data Source** UNEP Chemicals  
**Comments** Hanoi, Vietnam for Asia and the Pacific in March 1999, Lusaka, Zambia for the Southern African Development Community , SADC in February 2000) and Cairns Australia for the SPREP region in March 2001

**UNEP**

**Title** Intergovernmental Negotiating Committee for an International Legally Binding Instrument for Implementing International Action on Certain POPs  
**Objective(s)** To prepare an international legally binding instrument for implementing international action initially beginning with the twelve specified persistent organic pollutants, including criteria and a procedure for adding further POPs to the instrument.  
**Timeframe** 1997- 2001  
**Status** Finished  
**Responsible Organisation(s)** UNEP  
**Data Source** UNEP Chemicals  
**Comments** INC continuing in interim Management role pending Entry into Force for the Stockholm Convention on POPs

**UNEP**

**Title** 12 country project on the development of national implementation plans for the management of POPs.  
**Objective(s)** The project is to strengthen national capacity to manage persistent organic

pollutants and to assist countries in meeting their obligations under the Stockholm Convention. The project will assist 12 pilot countries (Barbados, Bulgaria, Chile, Ecuador, Guinea, Lebanon, Malaysia, Mali, Micronesia, Papua New Guinea, Slovenia and Zambia) in developing a national implementation plan for the Stockholm Convention. Also to be developed are guidelines for the development of national implementation plans in other countries.

**Timeframe**

2001-2003

**Status**

Concurrent

**Responsible Organisation(s)**

Implementing agency: UNEP

Executing agency: UNEP

**Project Funder(s)**

GEF, Switzerland, Sweden and Germany

**UNEP**

**Title**

Enabling Activities for the Stockholm Convention on Persistent Organic Pollutants (POPs): National Implementation Plans

**Objective(s)**

UNEP is assisting developing countries and countries with economy in transition, eligible for GEF funding, developing National Implementation 2001-2003Plans (NIPs) under the Stockholm Convention. The overall objective of the projects is to create sustainable capacity within the countries to meet their obligations under the Stockholm Convention. The primary outputs will be the National Implementation Plans. As such they will serve broader purposes of chemical safety and management as articulated in Chapter 19 of Agenda 21 and describe

**Timeframe**

24 months for each project

**Status**

Concurrent

**Responsible Organisation(s)**

Implementing agency: UNEP

Executing agency: UNEP

**Project Funder(s)**

GEF, UNEP

**Comments**

Current status of the projects is as follows:

31 countries (Antigua and Barbuda, Argentina, Benin, Brazil, Cambodia, Cameroon, Côte d'Ivoire, Fiji, Gambia, Haiti, Jordan, Kenya, Kiribati, Madagascar, Marshall Islands, Mauritania, Mozambique, Palau, Senegal, Serbia and Montenegro, South Africa, Sri Lanka, Syrian Arab Republic, Thailand, Tonga, Tunisia, Ukraine, Uruguay, Vanuatu, Yemen and Zimbabwe) has been approved by CEO GEF. Among these, 10 countries (Cote d'Ivoire, Fiji, Kenya, Kiribati, Marshall Islands, Mauritania, Senegal, Tonga, Tunisia and Vanuatu) are implementing the projects; 21 countries are in the initial stage of project organization.

10 countries (Bahrain, Cuba, Kyrgyzstan, Nauru, Oman, Paraguay, Saint Lucia and Tajikistan, Guinea Bissau, Democratic republic of Congo ) submitted their project proposals for GEF approval; and UNEP is still negotiating with other countries about the possibility to assist them in their NIP preparation once they sign the Stockholm Convention. Besides a Pilot Project for 12 countries is running in parallel (See the 12 country project).

**UNEP**

<b>Title</b>	National inventories of PCBs
<b>Objective(s)</b>	To support the undertaking of national inventories of PCBs and materials containing PCBs
<b>Timeframe</b>	2002-2003: Projects underway in Congo, Cuba, Guinea, Madagascar, Mali
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	UNEP Chemicals and the Secretariat for the Basel Convention (SBC)
<b>Project Funder(s)</b>	Germany, Norway, US
<b>Data Source</b>	UNEP Chemicals
<b>UNEP</b>	
<b>Title</b>	Subregional workshops on identification management of PCBs, dioxins and furans
<b>Objective(s)</b>	Train country experts to identify PCB-containing equipment, make inventories and manage PCBs; identify sources of dioxins and furans and quantify their releases. 7 workshops in total from April 2000 until April 2001
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	UNEP Chemicals
<b>Data Source</b>	UNEP Chemicals
<b>Comments</b>	Undetermined. Workshops held thus far in Hanoi, Vietnam (March 1999), Lusaka, Zambia (February 2000) and Darwin, Australia (May 2001) for the SPREP subregion
<b>UNEP</b>	
<b>Title</b>	Intergovernmental Negotiating Committee for the Stockholm Convention on Persistent Organic Pollutants
<b>Objective(s)</b>	Provide the interim secretariat for the Stockholm Convention on POPs, including preparing for and conducting further session of the Intergovernmental Negotiating Committee that developed the Convention, and provide secretariat for other interim activities called for the Conference of Plenipotentiaries that adopted the Convention.
<b>Timeframe</b>	2001 until end of calendar year in which COP1 takes place
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	UNEP
<b>Data Source</b>	UNEP Chemicals
<b>UNEP</b>	
<b>Title</b>	PCB identification and management training
<b>Objective(s)</b>	To provide information and training on identifying and managing PCBs and materials containing PCBs
<b>Timeframe</b>	Planned: Cameroon (Yaoundé) 17-21 APR 2000 Iran (Tehran) 24-28 JUN 2000 Uruguay (Montevideo) 18-22 SEP 2000 Tanzania (Arusha) 9 -13 OCT 2000
<b>Status</b>	Finished
<b>Responsible Organisation(s)</b>	UNEP Chemicals and the Secretariat for the Basel Convention (SBC)
<b>Project Funder(s)</b>	Germany, Norway, US
<b>Data Source</b>	UNEP Chemicals
<b>UNEP</b>	

**Title** Regional and Sub-regional workshops on Alternatives Approaches (Chemical and Non-Chemical) to POPs pesticides

**Objective(s)** To raise awareness among national officials of sustainable approaches in the reduction/ elimination of POPs pesticides and promote collaboration between agriculture, environment and health sectors in efforts to implement integrated pest and vector management

**Status** Concurrent

**Responsible Organisation(s)** UNEP-Chemicals

**Partner(s)** WHO and FAO

**Project Funder(s)** The United States of America, Canada POPs Fund, Belgium, The Inuit Circumpolar Conference (ICC)

**Data Source** UNEP-Chemicals

**UNEP**

**Title** National Pollution Release and Transfer Registers (PRTRs)

**Objective(s)** To promote PRTRs in the context of reporting under the Stockholm Convention on POPs

**Timeframe** Commence October 2003: Workshop and 2 pilot projects in ASEAN region

**Status** Concurrent

**Responsible Organisation(s)** UNEP Chemicals

**Project Funder(s)** Canada POPs Fund

**Data Source** UNEP Chemicals

**UNEP**

**Title** Capacity Building for Civil Society

**Objective(s)** To build public understanding of the Stockholm Convention on POPs, and support for its ratification by countries

**Timeframe** 2003: Projects in Russia and the South Pacific

**Status** Concurrent

**Responsible Organisation(s)** UNEP Chemicals, EcoACCORD and Pacific Concerns Resource Centre

**Project Funder(s)** Canada POPs Fund

**Data Source** UNEP Chemicals

**UNEP**

**Title** Chemicals Management Information Exchange and Networking

**Objective(s)** To enhance the capabilities of countries to obtain and share the information needed for their national decision making in the field of chemicals management, including POPs

**Timeframe** 2002-2004: Projects underway in 12 SADC and 11 ECOWAS countries

**Status** Concurrent

**Responsible Organisation(s)** UNEP Chemicals and the US EPA)

**Project Funder(s)** Canada POPs Fund and USEPA

**Data Source** UNEP Chemicals

**UNEP**

**Title** Disposal of Obsolete and waste pesticides in the Caribbean Region  
**Objective(s)** To develop a program to dispose of obsolete and waste pesticides in Caribbean countries  
**Timeframe** July 2003 to June 2004  
**Status** Concurrent  
**Responsible Organisation(s)** UNEP Chemicals, Secretariat for the Basel Convention (SBC) and CARARI  
**Project Funder(s)** Canada POPs Fund  
**Data Source** UNEP Chemicals

**UNEP**

**Title** Training on Developing Dioxin and Furan Inventories  
**Objective(s)** Train national experts to identify and quantify sources of PCDD/PCDF and establish national release inventories. Establish a network of regional experts  
**Status** Concurrent  
**Responsible Organisation(s)** UNEP Chemicals  
**Project Funder(s)** Funding by Canada POPs Fund  
**Data Source** UNEP Chemicals  
**Comments** Workshops held/scheduled:  
 La Havana, Cuba: 22-25 April 2003  
 Port-of-Spain, Trinidad and Tobago: 19-22 May 2003  
 Kampala, Uganda: 11-14 August 2003  
 Damascus, Syria: 7-11 September 2003  
 Ouidah, Benin: September 2003

**UNEP**

**Title** Strengthening National Chemicals Management in Countries of the Commonwealth of Independent States  
**Objective(s)** To strengthen national chemicals management, including legal, institutional and technical aspects, through training, conduct of expert meetings, development of guidance materials, data compilations and inventories as well as through field visits, in the following subject areas: POPs, PIC, PRTRs and information exchange (the major focus has been on POPs). The project involves 12 CIS countries (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Tajikistan, Turkmenistan, Uzbekistan and Ukraine)  
**Timeframe** June 1997 - December 2003  
**Status** Concurrent  
**Responsible Organisation(s)** UNEP Chemicals  
**Partner(s)** Government of the Russian Federation  
**Project Funder(s)** UNEP, Russian Federation  
**Data Source** UNEP Chemicals and CIS countries

**UNEP**

**Title** Regional Workshop on BAT/BEP for South American Countries, Buenos Aires, Argentina, October 21-26, 2002  
**Objective(s)** The workshop was an information exchange on the understanding of Best available Techniques (BAT) and Best Environmental Practices (BEP) under the Stockholm Convention on POPs (Article 5) for countries in the region and between the region and OECD countries. The results of this workshop

	are part of the documentation to the Expert Group (a subsidiary body) established by the POPs INC-6 in June 2002. The project has a direct impact and link to the National Implementation Plans (Article 7
<b>Timeframe</b>	Completed, Proceedings available
<b>Status</b>	Finished
<b>Responsible Organisation(s)</b>	Ministerio de Desarrollo Social y Medio Ambiente, Secretaría de Ambiente y Desarrollo Sostenible, Buenos Aires, Argentina;
<b>Partner(s)</b>	Secretariat of the Basel Convention;
<b>Project Funder(s)</b>	Funding by Canada POPs Fund
<b>Data Source</b>	UNEP Chemicals
<b>UNEP</b>	
<b>Title</b>	Developing Dioxin and Furan Inventories
<b>Objective(s)</b>	To train national experts to identify and quantify sources of PCDD/PCDF and establish national release inventories for Brunei Darussalam, Jordan, Lebanon, Philippines, Vietnam, Argentina, Cuba, Paraguay. Establish a network of regional experts.
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	UNEP Chemicals
<b>Project Funder(s)</b>	Funding by US EPA and Canada POPs Fund
<b>Data Source</b>	UNEP Chemicals
<b>Comments</b>	Training Workshops held: Hanoi, Vietnam: 1-4 October 2001 Brunei Darussalam: 17-19 December 2002 Buenos Aires, Argentina: 27-29 October 2003
<b>UNEP</b>	
<b>Title</b>	Developing a PCBs Inventory in Ukraine
<b>Objective(s)</b>	Through analysis of the available documentation and expert on-site investigations/field visits, to develop an inventory of PCBs containing equipment and other PCBs sources Review of technical and economic requirements for the environmentally sound technologies of PCBs treatment/destruction should be compiled.
<b>Timeframe</b>	October 2002 - February 2004
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	UNEP Chemicals
<b>Partner(s)</b>	Government of Ukraine
<b>Project Funder(s)</b>	Canada, UNEP Chemicals, POPs fund
<b>Data Source</b>	UNEP Chemicals
<b>UNEP</b>	
<b>Title</b>	Support countries in efforts to reduce the reliance on POPs pesticides in disease vector control and meeting obligations of the Stockholm Convention with regard to the production and use of DDT
<b>Objective(s)</b>	To build national capacities in developing and implementing integrated vector management programmes and support the international negotiation process with information and guidance needed to evaluate the continued need for POPs in disease vector control
<b>Timeframe</b>	2003 and onwards

**Status** Concurrent  
**Responsible Organisation(s)** UNEP-Chemicals, WHO  
**Partner(s)** WHO-AFRO, FAO  
**Project Funder(s)** The United States of America  
**Data Source** UNEP-Chemicals

**UNEP**

**Title** Capacity building to reduce / eliminate the need for POPs pesticides in termite control  
**Objective(s)** Build Capacities at national and regional level to identify, develop and implement sustainable approaches to replace POPs pesticides in termite control within agriculture, forestry and the construction sector  
**Timeframe** 2003 and onwards  
**Status** Concurrent  
**Responsible Organisation(s)** UNEP-Chemicals  
**Partner(s)** FAO  
**Project Funder(s)** The United States of America  
**Data Source** UNEP-Chemicals

**UNEP**

**Title** Dioxin Sampling and Analysis Program in Sub-Saharan Africa  
**Objective(s)** Characterize and quantify through a sampling campaign emission factors from activities realized in Africa, which have the potential to generate and release PCDD/PCDF. Improve the Toolkit emission factors.  
**Status** Concurrent  
**Responsible Organisation(s)** UNEP Chemicals and Ministries of Environment in Cameroon and in Benin  
**Project Funder(s)** Canada POPs Fund  
**Data Source** UNEP Chemicals

**UNITAR**

**Title** Design and Implementation of National Pollutant Release and Transfer Registers (PRTRs)  
**Objective(s)** The Programme assists countries in the design and implementation of national PRTR systems through multi-stakeholder processes. A series of guidance and training materials have been developed with a wide variety of partners, and are available for country use.  
**Timeframe** Ongoing  
**Responsible Organisation(s)** UNITAR  
**Partner(s)** IOMC Participating Organizations, Environment Canada, US Environmental Protection Agency. Partner countries (past and present) include: Chile, Ecuador, Mexico and the Slovak Republic.  
**Comments** Article 10 of the Stockholm Convention refers to PRTR as a possible mechanism that can assist with collecting and disseminating information on release or disposal estimates of persistent organic pollutants.

**UNITAR**

**Title** Preparation of a thought starter on Developing a National Plan of Action for Addressing Persistent Organic Pollutants (POPS): No.5 in the Pilot series of Thought starters in Support of National Capacity Building Initiatives for the Sound Management of Chemicals.

**Objective(s)**

The document is intended for a national task force or committee which has been given the mandate to develop a national strategy and action plan to address POP's. It aims to assist task force members in thinking through key issues which may be of importance in initiating a systematic national process, with involvement of all concerned parties, towards the goal of reducing emissions of POP's, with a particular focus on production, use and disposal. The document forms part of a Pilot Series of Thought Starters in Support of National Capacity Building Initiatives for the Sound Management of Chemicals.

**Timeframe**

Draft completed; final version to be published by June 1999

**Responsible Organisation(s)**

UNITAR

**Partner(s)**

UNEP Chemicals

**Comments**

Field: National Capacity building for sound chemicals management

**UNITAR**

**Title**

Action Plan Development for Sound Chemicals Management

**Objective(s)**

UNITAR provides guidance and training to countries on Action Plan development for priority topics of chemicals management. UNITAR's Action Plan development methodology is being applied at the country level in a number of chemicals-related fields, including for National Implementation Plan development under the Stockholm Convention on Persistent Organic Pollutants, and as part of a new phase of the UNITAR/IOMC programme on Integrated Chemicals and Waste Management.

**Timeframe**

ongoing

**Responsible Organisation(s)**

UNITAR

**Partner(s)**

IOMC Participating Organizations; Swiss Agency for Development and Cooperation (SDC); Netherlands Minister for Development Cooperation

**Comments**

Training on National Implementation Plan development, as part of this programme, has taken place in cooperation with UNEP in the following countries: Ecuador and Zambia. Discussions with the GEF and its Implementing Agencies regarding training in Action Plan development to assist with National Implementation development under the Stockholm Convention in additional countries are under way.

**UNITAR**

**Title**

UNITAR/IOMC National Chemicals Management Profiles Programme

**Objective(s)**

To provide IFCS-endorsed guidance, training and technical support to assist countries in assessing the existing legal, institutional, administrative, and technical infrastructures for sound chemicals management. Additional companion guidance (developed with UNEP as part of an ongoing GEF/UNEP project in twelve countries) on developing a National Profile as part of a National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants is also available in Working Draft form. A global Internet homepage and CD-Rom have also been developed featuring completed National Profiles and related guidance and training materials.

**Timeframe**

Ongoing (commenced in 1996)

**Responsible Organisation(s)**

UNITAR

**Partner(s)**

IOMC Participating Organizations; European Chemicals Bureau (ECB) of the European Commission

**Comments**

Current status: over 90 National Profiles already completed/in preparation.



In addition, National Profile guidance to assist in the field of waste management is also proposed for 2003. In 2003 further projects will be initiated. GEF interim guidelines for enabling activities under the Stockholm Convention recommend the development or updating of National Profiles as an important step in National Implementation Plan development under the Convention.

**UNITAR**

**Title**

UNITAR/IOMC Programme to Assist Countries in Developing and Sustaining Integrated National Programmes for the Sound Management of Chemicals

**Objective(s)**

To support developing countries and countries in economic transition to address integrated chemicals management issues and Action Plan development on topics identified through a national priority-setting process. Expected results include an updated National Profile, completed Action Plans on two priority topics, a financial resource mobilisation strategy and strengthened national inter-ministerial and multi-stakeholder mechanisms. The Programme is designed in a flexible manner to allow countries to consider areas of particular importance to their national situation.

**Timeframe**

2001 - 2003

**Responsible Organisation(s)**

UNITAR

**Partner(s)**

Swiss Agency for Development and Cooperation; IOMC Participating Organizations; Project Countries: Ecuador, Senegal and Sri Lanka

**Comments**

Field: National capacity building for sound chemicals management. Current status: Ecuador, Senegal and Sri Lanka are participating in two-year projects entitled Developing and Sustaining an Integrated National Programme (INP) for the Sound Management of Chemicals. The programme, which finishes its third phase in 2003, will include National Review workshops in all three countries, and a final report with high-level endorsement. Three countries will be supported in a new phase, which commences in 2003 and will focus on building on experiences from Phase III through the development of new guidance and training materials, and an expansion of the programme to include hazardous waste issues as well as issues of chemicals management.

**UNITAR**

**Title**

Risk Management Decision-making for Priority Chemicals

**Objective(s)**

Activities conducted under the programme promote the development of skills and procedures at the country level relevant to implementing risk management decision-making processes and action plan development for priority chemicals. The programme is implemented through country-based projects during which partner countries choose a priority chemical and develop a risk reduction/elimination strategy for the identified chemical through a process involving all affected and interested parties. Through case studies, country-based task forces work through a systematic risk management decision-making process, starting from the risk assessment stage, to identification of possible risk reduction options and development of a proposed risk reduction strategy. The programme, which makes use of working draft guidance document and expertise available from various organizations and countries.

**Timeframe**

ongoing

**Responsible Organisation(s)** UNITAR  
**Partner(s)** ICPS; UNEP Chemicals, European Commission. Partner countries in an early phase (1998-1999) were Chile, Cameroon, Tanzania, and The Gambia. An additional country project is under way in 2001-2003 in Ghana.  
**Comments** Field: Capacity building for risk assessment and risk management decision-making

**UNITAR**

**Title** UNITAR/IOMC Pilot Programme to Assist Countries in Implementing National Action Programmes for Integrated Chemicals Management.  
**Objective(s)** To support developing countries and countries in economic transition in implementing a formal national process to address priority issues and to strengthen the overall institutional infrastructure for chemicals management through a systematic process which involves all concerned parties and which builds on the results of the National Profile process. In the context of a National Action Programme, Technical Task Forces are set up to address identified priority areas of national chemicals management capacity building, and a policy-level National Coordinating Team is established to ensure coordination among the various task force activities. To test this approach, UNITAR/IOMC initiated a pilot programme in 1997 in partnership with Argentina, Ghana, Indonesia and Slovenia.  
**Timeframe** 1996-1999  
**Responsible Organisation(s)** UNITAR  
**Partner(s)** IOMC Participating Organisations; Swiss Agency for Development and Cooperation (SDC); Partner countries: Argentina, Ghana, Indonesia and Slovenia  
**Comments** Field: National capacity building for sound chemicals management. Substances covered: Hazardous and toxic chemicals (in general).

**WHO**

**Title** Action Plan for the Reduction of Reliance on DDT Use for Public Health Purposes  
**Objective(s)** 1. To support Member States (globally) in making informed decisions about reduction and/or elimination of reliance on DDT for vector control while ensuring that no adverse health consequences result from these actions. 2. To provide guidance and technical assistance on the development, implementation and evaluation of alternatives to the use of DDT for vector control. 3. To mobilize and establish effective partnerships in support of reducing reliance on DDT.  
**Status** Concurrent  
**Responsible Organisation(s)** World Health Organization: its Headquarters in Geneva and its six Regional Offices  
**Partner(s)** WHO Collaborating Centers, relevant multilateral and bilateral agencies and NGOs  
**Project Funder(s)** WHO, U.S. Government, Danish Government. Additional funds are required and are being solicited from various external support agencies.  
**Data Source** WHO, Roll Back Malaria  
**Comments** The action plan involves three strategic principles: 1) involvement of all countries still using DDT for vector control, 2) early identification of funding mechanisms for alternatives, and 3) the need for advocacy. WHO will assist Member States to: a) conduct needs assessments to establish baseline data on current vector control programs as the basis for national action plans to reduce reliance on DDT without adverse public health consequences; b) ensure the safe management of DDT stockpiles in

collaboration with FAO and industry; c) support research on alternatives through institutional research networks; d) monitor and evaluate disease control programs; e) mobilize resources to ensure that the necessary technical and financial support is available for strengthening disease control programs.

### **WHO/WHO-IPCS**

**Title**

Environmental Health Criteria Monographs (EHCs).

**Objective(s)**

- Assessment of risks to human health and the environment from exposure to chemicals. Substances covered: Aldrin and Dieldrin, DDT and derivatives, Endrin, HCB, Chlordane, Heptachlor, Mirex, and Dioxins, furans  
Concurrent

**Status**

IPCS

**Responsible Organisation(s)**

UNEP, ILO and IPCS Participating Institutions.

**Partner(s)**

**Data Source**

Aldrin and Dieldrin (n°91, 1989); DDT Environmental aspects (n°83, 1989); DDT and Derivatives (n°9, 1979); Endrin (n°130, 1992); Hexachlorobenzene (n°195, 1997); Chlordane (n°34, 1984); Heptachlor (n°38, 1984); Mirex (n°44, 1994); PCB (n°2, 1976/ n°140, 1993); Dioxins and Dibenzofurans (n°88, 1989/ n°205, 1998).

### **WHO/WHO-IPCS**

**Title**

Joint FAO/WHO Meeting on Pesticide Residues

**Objective(s)**

Assessment of risks to human health from exposure to pesticides, mostly through food. Substances covered: Aldrin; Dieldrin; Endrin; Heptachlor; Hexachlorobenzene; Mirex; DDT; Chlordane, Toxaphene.

**Status**

Concurrent

**Responsible Organisation(s)**

IPCS

**Partner(s)**

FAO



## 1.2 Regional and Sub-Regional Activities

Updated information included from the following IGOs:

1. AMAP, Arctic Monitoring Action Plan
2. CEC-NAFTA, Commission for Environmental Cooperation of the North American Free Trade Agreement
3. GEF, Global Environment Facility
4. IPCS, The International Programme on Chemical Safety
5. OSPAR, Convention for the Protection of the Marine Environment of the North-East Atlantic
6. ROPME, Regional Organization for the Protection of the Marine Environment
7. SPREP, South Pacific Regional Environmental Programme
8. UNEP, United Nations Environment Programme
9. UN-ECE, United Nations Economic Commission for Europe
10. WHO, World Health Organization
11. Caspian Environment Programme



## **AMAP**

<b>Title</b>	The Arctic Monitoring and Assessment Program
<b>Objective(s)</b>	To monitor the levels of, and assess the effects of POP's on the Arctic ecosystems and Arctic peoples. To monitor spatial and temporal trends in the circumpolar area north of approx. 60
<b>Timeframe</b>	1991-1997 First Assessment report is presented. 1998-2003 Monitoring research and assessment is ongoing.
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	Arctic Monitoring and Assessment Program (AMAP)
<b>Partner(s)</b>	UK The Netherlands and Germany. UN-ECE, UNEP, ILES, OSPAR, etc.
<b>Project funder(s)</b>	The eight Arctic countries: Canada, Denmark/Greenland, Iceland, Norway, Russia, Sweden and USA.
<b>Data Source</b>	The data gathered is stored at thematic data centres.
<b>Comments</b>	Ongoing and new initiated national, bilateral and international programmes. National reporting on sources.

## **Caspian Environment Programme**

<b>Title</b>	At Sea Training Programme ASTP
<b>Objective(s)</b>	The major objectives of the At Sea Training Programme (ASTP) are summarized as follows: 1) Carry out a pilot ambient monitoring activity in the Caspian Sea (screening project) in order to create an up to date high quality contaminants data, to fill the gaps and serve as supplementary inputs to Transboundary Diagnostic Analysis TDA, Regional Strategic Action Programme "SAP" and National Action Plans "NAPs". 2) Mapping the distribution of major contaminants (oil and non-oil) in bottom sediment of the Caspian Sea marine environment focusing on Persistent pollutions. 3) On-Board training course for the region on ambient pollution monitoring including methodology, sampling, sample handling and preservation, sample analyses, quality control/quality assurance and data management. 4) Carry out a regional Inter comparison/inter calibration - quality control exercises among Caspian Littoral States laboratories on contaminants analysis. Initiate the activities in order to improve pollution monitoring and assessment in the region.
<b>Timeframe</b>	Mid 2001-End of 2001
<b>Status</b>	Finnished
<b>Responsible Organisation(s)</b>	GEF-UNDP Caspian Environment Programme CEP "Theme for Effective Regional Assessment of Contaminant Levels " ERACL".
<b>Partner(s)</b>	Caspian Littoral States: Azerbaijan, Islamic Republic of Iran, Russian Federation, Kazakhstan and Turkmenistan
<b>Project funder(s)</b>	GEF-UNDP Caspian Environment Programme CEP
<b>Data Source</b>	Data and Information Management division (DIM) of Project Coordinating Unit (PCU) located in Baku - Azerbaijan, please see the website
<b>Comments</b>	Complete assessment and report preparation will be finalized by early 2002

## **CEC-NAFTA**

<b>Title</b>	North American Regional Action Plan on DDT, Chlordane, and PCB Regional Action Plans 1997, under the Sound Management of Chemicals Project, December 1996
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## **OSPAR**

<b>Title</b>	The 1992 OSPAR Convention, 1998: OSPAR Strategy with the regard to Hazardous Substances, 1999
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## **ROPME**

<b>Title</b>	Pilot Study on POPs
<b>Objective(s)</b>	1. Carry out surveys of Land-Based activities/sources in the ROPME Sea Area (RSA). 2. Identify POPs more specific to the RSA. 3. Compile information on production and use of POPs by various sectors. 4. Assess the amount of POPs unintentionally produced by different sectors. 5. Assess inputs of POPs into the marine environment from different point and

diffuse sources.  
 6. Assess the spatial and temporal distribution of POPs in the RSA.  
 7. Assess capabilities and constraints for compliance and trend monitoring of POPs.  
 8. Review existing national policies, strategies, programmes and measures for the reduction and/or elimination or emissions and discharges of POPs.  
 9. Prepare a regional plan of action for the reduction and/or elimination of emissions and discharges of POPs, as well as for the regional monitoring programme.  
 10. Carry out training workshops on sampling and analyses of POPs, including a Quality Assurance Component.

**Timeframe** 1999-2000  
**Status** Concurrent  
**Partner(s)** IAEA-Monaco and UNEP (Water Branch, GPA, ROWA)

**SPREP**

**Title** Management of persistent Organic Pollutants in Pacific Island Countries  
**Objective(s)** Identification and disposal of waste and obsolete chemicals and identification and remediation of chemicals contaminated sites.  
**Timeframe** 1998-2001  
**Partner(s)** AUSAID  
**Comments** Field: Environment Protection, Public Health  
 Other substances: industrial chemicals, medical wastes, laboratory chemicals, bitumen oil.

**SPREP**

**Title** Persistent Organic Pollutants in Pacific Island Countries (POPs in PICs)  
**Objective(s)** To upgrade regional capacity for the management of POPs and related chemicals, in order to eliminate the threats posed by these towards the environment and human health.  
 12 Countries in the South Pacific: -Cook Islands, Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu  
**Timeframe** 1997-1999 (Phase 1 - inventories)  
 2000-2002 (Phase 2 - clean-up)  
**Responsible Organisation(s)** SPREP  
**Partner(s)** Governments in the target countries  
**Project funder(s)** AUSAID  
**Data Source** SPREP  
**Comments** The Phase 1 Report, Waste and Obsolete Chemicals and Chemical Contaminated Sites, has published by SPREP in August 2000.

**UN-ECE**

**Title** Convention on Long-range Transboundary Air Pollution, 1979  
 Trade Division, Chemical Industry Programme: Pilot Project Demonstrating the Environmental Clean-up of Selected Sites Polluted by Chemicals (Central and Eastern Europe)  
 Seminar on POPs, Plan of Action on POPs reducing and elimination in the Russian Federation

**UN-ECE Trade Division**

**Title** Pilot Project Demonstrating the Environmental cleaning of Selected Sites Polluted by Chemicals  
**Objective(s)** By use of one pilot site by country, to demonstrate to governments the approach to cleaning chemically polluted sites as model for other sites in the country.  
**Timeframe** 5 to 10 years  
**Comments** Substances covered: Heavy metals, chlorinated solvents, PAH's, mixed contaminants.

**UNEP**

**Title** Strategic Action Programme to Address Pollution from Landbased Activities (SAP); Adopted by the Barcelona Convention in Tunis, 1997  
**Status** Concurrent



**UNEP**

**Title** Strengthening National Chemicals Management in countries of the Commonwealth of Independent States

**Objective(s)** Strengthening National Chemicals Management

**Status** Concurrent

**Responsible Organisation(s)** UNEP

**UNEP**

**Title** Protection of the Marine Environment from Land-based activities in the Eastern African Region (regional) component of the Programme of Action

**Status** Concurrent

**UNEP**

**Title** Reducing Pesticide Runoff to the Caribbean Sea (PDF-B)

**Objective(s)** The project will assist Colombia, Costa Rica, and Nicaragua in developing comprehensive management practices and specific measures to control the use of pesticides in the agricultural sector. In the framework of a National Action Plan, the project will strengthen national regulatory systems and promote the use of economic instruments and alternatives including Integrated Pest Management.

**Timeframe** 15 months (April 1999- June 2000)

**Status** Concurrent

**Responsible Organisation(s)** Implementing agency: UNEP  
Executing agency: The Secretariat of the Cartagena Convention (CAR/RCU), Colombia, Costa Rica, Nicaragua, Panama

**Project funder(s)** PDF-B funding (GEF, UNEP, Governments, Counterparts)

**Data Source** Persistent Toxic Substances and UNEP, in the Global Environment Facility

**Comments** The use of pesticides in agriculture, particularly in large scale production of export crops, poses a serious threat to both human health and the aquatic environment, and has transboundary effects through the hydrological cycle and atmospheric pathways. The objective of the project is to reduce the use of, and reliance on, pesticides in the agricultural sector of four Caribbean countries. The PDF-B is being executed in collaboration with a number of partners including the World Bank, UNDP, FAO and the Inter-American Development Bank.

**UNEP**

**Title** Persistent Organic Pollutants, Food Security, and Indigenous Peoples in Arctic Russia (PDF-A)

**Objective(s)** The objectives of the project are to ascertain the level of key POPs in country food and in blood and lipid tissues of selected populations and to analyze the health and dietary implications of these findings

**Timeframe** 4 months (January 1999- April 2000)

**Status** Finished

**Responsible Organisation(s)** Implementing agency: UNEP  
Executing agency: Inuit Circumpolar Conference (ICC)

**Project funder(s)** PDF-B funding (GEF, AMAP, ICC, Russian Association of Indigenous Peoples (RAIPON), McGill University- Centre for Indigenous People Nutrition & the Environment (CINE))

**Data Source** Persistent Toxic Substances and UNEP, in the Global Environment Facility

**Comments** It has been shown that, due to their reliance on fishing, hunting and herding, Arctic indigenous peoples are particularly prone to accumulate contaminants via ingestion of contaminated food. However, there is no data on the exposure to contaminants of arctic indigenous populations from the Russian Federation. Particular emphasis will be placed on exposure via aquatic pathways and on the actions necessary to reduce this route of exposure, thus contributing to an improvement in the quality of the Arctic aquatic environment. The PDF-A is being executed in partnership with RAIPON, CINE, Saami Council, AMAP and the State Committee of the Russian Federation for Environmental Protection. The PDF-A is expected to lead to a medium-size project, of 3 years duration, which will commence in the last quarter of 1999.

**UNEP**

**Title** Identification of priority hot-spots and conduct of pre-investment studies for remedial action in support of the National Plan of Action for the Protection of the Marine Environment from Anthropogenic Pollution in the Arctic Region of the Russian Federation. (PDF-B)

**Objective(s)** The main objective of the project is to conduct pre-investment studies of the priority hot spots with significant transboundary consequences that will have been identified during the PDF-B phase.

**Timeframe** 17 Months (July 1999 – January 2001)

**Status** Concurrent

**Responsible Organisation(s)** Implementing agency: UNEP (in collaboration with the World Bank)  
Executing agency: Advisory Committee on Protection of the Sea (ACOPS).  
Russian Inter-Agency "Task Team for the preparation of the National Plan of Action for the Protection of the Marine Environment from Anthropogenic Pollution in the Arctic Region of the Russian Federation."

**Project funder(s)** GEF, ACOPS, Canada, Denmark, Russian Federation, Sweden and the U.S.A.

**Comments** Preliminary definition and analyses of the sources of degradation for the Arctic region of the Russian Federation have been carried out, and provided input to the preparation of the "Regional Programme of Action for the Protection of the Arctic Marine Environment from Land-Based Activities". This, however, defines neither the priorities nor the costs of interventions of a remedial or mitigating nature.  
The PDF-B is being executed in partnership with the World Bank, the Russian Inter-Agency Task Team, the Russian Duma and the International Task Team for the NPA-Arctic.

**UNEP**

**Title** Regional Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Vector Control in Mexico and Central America

**Objective(s)** The project will support the phase out of DDT in Mexico, and in Central America by relying on the Mexican experience. Alternatives to DDT will be implemented in selected sub-sets of the region. One particular component of the project will assess the relative costs and benefits of DDT and alternatives.

**Timeframe** 12 Months (September 1999 – August 2000)

**Status** Concurrent

**Responsible Organisation(s)** Implementing agency: UNEP  
Executing agency: Regional: Pan American Health Organization (PAHO)  
National: Health Ministries

**Project funder(s)** PDF-B funding: (GEF, PAHO, Commission for Environmental Cooperation (CEC))

**Data Source** Persistent Toxic Substances and UNEP, in the Global Environment Facility

**Comments** At present, DDT is cheap, readily available, and thought to be an efficient way to control disease vectors, particularly the Anopheles that transmit the Plasmodium parasite causing malaria. Some chemical and non-chemical alternatives to DDT exist, but their efficiencies have not always been fully demonstrated. More importantly, a net benefit analysis of the use of DDT and its alternative has not been undertaken.  
The PDF-B will assess in particular the state of the use of DDT for public health in the region and the barriers to the adoption of alternatives. The PDF-B will be executed with the collaboration of the CEC, the Organization of American States and the International Development Research Centre.

**UNEP**

**Title** Mediterranean Action Plan, 1975  
- Land-Based Sources Protocol  
- Barcelona Convention, 1976  
- The LBS Protocol, 1996

**Status** Concurrent

**UNEP**

**Title** Evaluation of Emissions of Dioxins and Furans in the Russian Federation with Focus on the Northern Regions

**Objective(s)** This project aims to identify and quantify PCDD/PCDF sources in the Russian Federation, quantify the releases to the environment and prioritize sources in terms of release reduction measures. The project has a training component as to the transfer of sampling and analysis techniques from Western industrialized countries to Russian laboratories.

**Status** Concurrent

<b>Responsible Organisation(s)</b>	ACAP (Arctic Council Action Programme)
<b>Partner(s)</b>	Governments of Russia, Sweden (coordinating country), USA, AMAP, and UNEP
<b>Data Source</b>	UNEP Chemicals
<b>UNEP</b>	
<b>Title</b>	Reducing Reliance on Agricultural Pesticide Use and Establishing a Community Based Pollution Prevention System in the Senegal and Niger River Basins, PDF-B
<b>Responsible Organisation(s)</b>	Implementation: UNEP
<b>Project funder(s)</b>	Execution: Global IPM Facility, FAO; CERES Locustox (Sénégal) GEF
<b>UNEP</b>	
<b>Title</b>	Persistent Toxic Substances (PTS), Food Security and Indigenous Peoples of the Russian North
<b>Responsible Organisation(s)</b>	Implementation: UNEP
<b>Project funder(s)</b>	Execution: Arctic Monitoring and Assessment Programme and Russian Association of Indigenous Peoples of the North GEF
<b>UNEP</b>	
<b>Title</b>	Eritrea, Ethiopia, Madagascar, Namibia, South Africa and Swaziland: Prevention of Human and Environmental Exposure to DDT and other Toxic Pesticides and Strengthening of Malaria Control Programmes in Africa, PDF-B
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	Implementation: UNEP
<b>Project funder(s)</b>	Execution: WHO Regional Office for Africa; national roll-back malaria committees GEF
<b>UNEP</b>	
<b>Title</b>	GEF PDF-B/WIO, Preparation of Transboundary Diagnostic Analysis (TDA) of the Western Indian Ocean (WIO) and related Strategic Action Programme
<b>WHO (EURO,ECEH) &amp; WHO/IPCS</b>	
<b>Title</b>	Assessment of Exposure to dioxins and PCBs
<b>Objective(s)</b>	To assess trends in exposure to dioxins and PCBs in mother's milk. Geographical coverage: Europe, USA, Canada. Substances covered: PCDD's, PCDF's, PCBs.
<b>Timeframe</b>	1999-2000.
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	IPCS
<b>Partner(s)</b>	FAO
<b>WHO-EURO/WHO-IPCS/WHO-FOS</b>	
<b>Title</b>	Assessment of levels of PCDDs, PCDFs and PCBs in mothers' milk
<b>Objective(s)</b>	Evaluation of overall exposure in various countries, and assessment of trends
<b>Timeframe</b>	Ongoing
<b>Responsible Organisation(s)</b>	World Health Organization (WHO)
<b>Partner(s)</b>	Country contact points.



## 2. Activities by Countries

2.1 Projects on the Assessment and Monitoring of POPs Chemicals.....	pg. 47
2.2 National Action Plans aiming at the reduction and/or elimination of the releases of POPs.....	pg. 187
2.3 Regulatory Status of POPs on bans, restrictions, legally permitted use or no actions.....	pg. 231



## 2.1 Projects on the assessment and monitoring of POPs chemicals

Updated information included from the following countries:

1. Armenia
2. Australia
3. Austria
4. Belgium
5. Brazil
6. Brunei Darussalam
7. Bulgaria
8. Canada
9. Central African Republic
10. Chad
11. Chile
12. Colombia
13. Congo
14. Costa Rica
15. Cote d'Ivoire
16. Czech Republic
17. Denmark
18. Dominican Republic
19. Egypt
20. Estonia
21. European Commission
22. Federated States of Micronesia
23. Fiji
24. Finland
25. France
26. Gambia, The
27. Germany
28. Ghana
29. Greenland
30. Honduras
31. Hungary
32. Iceland
33. Indonesia
34. Iran
35. Italy
36. Jamaica
37. Japan
38. Jordan
39. Korea
40. Kyrgyz Republic
41. Laos
42. Latvia
43. Lebanon
44. Lithuania
45. Madagascar
46. Mexico
47. Moldova
48. Monaco
49. Morocco
50. Myanmar
51. New Zealand
52. Nicaragua
53. Niger
54. Norway
55. Peru
56. Philippines
57. Poland
58. Portugal
59. Romania
60. Saudi Arabia
61. Singapore
62. Slovakia
63. Slovenia
64. South Korea
65. Sri Lanka
66. Sweden
67. Switzerland
68. Thailand
69. Turkey
70. UK
71. Ukraine
72. USA





## Algeria

<b>Title</b>	Enabling activities to facilitate early action on the implementation of the Stockholm Convention on persistent organic pollutants (POPs) in Algeria
<b>Objective(s)</b>	The objective is to develop and formulate a National Implementation Plan (NIP) and thereby strengthen national capacity and enhance knowledge and understanding. This objective Algeria will meet the obligation of the Stockholm Convention on Pops and will be enabled to manage the elimination of POPs
<b>Timeframe</b>	May 2002 - 2004
<b>Responsible Organisation(s)</b>	<ul style="list-style-type: none"><li>-Ministry of the Industry</li><li>-Ministry of the small and middle factories</li><li>-SOWELGAZ</li><li>-SONATRACH</li><li>-ASMIDAL</li><li>-Ministry of Agriculture</li><li>-Ministry of the Health</li><li>-Ministry of interior and local activities</li><li>-Ministry of Foreign Affairs</li><li>-Ministry of Environment</li><li>-Ministry of Finance</li><li>-Ministry of Energy</li><li>-Ministry of University Education and Scientific Search</li><li>-Ministry of Commerce</li><li>-Nation Office of Statistical</li><li>-Algerian Center of Control of the quality and packing</li><li>-Algerian Chamber of Commerce and Industry</li><li>-National Institute of Regetal Protection</li><li>-National Center of Toxicology</li><li>-National Chamber of Agriculture</li><li>-National Institute of Public Health</li><li>-Association for the Protection of the Environment</li></ul>
<b>Partner(s)</b>	UNIDO
<b>Project Funder(s)</b>	<ul style="list-style-type: none"><li>-GEF Implementing Agency/ Executing Agency with Expanded Opportunities</li><li>-United Nations Industrial Development Organization</li></ul>
<b>Publication</b>	<ul style="list-style-type: none"><li>-POPs enabling activities for Algeria</li><li>-UNIDO proposal (22.10.2002)</li></ul>
<b>Comments</b>	The project duration is 24 months, reckoning from the signing of the contract
<b>Contact</b>	Ms Dalia Boudjemda Rue des Quatre Cannons 16000 Algiers, ALGERIA 213-21-43-28-04 d_boudjeman@hotmail.com

## Armenia

<b>Title</b>	"Exposure and Measuring of POPs sources on the Territory of the Republic of
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Armenia and risks of Impact on the Health and the Environment"

**Objective(s)** Identify POPs sources in industry, agriculture, to analyze POPs residues in soil samples, surface water (in the rivers Hrazdan, Sevjur, Arpa, Kasakh), Lake Sevan, breast milk samples of rural population

**Timeframe** 1 December 1999 - 1 April 2000

**Responsible Organisation(s)** Ministry of Nature Protection Republic of Armenia, Hazardous Substances and Wastes Management Department

**Partner(s)**

- Center of Environment Monitoring Ministry of Nature Protection Republic of Armenia;
- Scient.Research Institute of Environmental Hygiene and Preventive Toxicology;
- Scient.Research Institute of General Hygiene and Occupational Diseases;
- Institute of Hydroecology and Ichthology;
- Plant Protection Research Institute;
- Soil Sciences and Agrochemistry Institute;
- Republic Center of Hygiene and SES of Republic of Armenia;
- "Chimtech" State Closed Stock Company;
- "Paren" Scientific-Production and Design State Closed Joint-Stock Company of the Ministry of Agriculture Republic of Armenia.

**Project Funder(s)** UNEP Chemicals

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## **Australia**

**Title** Determination of the levels of organochlorine pesticides (OCPs) and polybrominated diphenylethers (PBDEs) in the Australian population by analysis of breast milk

**Objective(s)** To investigate the levels of organochlorine pesticides (OCPs) and polybrominated diphenyls (PBDEs) in the Australian population by analysis human milk samples.

**Timeframe** 2002 - 2003

**Responsible Organisation(s)** Environment Australia

**Project Funder(s)** Environment Australia

**Comments** The analyses of OCPs and PBDEs in human breast milk will be undertaken conjunction with the dioxins breast milk study under the National Dioxins program

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## **Australia**

**Title** SOURCES OF DIOXINS AND FURANS IN AUSTRALIA: AIR EMISSIONS  
Revised Edition 2002

**Objective(s)** To investigate the sources of polychlorinated dioxin and polychlorinated furan emissions in Australia.

**Timeframe** 1998 - Completed in  
1998 and  
revised 2002

**Responsible Organisation(s)** Environment Australia

**Partner(s)** Pacific Air & Environment

**Project Funder(s)** Environment Australia

**Publication** English:  
<http://www.ea.gov.au/industry/chemicals/dioxins/>

**Comments** Since the first publication in May 1998 of the report, "Sources of Dioxins and Furans in Australia: Air Emissions", some additional Australian data on emissions from cement and lime production has been provided by the Cement Industry Federation and reviewed by Pacific Air & Environment, the principal authors of the original report. The information from this industry sector has been included in this Revised Edition.

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## **Australia**

**Title** National Dioxins Program

**Objective(s)** To: a. ensure protection of the health of the Australian population and environment from exposure to dioxins; b. ensure that international obligations concerning dioxins are met; and c. complement work of other government agencies in protecting the integrity of Australia's food.

**Timeframe** 2001 - 2005

**Responsible Organisation(s)** Environment Australia

**Partner(s)** National Dioxins Project Team consisting of representatives of State/Territory environment protection agencies; Agriculture and Resource Management Council of Australia and New Zealand; Australian Health Ministers' Conference. National Dioxins Consultative Group; consisting of representatives of Commonwealth and State/Territory governments and of industry; scientific research and community interest organisations.

**Project Funder(s)** Environment Australia

**Publication** <http://www.ea.gov.au/industry/chemicals/dioxins/index.html> (website in English, includes information about the National Dioxins Program and also some pre-existing material on dioxins in Australia).

**Comments** The key actions of the National Dioxins Program will be implemented over three phases:  
Phase 1 - gather as much data as possible about levels of dioxins in Australia;  
Phase 2 - assess the impact of dioxins on human health and the environment; and  
Phase 3 - in light of these assessed impacts, reduce or where feasible eliminate releases of dioxins in Australia.

Projects underway are designed to determine the levels of dioxins:  
-in the environment by sampling ambient air, soil, aquatic environments and fauna;  
-in human body burden by sampling breast milk from first time mothers and blood serum from men and women across a range of ages;  
-in food; and  
-the emissions from bushfires and motor vehicles.

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**Australia**

**Title** Characterization and estimation of Dioxin & Furan Emissions from Waste Incineration & Metal Processing Facilities

**Objective(s)** To characterize waste incineration and metal processing facilities and to estimate dioxin/furan emissions, relying wherever possible on local data

**Timeframe** July 2000

**Responsible Organisation(s)** Environment Australia (EA)

**Project Funder(s)** EA, Australian government

**Comments** Covers last decade, in particular, although some earlier data is included, due to be completed, August 1999. Relevant website:  
<http://www.ea.gov.au/industry/chemicals/dioxins/dioxinemissions.html>

Report on dioxins from waste incineration published July 2000, report on metals processing not published, due to lack of available data

## **Australia**

**Title** The quantity and Quality of Run-off to Darwin Harbour

**Objective(s)** To measure the volume of water flowing to the harbor from four different land use areas, and to determine the quality of this water as measured by metals, nutrients, suspended material, and pesticides (including Mirex)

**Timeframe** 1995 - 2000

**Responsible Organisation(s)** Northern Territory Department of Lands, Planning and Environment, Natural Resource Division

**Partner(s)** The Commonwealth Government

**Project Funder(s)** 50% the Commonwealth Government  
50% The NT Government

**Comments** Monitoring took place over 1995/96 and 1996/97 wet seasons, final report due this year. Mirex has not been detected in water sediment compartments

## **Austria**

**Title** MONARPOP - Monitoring Network in the Alpine Region for Persistent Organic Pollutants

**Objective(s)**

- To investigate the Load of POPs in remote Alpine regions focused on forests
- To clarify the role of the Alps as sink for POPs and establish an inventory
- Spruce needles will serve as the major monitoring tool, giving the possibility to identify regional and seasonal differences of the load
- Identification of altitudinal effects on the concentration of POPs
- Identify the impacts on the ecosystem
- Identify the concentration of POPs in Alpine mammals and other faunistic aspects at a later stage

The project should cover most of the Alpine region. The Czech Republic, France, Germany, Italy and Switzerland are invited to participate in the monitoring network. Austria is starting the monitoring network program this year by collecting data from a north-south profile which extends from southern Austria to Slovenia.

<b>Timeframe</b>	2000 - 2003
<b>Responsible Organisation(s)</b>	Federal Ministry of Agriculture, Forestry, Environment and Water Management, Unit I/2 U Chemicals Policy, Austrian Environment Agency, Unit Forest Ecology
<b>Partner(s)</b>	Slovenia is included in the first part of the monitoring network. Other countries in the Alpine region are invited to participate.
<b>Project Funder(s)</b>	Federal Ministry of Agriculture, Forestry, Environment and Water Management INTERREG (EU-funding)
<b>Comments</b>	First monitoring north-south-profile between Slovenia and Austria will be sampled in the year 2000  Additional Contact at Unit Forest Ecology: Mr. P. Weiss, e-mail: weissp@ubavie.gv.at
<b>Contact</b>	Ms. Berthold Aline Federal Ministry of Agriculture, Forestry, Environment and Water Management, Unit I/2 U Chemicals Policy, Austrian Environment Agency aline.berthold@bmu.gv.at

## **Belguim**

<b>Title</b>	1. inventaire des déchets contenant des PCB (objectif voir b1, responsable voir c1)  2. création d'un réseau interdépartemental belge relatif aux politiques et au suivi de l'état de la situation des PCB en PCB (objectif voir b2),  3. élaboration d'un background document sur tous les PCB identifiables (objectif voir b3)
<b>Objective(s)</b>	b1. dresser un inventaire de tous les appareils contenant des PCB-PCT dans les trois régions que constituent la Belgique. (responsable voir c1),  b2. échanger, organiser et gérer de l'information cohérente entre les départements invités. Tant des départements régionaux que fédéraux participent au réseau. Le réseau évalue la pertinences des politiques mise en place et fait rapport au Comité de Coordination des politiques internationales environnementales de Belgique. (organisation responsable voir c2)  b3. identifier toutes les petites applications contenant des PCB et en estimer les émissions jusqu'au milieu marin pour ce qui concerne la Belgique et les pays membres d'OSPAR. Ce document est préparé avec l'Allemagne qui se charge des grandes applications. (organisation responsable voir c3)

<b>Timeframe</b>	Jan 1999 - Dec 2000
<b>Responsible Organisation(s)</b>	c1. Administrations régionales de l'environnement :
<b>Partner(s)</b>	<p>d1. les administrations régionales de l'environnement (OVAM, DGRNE, IBGE), le département des Affaires environnementales, l'inspection des denrées alimentaires et l'inspection d'expertise vétérinaire du Ministère de la Santé publique et de l'Environnement, le Ministère de l'Agriculture et l'UGMM (unité de gestion du modèle mathématique de la mer du nord) qui est le département « gestion de l'écosystème marin » de Institut Royal des Sciences Naturelles de Belgique.</p> <p>d2. le réseau interdépartemental PCB (timeframef4).</p>
<b>Publication</b>	<p>D.S.1 Arrêté du Gouvernement Flamand du 24 mars 1998 modifiant l'arrêté du gouvernement du 1 juin 1995 concernant des dispositions générales et sectorielles relatives à l'environnement.</p> <p>D.S.2 Arrêté du Gouvernement Wallon du 25 mars 1999 relatif à l'élimination des PCB et PCT modifié par l'arrêté du gouvernement Wallon du 13 avril 2000 prolongeant le délais de déclaration des détenteurs de PCB-PCT ou appareils en contenant.</p> <p>D.S.3 Arrêté du Gouvernement de la Région Bruxelles-Capitale du 4 mars 1999 relatif à la planification de l'élimination des PCB et des PCT complété par l'arrêté ministériel du 20 décembre 2000.</p>
<b>Comments</b>	<p>Timeframe:</p> <p>f1. tous les détenteurs d'appareils de plus d'1 litre de PCB doivent en faire la notification auprès de l'administration (OVAM) au plus tard le 1 janvier 1999. Sur base de ces informations, l'OVAM dresse un inventaire (source voir D.S.1)</p> <p>f2. tous les détenteurs d'appareils de plus d'1 litre de PCB doivent en faire la notification auprès de l'administration (DGRNE) au plus tard le 22 novembre 2000. Sur base de ces informations, la DGRNE dresse un inventaire (source voir D.S.2)</p> <p>f3. tous les détenteurs d'appareils de plus d'1 litre de PCB doivent en faire la notification auprès de l'administration (IBGE) au plus tard le 15 mai 2000. (source voir D.S.3)</p> <p>f4. présentation avec l'Allemagne en décembre 2000 du projet de background document pour commentaires de la part des Etats membres d'OSPAR.</p> <p>Comments:</p> <p>1. Région Flamande OVAM  Personne de contact : Madame Gwen DONS Kan. De Deckerstraat, 22-26  2800 MECHELEN BELGIE</p> <p>2. Région Wallonne DGRNE  Personne de contact : Madame Christine Nemegeer Avenue Prince de Liège,  15  5000 NAMUR Belgique</p> <p>3. Région Bruxelles-Capitale (IBGE)  Personne de contact : Madame Séverine Woutters Gulledelle 100  1200 BRUXELLES BELGIQUE</p>

## **Brazil**

<b>Title</b>	1. Sediment Quality Criteria 2. Mercury cycling over the Amazon 3. Carrying capacity of the Atibaia Watershed
<b>Objective(s)</b>	1. Assessing the present stage of sediment in the Tiete Basin 2. Mercury Methylation under Tropical conditions 3. Anthropogenic impacts in the Atibaia Basin
<b>Timeframe</b>	1988 - ongoing
<b>Responsible Organisation(s)</b>	The University of Campinas- UNICAMP
<b>Partner(s)</b>	Federal University of Sao Carlos Environmental Protection Agency of Sao Paulo State - CETESB National Institute of Amazon Research - INPA (Manaus)
<b>Project Funder(s)</b>	The state of Sao Paulo Research Foundation - FAPESP
<b>Publication</b>	<a href="http://lqa.iqm.unicamp.br">http://lqa.iqm.unicamp.br</a> (under "Publicacoes") <a href="http://lavoisier.dq.ufscar.br/Labs/biogeopquimica/qualised.htm">http://lavoisier.dq.ufscar.br/Labs/biogeopquimica/qualised.htm</a>
<b>Comments</b>	The Tiete River Project is providing a sediment quality criteria for the State of Sao Paulo (due to 2003). The other 2 Projects are to be funded until 2004
<b>Contact</b>	Mr Wilson F Jardim Instituto de Quimica- UNICAMP- CX Postal 6514 13084-971 Campinas-SP- Brasil 55-19-3788-3135 wfjardim@iqm.unicamp.br

## **Brazil**

<b>Title</b>	Levels of PCDDs, PCDFs and PCBs in Human Milk- Third Round of WHO-coordinated Exposure Study
<b>Objective(s)</b>	This study aims to evaluate the possible human health risks by analyzing exposure levels to PCDDs, PCDFs, and PCBs in human milk to control and prevent environmental exposure to these toxic chemicals
<b>Timeframe</b>	2000 - ongoing
<b>Responsible Organisation(s)</b>	Oswaldo Cruz Foundation, Ministry of Health, National Agency for Sanitary Surveillance, World Health Organization
<b>Project Funder(s)</b>	National Agency for Sanitary Surveillance
<b>Publication</b>	<a href="http://www.anvisa.gov.br">http://www.anvisa.gov.br</a> , Organohalogen Compounds, Vol. 56:329-332, 2002
<b>Comments</b>	This project is coordinated by World Health Organization and by the National Agency for Sanitary Surveillance and Oswaldo Cruz Foundation, in Brazil



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## **Brazil**

**Title** Monitoring dioxins in pasteurized milk in the State of Rio de Janeiro, Brazil

**Objective(s)** This project aimed to assess the levels of dioxins in pasteurized milk in Rio de Janeiro to prevent human exposure by controlling the possible sources

**Timeframe** 1999 - 2000

**Project Funder(s)** National Agency for Sanitary Surveillance

**Publication** Levels of Dioxins in pasteurized milk from Rio de Janeiro, Preliminary Report, National Agency for Sanitary Surveillance, Brasillia 2000

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## **Brazil**

**Title** Occurrence and distribution of organochlorine compounds in sediment and organisms from estuaries along the Brazilian coast

**Objective(s)** Screening of organochlorine pesticides and PCBs contamination in sediments, bivalves, worms and fishes from five estuaries

**Timeframe** 2002 - 2005

**Responsible Organisation(s)** Fundação Universidade Federal do Rio Grande (University of Rio Grande - FURG); Department of Oceanography; Laboratory of Organic Microcontaminants (Gilberto Fillmann, PhD)

**Partner(s)** Several Universities along the Brazilian coast (Federal University of Parana - UFPR; Federal University of Espirito Santo - UFES; Federal University of Pernambuco - UFPE; Federal University of Pará - UFPA)

**Project Funder(s)** MCT/Milênio (Ministry of Science and Technology)

**Publication** <http://www.cem.ufpr.br/milenio/index.htm>

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## **Brazil**

**Title** Levantamento da Contaminacao do Sistema Estuarino de Santos e Sa Vicente ( A contamination survey of the estuarine system of Santos and Sao Vicente

**Objective(s)** Evaluate the presence of contaminants in water, sediment and organisms in the Estuary of Santos-Sao Vicente

**Timeframe** 1998 - 2003

**Responsible Organisation(s)** This study was conducted by CETESB (Companhia de Tecnologia de Saneamento Ambiental) the Sao Paulo State Environmental Protection Agency, belonging to the State of Sao Paulo Environment Secretary

**Project Funder(s)** This Study was partially funded by PROCOP, a state fund for pollution control

**Publication** Technical Report for CETESB: "Sistema Estuarino de Santos e Sao Vicente" August 2001, (in portuguese, has data on contaminants)

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## **Brazil**

**Title** Specimen Bank and monitoring of organohalogenated contaminants

**Objective(s)** Sampling and storing of tissue samples from organisms (mammals, bird, etc.) found stranded on the coastshore of Southern Brazil aiming to monitor organohalogenated compounds

**Timeframe** 1999 - ongoing

**Responsible Organisation(s)** Fundação Universidade Federal do Rio Grande (University of Rio Grande - FURG); Department of Oceanography; Laboratory of Organic Microcontaminants (Gilberto Fillmann, PhD)

**Partner(s)** UNIVALI (Santa Catarina) and INPA (Amazonas)

**Project Funder(s)** University of Rio Grande (FURG)

**Publication** <http://www.furg.br/furg/projet/BAMM.htm> (in preparation)

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## **Brunei Darussalam**

**Title** Project on inventory of sources of dioxins and furans emissions in selected Asian countries

**Objective(s)** The objective of this project is to inventory the sources of PCDD/PCDF emission

**Timeframe** 2001 - July 2002

**Responsible Organisation(s)** Environment Unit, Ministry of Development, Brunei Darussalam BB 3510

**Partner(s)** Department of Agriculture, Ministry of Industries and Primary Resources.- Ministry of Health.

**Project Funder(s)** UNEP

**Comments** Except for the unintentional release of PCDD/PCDF, Brunei Darussalam is not using any of the POPs chemicals

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## **Bulgaria**

**Title** Development of National Implementation Plans for the Management of Persistent Organic Pollutants in Bulgaria - GF/2732-02-4454

**Objective(s)** Strengthening national capacity to manage persistent organic pollutants (POPs) and to assist the government in meeting their obligations under the Stockholm POPs Convention

**Timeframe** 2002 - 2004 (24

months)

**Responsible Organisation(s)** Ministry of Environment and Water

**Partner(s)** UNEP Chemicals BALKAN SCIENCE AND EDUCATION CENTRE OF ECOLOGY AND ENVIRONMENT

**Project Funder(s)** GEF, Germany

**Publication** Establishment of website is forthcoming

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**Canada**

**Title** Federal State of the Environment Reporting Program, including Environmental Indicators

**Objective(s)** The two main purposes of state of the environment (SOE) reporting are to report to Canadians on the condition of their environment and to foster the use of science in policy- and decision-making. (SOE) reporting attempts to answer five key questions:  
 1. What is happening in the environment (i.e., how are environmental conditions and trends changing)?  
 2. Why is it happening (i.e., how are human activities and other stresses linked to the issue in question)?  
 3. Why is it significant (i.e., what are its ecological and socioeconomic effects)?  
 4. What is being done about it (i.e., how is society responding to the issues through government and industry action and voluntary initiatives)?  
 5. Is this sustainable (i.e., are human actions depleting environmental capital and causing deterioration of ecosystem health)?

**Timeframe** 1986 - ongoing

**Responsible Organisation(s)** Environment Canada

**Partner(s)** Other members of the Five Natural Resource Departments (5NR)  
 - Agriculture and Agri-Food Canada, Fisheries and Oceans Canada, Health Canada, and Natural Resources Canada  
 - as well as other federal agencies, including Canadian Heritage (Parks Canada), Indian and Northern Affairs Canada, Statistics Canada, and Transport Canada.

**Project Funder(s)** Various agencies of the Government of Canada.

**Publication** State of the environment reports and environmental indicator reports and other products are available at a number of websites, and most Government of Canada publications are available in both English and French. The State of the Environment Infobase, an Internet website on Environment Canada's

Green Lane (<http://www.ec.gc.ca/soer-ree/English/default.cfm>), provides a single-window access to SOE reporting products of the 5NR and other federal agencies and to Environment Canada's national and regional environmental indicators.

**Comments**

State of the environment reports and environmental indicator reports are published periodically by various government agencies. Some focus directly on POPs and other toxic contaminants, whereas others are broader in scope (e.g., covering a broad range of environmental issues) but may have sections addressing the issue of POPs.

Federal state of the environment (SOE) reporting began in the mid-1980s, and in 1986 Environment Canada published the first comprehensive SOE report for Canada. National environmental indicator work started in the late 1980s, and in 1991 Environment Canada published "A Report on Canada's Progress Towards a National Set of Environmental Indicators", presenting 43 preliminary indicators in eighteen issue areas. 5NR SOE reporting started in the mid-1990s, and in 1998 Natural Resources Canada published the report "Forest Health in Canada: An Overview 1998".

Projects ongoing, but undergoing significant change.

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**Canada**

**Title**

Northern Contaminants Program (NCP)

**Objective(s)**

The Northern Contaminants Program (NCP) was initiated in 1991 to examine POPs and other contaminants in northern Canada focusing upon: (i) human health; (ii) ecosystem uptake and effects; (iii) sources, pathways and fate; and (iv) education and communication.

The results of this work were assessed in 1997 and are available in the Canadian Arctic Assessments Report, Indian and Northern Affairs, Ottawa, Canada. This work is being continued with an increased emphasis on contaminants (particularly POPs) in traditionally harvested foods, human exposure, and human health effects. Media studied include the atmospheric, marine, and freshwater abiotic environments, and key species including arctic marine mammals (e.g. ringed seals, beluga and narwhale), freshwater and anadromous fish, and terrestrial mammals. The second phase comprehensive assessment is currently being finalized.

The NCP is the Canadian implementation of contaminant monitoring under the Arctic Monitoring and Assessment Programme (AMAP).

**Timeframe**

NCP Phase I: 1991	-	NCP Phase I: 1997
NCP Phase II: 1998		NCP Phase II: 2003

**Responsible Organisation(s)** Northern Contaminants Program (Northern Science and Contaminants Research Directorate; Department of Indian Affairs and Northern Development)

**Partner(s)** Aboriginal Organizations: Council of Yukon First Nations, Dene Nation, Inuit Circumpolar Conference, Inuit Tapiriit Kanatami (ITK). Federal Government Departments: Environment Canada, Fisheries and Oceans, Health Canada Provincial: Nunavik Nutrition and Health Committee (Northern Quebec) Territorial Government Departments: GNWT Health & Social Services Board, NWT Dept. of Resources, Wildlife & Economic Development, Yukon Health & Social Services Board, Yukon Environmental Protection & Assessment Branch, Nunavut Health & Social Services, Nunavut Department of Sustainable Development.

**Project Funder(s)** Northern Contaminants Program (funds derived from Department of Indian Affairs and Northern Development; Health Canada; Department of Fisheries and Oceans; and Environment Canada)

**Publication** <http://www.ainc-inac.gc.ca/Ncp/>

**Comments** For the purposes of this UNEP survey; 6 NCP projects out of the total 64 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 6 projects. This form is Part 1 and covers the project titled: Northern Contaminants Air Monitoring; Organochlorine Measurements. The atmosphere is the main pathway for organochlorine contaminants to enter Arctic ecosystems. This project involves the measurement of these contaminants in the Arctic air. It is part of a continuing monitoring program started in 1992. The measurement of amounts and types of contaminants involves collecting large volumes of air through filters. The filter samples are then analyzed in a laboratory. Results from this continuing project are used to negotiate international control protocols and to test atmospheric models that explain the transport of contaminants from sources in the South to the Arctic. This phase of the project will see the continuation of measurements at Alert as the baseline site and at Kinngait (Cape Dorset) to obtain results from different sites in the Arctic.

The Northern Contaminants Symposium took place from March 4-7 2003, Ottawa, Canada. The annual Summary of Northern Contaminants Program Projects for 2001/2002 in English, French and Inuktitut was released in July 2001. This booklet provides a quick, non-scientific reference guide for communities on current-year projects being conducted by the NCP.

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**Canada**

**Title** Toxic Substances Research Initiative (TSRI)

**Objective(s)** The Toxic Substances Research Initiative (TSRI), is a \$40 million program managed by Health Canada and Environment Canada, which was launched in 1998. The TSRI reinforces the federal government's commitment to enhance

the health and environment of Canadians, through funding a variety of research projects on toxic substances. The research funded by the TSRI will help to protect the health and environment of Canadians by gathering an improved knowledge of toxic substances, and their adverse effects. The TSRI enhances existing research partnerships and fosters the development of new collaborations between non-government and federal government researchers, to focus on emerging issues not adequately addressed by existing research. Canadians will benefit directly from this investment as it will strengthen the government's capacity to protect their health and environment in a socially and economically responsible manner.

<b>Timeframe</b>	1998 - March 2002
<b>Responsible Organisation(s)</b>	Health Canada/Environment Canada
<b>Partner(s)</b>	Department of Fisheries and Oceans; Agriculture and Agri-Foods Canada; Natural Resources Canada; Indian and Northern Affairs Canada; National Research Council; Department of National Defense; Universities.
<b>Project Funder(s)</b>	Health Canada
<b>Publication</b>	<a href="http://www.hc-sc.gc.ca/hecs-sesc/tsri/tsri.htm">http://www.hc-sc.gc.ca/hecs-sesc/tsri/tsri.htm</a> Summaries of individual research projects are provided on the web-site.
<b>Comments</b>	For the purposes of this UNEP survey; 5 TSRI projects out of the total 97 projects have been selected for detailed description. Separate Annex 1 forms have been completed for the global monitoring information for each of the 5 projects. This form covers Project 1; TSRI #11; Sources of Agrochemicals to the Atmosphere and Delivery to the Canadian Environment. Project Summary: Many organochlorine pesticides (OCPs) have been banned for decades in Canada and the U.S.; but are still present in air from the Great Lakes and arctic regions. OCPs that are typically found in air include DDT; dieldrin; chlordane and toxaphene. What is the source of these chemicals today? Are they carried through the air from countries where they are still used; or recycled into the atmosphere from contaminated soil and water? Project TSRI #11 addresses this central question in several ways. Agricultural soils are surveyed in selected areas of Canada and the U.S. where OCPs were used in the past to determine the amount available to be released into the atmosphere. Estimates of releases are obtained by measuring levels of pesticides in air above agricultural soils and through computer simulations of pesticide emissions from soil. A case study is being done of pesticide transport in an Ontario watershed which is known to be contaminated with DDT. Measurements are carried out in the southern U.S. and Mexico to determine whether transport from these suspected source regions is bringing OCPs into Canada. Emission and transport are also determined for certain compounds that are currently used in agriculture. Results of the project will provide a better understanding of where airborne pesticides come from and how they are transported to Canadian ecosystems.
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## Canada

<b>Title</b>	Monitoring under the Integrated Atmospheric Deposition Network (IADN)
<b>Objective(s)</b>	<p>The Integrated Atmospheric Deposition Network (IADN) was established by the US and Canada for conducting air and precipitation monitoring of toxics in the Great Lakes Basin. IADN was created as part of the 1987 amendments to the Great Lakes Water Quality Agreement through the adoption of Annex 15. The goals of IADN are as follows:</p> <ol style="list-style-type: none"><li>1. Determine with a specified degree of confidence the atmospheric loadings and trends (both spatial and temporal) of priority toxic chemicals to the Great Lakes and its basin on at least a biennial basis;</li><li>2. Acquire quality-assured air and precipitation concentration measurements with attention to continuity and consistency of those measurements so that trend data are not biased by changes in network operations or personnel; and</li><li>3. Help determine the sources of the continuing input of those chemicals</li></ol>
<b>Timeframe</b>	1988 - ongoing
<b>Responsible Organisation(s)</b>	Environment Canada
<b>Partner(s)</b>	Canada and the United States operate IADN through four cooperating agencies (Environment Canada's Meteorological Service of Canada National Water Research Institute and Ecosystem Health Division (Ontario Region) and the US Environmental Protection Agency).
<b>Project Funder(s)</b>	Canada: Environment Canada. United States: US Environmental Protection Agency
<b>Publication</b>	English: <a href="http://www.msc.ec.gc.ca/iadn/index_e.html">www.msc.ec.gc.ca/iadn/index_e.html</a> . English: <a href="http://www.msc.ec.gc.ca/iadn/overview/whats_new_e.html">http://www.msc.ec.gc.ca/iadn/overview/whats_new_e.html</a> - IADN 1997-98 Loadings Report
<b>Comments</b>	IADN began operation at the Point Petre Master Station in 1988 and full IADN operation was in place by early 1992.
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## Canada

<b>Title</b>	Northern Contaminants Program (NCP) Global Monitoring Project #2
<b>Objective(s)</b>	<p>The Northern Contaminants Program (NCP) was initiated in 1991 to examine POPs and other contaminants in northern Canada focusing upon: (I) human health; (ii) ecosystem uptake and effects; (iii) sources, pathways and fate; and (iv) education and communication.</p> <p>The results of this work were assessed in 1997 and are available in the Canadian Arctic Assessments Report, Indian and Northern Affairs, Ottawa, Canada. This work is being continued with an increased emphasis on</p>



contaminants (particularly POPs) in traditionally harvested foods, human exposure, and human health effects. Media studied include the atmospheric, marine, and freshwater abiotic environments, and key species including arctic marine mammals (e.g. ringed seals, beluga and narwhale), freshwater and anadromous fish, and terrestrial mammals. The second phase comprehensive assessment is currently being finalized.

The NCP is the Canadian implementation of contaminant monitoring under the Arctic Monitoring and Assessment Programme (AMAP).

**Responsible Organisation(s)**

Northern Contaminants Program (Northern Science and Contaminants Research Directorate; Department of Indian Affairs and Northern Development)

**Partner(s)**

Aboriginal Organizations: Council of Yukon First Nations, Dene Nation, Inuit Circumpolar Conference, Inuit Tapiriit Kanatami (ITK). Federal Government Departments: Environment Canada, Fisheries and Oceans, Health Canada Provincial: Nunavik Nutrition and Health Committee (Northern Quebec) Territorial Government Departments: GNWT Health & Social Services Board, NWT Dept. of Resources, Wildlife & Economic Development, Yukon Health & Social Services Board, Yukon Environmental Protection & Assessment Branch, Nunavut Health & Social Services, Nunavut Department of Sustainable Development.

**Project Funder(s)**

Northern Contaminants Program (funds derived from Department of Indian Affairs and Northern Development; Health Canada; Department of Fisheries and Oceans; and Environment Canada)

**Publication**

<http://www.ainc-inac.gc.ca/Ncp/>

**Comments**

For the purposes of this UNEP survey; 6 NCP projects out of the total 64 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 6 projects. This form is Part 2 and covers the project titled: Temporal trends of organochlorine and organobromine contaminants in beluga and ringed-seals from the Canadian Arctic. The objective of the project is to document the temporal trends of bioaccumulating substances such as for polychlorinated dibenzodioxins (PCDD); dibenzofurans (PCDF); PCBs; DDT; toxaphene; coplanar PCBs and selected current use chemicals such as short chain polychlorinated-n-alkanes (PCAs); polybrominated biphenyls (PBBs); brominated and chlorinated diphenyl ethers (BDPEs/CDPEs) in Arctic marine ecosystems so as to determine whether contaminant levels in marine mammal tissues; and thus exposure to people living in Arctic communities who consume them as part of their traditional diet; are increasing or decreasing with time.

**Contact**

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**Canada**

**Title**

Northern Contaminants Program (NCP) Global Monitoring Project #3

**Objective(s)**

The Northern Contaminants Program (NCP) was initiated in 1991 to examine POPs and other contaminants in northern Canada focusing upon: (I) human

health; (ii) ecosystem uptake and effects; (iii) sources, pathways and fate; and (iv) education and communication.

The results of this work were assessed in 1997 and are available in the Canadian Arctic Assessments Report, Indian and Northern Affairs, Ottawa, Canada. This work is being continued with an increased emphasis on contaminants (particularly POPs) in traditionally harvested foods, human exposure, and human health effects. Media studied include the atmospheric, marine, and freshwater abiotic environments, and key species including arctic marine mammals (e.g. ringed seals, beluga and narwhale), freshwater and anadromous fish, and terrestrial mammals. The second phase comprehensive assessment is currently being finalized.

The NCP is the Canadian implementation of contaminant monitoring under the Arctic Monitoring and Assessment Programme (AMAP).

**Responsible Organisation(s)**

Northern Contaminants Program (Northern Science and Contaminants Research Directorate; Department of Indian Affairs and Northern Development)

**Partner(s)**

Aboriginal Organizations: Council of Yukon First Nations, Dene Nation, Inuit Circumpolar Conference, Inuit Tapiriit Kanatami (ITK). Federal Government Departments: Environment Canada, Fisheries and Oceans, Health Canada Provincial: Nunavik Nutrition and Health Committee (Northern Quebec) Territorial Government Departments: GNWT Health & Social Services Board, NWT Dept. of Resources, Wildlife & Economic Development, Yukon Health & Social Services Board, Yukon Environmental Protection & Assessment Branch, Nunavut Health & Social Services, Nunavut Department of Sustainable Development.

**Project Funder(s)**

Northern Contaminants Program (funds derived from Department of Indian Affairs and Northern Development; Health Canada; Department of Fisheries and Oceans; and Environment Canada)

**Publication**

<http://www.ainc-inac.gc.ca/Ncp/>

**Comments**

For the purposes of this UNEP survey; 6 NCP projects out of the total 64 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 6 projects. This form is Part 3 and covers the project titled: Spatial and Long-term Trends in Organic Contaminants and Metals in Fish Species Important to the Commercial; Sports; and Domestic Fisheries of Great Slave Lake and the Slave River Ecosystem. The long-term biomonitoring of contaminant trends is an essential component of the NCP program. Included in this biomonitoring program is the investigation of selected species of freshwater fish at various representative sites in the Northwest Territories and the Yukon. The actual inclusion of sites into the monitoring program includes consideration of the existence of an historic database for the study site(s); archived fish samples; community use of the resource; and some elements of appropriate local concerns. Annual sampling is recommended because freshwater indicator fish species respond relatively rapidly to temporal trends in contaminant inputs. Great Slave Lake was selected in 1999 for the long-term biomonitoring of contaminant trends in freshwater fish. A major fraction of the NWT population resides around the shores of Great Slave Lake including Yellowknife; the territorial capital; Hay River; and a number of communities including Fort Resolution and Lutsel K'e. Fort Smith; on the Slave River; also is a large population centre.

**Contact**

Mr David Stone

## **Canada**

<b>Title</b>	Northern Contaminants Program (NCP) Global Monitoring Project #4
<b>Objective(s)</b>	<p>The Northern Contaminants Program (NCP) was initiated in 1991 to examine POPs and other contaminants in northern Canada focusing upon: (I) human health; (ii) ecosystem uptake and effects; (iii) sources, pathways and fate; and (iv) education and communication.</p> <p>The results of this work were assessed in 1997 and are available in the Canadian Arctic Assessments Report, Indian and Northern Affairs, Ottawa, Canada. This work is being continued with an increased emphasis on contaminants (particularly POPs) in traditionally harvested foods, human exposure, and human health effects. Media studied include the atmospheric, marine, and freshwater abiotic environments, and key species including arctic marine mammals (e.g. ringed seals, beluga and narwhale), freshwater and anadromous fish, and terrestrial mammals. The second phase comprehensive assessment is currently being finalized.</p> <p>The NCP is the Canadian implementation of contaminant monitoring under the Arctic Monitoring and Assessment Programme (AMAP).</p>
<b>Responsible Organisation(s)</b>	Northern Contaminants Program (Northern Science and Contaminants Research Directorate; Department of Indian Affairs and Northern Development)
<b>Partner(s)</b>	<p>Aboriginal Organizations: Council of Yukon First Nations, Dene Nation, Inuit Circumpolar Conference, Inuit Tapiriit Kanatami (ITK). Federal Government Departments: Environment Canada, Fisheries and Oceans, Health Canada</p> <p>Provincial: Nunavik Nutrition and Health Committee (Northern Quebec)</p> <p>Territorial Government Departments: GNWT Health &amp; Social Services Board, NWT Dept. of Resources, Wildlife &amp; Economic Development, Yukon Health &amp; Social Services Board, Yukon Environmental Protection &amp; Assessment Branch, Nunavut Health &amp; Social Services, Nunavut Department of Sustainable Development.</p>
<b>Project Funder(s)</b>	Northern Contaminants Program (funds derived from Department of Indian Affairs and Northern Development; Health Canada; Department of Fisheries and Oceans; and Environment Canada)
<b>Publication</b>	<a href="http://www.ainc-inac.gc.ca/Ncp/">http://www.ainc-inac.gc.ca/Ncp/</a>
<b>Comments</b>	<p>For the purposes of this UNEP survey, 6 NCP projects out of the total 64 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 6 projects. This form is Part 4 and covers the project titled: Temporal Trends in the Bioaccumulation of Organochlorines, Selenium and Mercury in a Sub-arctic Food Web: Continuing survey of Lake Laberge, Yukon Territories. One of the objectives of the study is to document the temporal trends of bioaccumulating substances such as metals (mercury; selenium) and organochlorines (OCs) such as PCBs; DDT; toxaphene in lake trout muscle and in burbot from Lake Laberge; so as to determine whether contaminant levels in the fish and thus exposure to people who consume them; are increasing or decreasing with time. A related</p>

objective of the study is to determine the underlying factor(s) responsible for the observed decline of organochlorine contaminants and Hg concentrations in Lake Laberge fish.

**Contact**

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**Canada**

**Title**

Northern Contaminants Program (NCP) Global Monitoring Project #5

**Objective(s)**

The Northern Contaminants Program (NCP) was initiated in 1991 to examine POPs and other contaminants in northern Canada focusing upon: (i) human health; (ii) ecosystem uptake and effects; (iii) sources, pathways and fate; and (iv) education and communication. The results of this work were assessed in 1997 and are available in the Canadian Arctic Assessments Report, Indian and Northern Affairs, Ottawa, Canada. This work is being continued with an increased emphasis on contaminants (particularly POPs) in traditionally harvested foods, human exposure, and human health effects. Media studied include the atmospheric, marine, and freshwater abiotic environments, and key species including arctic marine mammals (e.g. ringed seals, beluga and narwhale), freshwater and anadromous fish, and terrestrial mammals. The second phase comprehensive assessment is currently being finalized. The NCP is the Canadian implementation of contaminant monitoring under the Arctic Monitoring and Assessment Programme (AMAP).

**Responsible Organisation(s)**

Northern Contaminants Program (Northern Science and Contaminants Research Directorate; Department of Indian Affairs and Northern Development)

**Partner(s)**

Aboriginal Organizations: Council of Yukon First Nations, Dene Nation, Inuit Circumpolar Conference, Inuit Tapiriit Kanatami (ITK). Federal Government Departments: Environment Canada, Fisheries and Oceans, Health Canada Provincial: Nunavik Nutrition and Health Committee (Northern Quebec) Territorial Government Departments: GNWT Health & Social Services Board, NWT Dept. of Resources, Wildlife & Economic Development, Yukon Health & Social Services Board, Yukon Environmental Protection & Assessment Branch, Nunavut Health & Social Services, Nunavut Department of Sustainable Development.

**Project Funder(s)**

Northern Contaminants Program (funds derived from Department of Indian Affairs and Northern Development; Health Canada; Department of Fisheries and Oceans; and Environment Canada)

**Publication**

<http://www.ainc-inac.gc.ca/Ncp/>

**Comments**

For the purposes of this UNEP survey; 6 NCP projects out of the total 64 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 6 projects. This form is Part 5 and covers the project titled: Temporal Trends of Persistent Organic Pollutants and Metals in Landlocked Char. The purpose of this project is to investigate changes in concentrations of contaminants over time in Arctic char from Char

Lake; Resolute Lake and other lakes near Qausuittuq (Resolute).  
Contaminants include PCBs and mercury.

**Contact**

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**Canada**

**Title**

Northern Contaminants Program (NCP) Global Monitoring Project #6

**Objective(s)**

The Northern Contaminants Program (NCP) was initiated in 1991 to examine POPs and other contaminants in northern Canada focusing upon: (i) human health; (ii) ecosystem uptake and effects; (iii) sources, pathways and fate; and (iv) education and communication. The results of this work were assessed in 1997 and are available in the Canadian Arctic Assessments Report, Indian and Northern Affairs, Ottawa, Canada. This work is being continued with an increased emphasis on contaminants (particularly POPs) in traditionally harvested foods, human exposure, and human health effects. Media studied include the atmospheric, marine, and freshwater abiotic environments, and key species including arctic marine mammals (e.g. ringed seals, beluga and narwhale), freshwater and anadromous fish, and terrestrial mammals. The second phase comprehensive assessment is currently being finalized. The NCP is the Canadian implementation of contaminant monitoring under the Arctic Monitoring and Assessment Programme (AMAP).

**Responsible Organisation(s)**

Northern Contaminants Program (Northern Science and Contaminants Research Directorate; Department of Indian Affairs and Northern Development)

**Partner(s)**

Aboriginal Organizations: Council of Yukon First Nations, Dene Nation, Inuit Circumpolar Conference, Inuit Tapiriit Kanatami (ITK). Federal Government Departments: Environment Canada, Fisheries and Oceans, Health Canada Provincial: Nunavik Nutrition and Health Committee (Northern Quebec) Territorial Government Departments: GNWT Health & Social Services Board, NWT Dept. of Resources, Wildlife & Economic Development, Yukon Health & Social Services Board, Yukon Environmental Protection & Assessment Branch, Nunavut Health & Social Services, Nunavut Department of Sustainable Development.

**Project Funder(s)**

Northern Contaminants Program (funds derived from Department of Indian Affairs and Northern Development; Health Canada; Department of Fisheries and Oceans; and Environment Canada)

**Publication**

<http://www.ainc-inac.gc.ca/Ncp/>

**Comments**

For the purposes of this UNEP survey; 6 NCP projects out of the total 64 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 6 projects. This form is Part 6 and covers the project titled: Temporal Trends of Persistent Organic Pollutants and Metals in Ringed Seals and Walrus from the Canadian Arctic. The main objectives of the study are to determine temporal trends of POPs and mercury in ringed seals and in walrus from locations previously studied in the 1970s;

'80s and '90s and to provide the information to each community participating in the study.

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**Canada**

**Title**

Toxic Substances Research Initiative (TSRI) Project # 2.

**Objective(s)**

The Toxic Substances Research Initiative (TSRI), is a \$40 million program managed by Health Canada and Environment Canada, which was launched in 1998. The TSRI reinforces the federal government's commitment to enhance the health and environment of Canadians, through funding a variety of research projects on toxic substances. The research funded by the TSRI will help to protect the health and environment of Canadians by gathering an improved knowledge of toxic substances, and their adverse effects. The TSRI enhances existing research partnerships and fosters the development of new collaborations between non-government and federal government researchers, to focus on emerging issues not adequately addressed by existing research. Canadians will benefit directly from this investment as it will strengthen the government's capacity to protect their health and environment in a socially and economically responsible manner.

**Timeframe**

1998 - March 2002

**Responsible Organisation(s)**

Health Canada/Environment Canada

**Partner(s)**

Department of Fisheries and Oceans; Agriculture and Agri-Foods Canada; Natural Resources Canada; Indian and Northern Affairs Canada; National Research Council; Department of National Defense; Universities.

**Project Funder(s)**

Health Canada

**Publication**

<http://www.hc-sc.gc.ca/tsri>

**Comments**

For the purposes of this UNEP survey; 5 TSRI projects out of the total 97 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 5 projects. This form covers Project 2; TSRI #236: Biomagnification of Persistent Organic Pollutants and Mercury in Canadian Freshwater Subsistence Fisheries and Food Webs. This project is examining levels of persistent bioaccumulative toxic substances such as PCBs; DDT; toxaphene and mercury in top predator fishes and their food webs from lakes across northern Canada from northern Alberta to Labrador. Many of these lakes have important aboriginal subsistence fisheries We have selected this geographic area because it is currently understudied relative to the Great Lakes and the Arctic (north of 60oN) where numerous measurements have already been made on persistent organic pollutants (POPs) and Hg. The project involves collection and analysis of fish and other food chain organisms from lakes in northern Saskatchewan; northwestern Ontario; central Ontario; Labrador; and central New Brunswick coordinated by seven Collaborating Partners working with local communities and provincial/federal fisheries officers.

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## Canada

**Title** Toxic Substances Research Initiative (TSRI). Project # 3.

**Objective(s)** The Toxic Substances Research Initiative (TSRI), is a \$40 million program managed by Health Canada and Environment Canada, which was launched in 1998. The TSRI reinforces the federal government's commitment to enhance the health and environment of Canadians, through funding a variety of research projects on toxic substances. The research funded by the TSRI will help to protect the health and environment of Canadians by gathering an improved knowledge of toxic substances, and their adverse effects. The TSRI enhances existing research partnerships and fosters the development of new collaborations between non-government and federal government researchers, to focus on emerging issues not adequately addressed by existing research. Canadians will benefit directly from this investment as it will strengthen the government's capacity to protect their health and environment in a socially and economically responsible manner.

**Timeframe** 1998 - March 2002

**Responsible Organisation(s)** Health Canada/Environment Canada

**Partner(s)** Department of Fisheries and Oceans; Agriculture and Agri-Foods Canada; Natural Resources Canada; Indian and Northern Affairs Canada; National Research Council; Department of National Defense; Universities.

**Project Funder(s)** Health Canada

**Publication** <http://www.hc-sc.gc.ca/tsri>

**Comments** For the purposes of this UNEP survey, 5 TSRI projects out of the total 97 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 5 projects. This form covers Project 3; TSRI #207: Toxaphene in the St. Lawrence River Marine Ecosystem: State of Contamination, Ecosystem Toxicology and Human Health. Toxaphene is a complex mixture of chlorinated camphenes which is toxic and persistent in the environment. It has been studied in Arctic marine environments and Canadian lakes. However in eastern Canada toxaphene has not been the subject of significant research even though belugas in the St. Lawrence river basin demonstrate toxaphene concentrations among the highest observed in marine mammals. At present very little is known about the dispersion of this Persistent Organic Pollutant (POP) in the marine ecosystem of the St. Lawrence. In addition the toxicological risks posed to fish and to top predators including humans are currently unknown. To fill these gaps TSRI Project 207 titled: Toxaphene in the St. Lawrence River Marine Ecosystem: State of Contamination Ecosystem Toxicology and Human Health will evaluate : 1) dispersion of toxaphene in the St. Lawrence marine ecosystem; and 2) some ecotoxicological risks to marine organisms and humans associated with Toxaphene in the St. Lawrence marine ecosystem.

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## Canada

**Title** Toxic Substances Research Initiative (TSRI). Project # 4.

**Objective(s)** The Toxic Substances Research Initiative (TSRI), is a \$40 million program managed by Health Canada and Environment Canada, which was launched in 1998. The TSRI reinforces the federal government's commitment to enhance the health and environment of Canadians, through funding a variety of research projects on toxic substances. The research funded by the TSRI will help to protect the health and environment of Canadians by gathering an improved knowledge of toxic substances, and their adverse effects. The TSRI enhances existing research partnerships and fosters the development of new collaborations between non-government and federal government researchers, to focus on emerging issues not adequately addressed by existing research. Canadians will benefit directly from this investment as it will strengthen the government's capacity to protect their health and environment in a socially and economically responsible manner.

**Timeframe** 1998 - March 2002

**Responsible Organisation(s)** Health Canada/Environment Canada

**Partner(s)** Department of Fisheries and Oceans; Agriculture and Agri-Foods Canada; Natural Resources Canada; Indian and Northern Affairs Canada; National Research Council; Department of National Defence; Universities.

**Project Funder(s)** Health Canada

**Publication** <http://www.hc-sc.gc.ca/tsri>

**Comments** For the purposes of this UNEP survey 5 TSRI projects out of the total 97 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 5 projects. This form covers Project 4 TSRI #206: Sources; Long Range Transport and Impacts of New and Old POPs Inferred from Date lake Sediment Cores." This proposal specifically addresses the need to "Determine the degree to which domestic and international sources are contributing to observed levels of POPs in Canada". It also addresses the priority to "determine the long range transport characteristics of known and emerging POPs" and for "developing the data necessary to determine ecosystem and human health risks associated with known priority POPs". The project involves collection and analysis of sediments cores and lake water over a 40 degree latitude north-south transect from southeastern Ontario and northern New York State to Ellesmere Island; as well as on a longitudinal transect from northwestern Ontario to New Brunswick in order to study the current and past deposition of priority POPs and new and emerging POPs. The lakes selected are; for the most part; undisturbed; and in many cases uninhabited; so that the major or sole pathway for inputs of contaminants would be from atmospheric deposition to the surface or the watershed.



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## Canada

**Title** Toxic Substances Research Initiative (TSRI). Project # 5.

**Objective(s)** The Toxic Substances Research Initiative (TSRI), is a \$40 million program managed by Health Canada and Environment Canada, which was launched in 1998. The TSRI reinforces the federal government's commitment to enhance the health and environment of Canadians, through funding a variety of research projects on toxic substances. The research funded by the TSRI will help to protect the health and environment of Canadians by gathering an improved knowledge of toxic substances, and their adverse effects. The TSRI enhances existing research partnerships and fosters the development of new collaborations between non-government and federal government researchers, to focus on emerging issues not adequately addressed by existing research. Canadians will benefit directly from this investment as it will strengthen the government's capacity to protect their health and environment in a socially and economically responsible manner.

**Timeframe** 1998 - March 2002

**Responsible Organisation(s)** Health Canada/Environment Canada

**Partner(s)** Department of Fisheries and Oceans; Agriculture and Agri-Foods Canada; Natural Resources Canada; Indian and Northern Affairs Canada; National Research Council; Department of National Defense; Universities.

**Project Funder(s)** Health Canada

**Publication** <http://www.hc-sc.gc.ca/tsri>

**Comments** For the purposes of this UNEP survey; 5 TSRI projects out of the total 97 projects have been selected for detailed description. Separate Annex 1 forms have been completed for each of the 5 projects. This form covers Project 5; TSRI #27: Characterising the Origin and Long Range Transport Behaviour of Persistent Organic Pollutants (POPs) in the Canadian Atmospheric Environment Using Passive Samplers. This project characterises the large scale distribution patterns of known and emerging persistent organic pollutants (POPs) in the Canadian atmosphere. The PAS are analysed for their content of PCBs; organochlorine pesticides and a suite of chemicals suspected to possess the characteristics of POPs. Selected pesticides are also analysed for their enantiomeric composition.

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## Canada

<b>Title</b>	Monitoring under the Accelerated Reduction/Elimination of Toxics (ARET)
<b>Objective(s)</b>	The Accelerated Reduction and Elimination of Toxics (ARET) program is a key example of voluntary efforts to secure a safe and healthy environment while contributing to a prosperous economy. ARET seeks; through voluntary actions; the virtual elimination of 30 persistent; bioaccumulative and toxic (PBT) substances (including several POPs such as PCBs; certain species of PAHs; hexachlorobenzene and dioxins and furans); as well as significant reductions in emissions of another 87 toxic substances. Participants from nine major industry sectors and government use the ARET program to prioritize emission reductions and determine appropriate reduction and elimination methods. The ARET goal is to achieve a 90-per-cent reduction of PBT substance emissions and a 50-per-cent emission reduction of the other 87 toxic substances by the year 2000. The final report of the current ARET program will be released soon; detailing achievements made from the base year to 2000. The ARET initiative involves facilities from companies all across Canada. There are three substances included on the global UNEP POPs Agreement which are reported on the A-1 list of ARET. These include: 2;3;7;8-tetrachlorodibenzofuran; 2;3;7;8-tetrachlorodibenzo-p-dioxin and PCBs.
<b>Timeframe</b>	1994 - not specified
<b>Responsible Organisation(s)</b>	Environment Canada
<b>Partner(s)</b>	The ARET Stakeholders Committee is made of representatives from industry (Canadian Chemical Producers' Association; Canadian Electricity Association; The Alliance of Manufacturers and Exporters of Canada; Canadian Manufacturers of Chemical Specialties; Canadian Petroleum Products Institute; Canadian Pulp & Paper Association; Canadian Steel Producers Association; Mining Association of Canada; Aluminum Industry Association); health and professional associations (Chemical Institute of Canada; Comité de santé environnementale du Québec); provincial governments (Ontario; British Columbia; Nova Scotia); and the federal government (Environment Canada; Industry Canada; Health Canada).
<b>Publication</b>	<a href="http://www.ec.gc.ca/ARET/homee.html">http://www.ec.gc.ca/ARET/homee.html</a>
<b>Comments</b>	The short-term goals of the ARET program were established to the year 2000; a renewal process for ARET has been initiated.
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## Canada

<b>Title</b>	Assessments of Priority Substances under the Canadian Environmental Protection Act ; 1999 (CEPA 1999)
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**Objective(s)** CEPA 1999 requires the Ministers of the Environment and of Health to establish a Priority Substances List (PSL) that identifies substances to be assessed on a priority basis to determine whether they pose a significant risk to the health of Canadians or to the environment. Assessments of substances placed on the PSL are the shared responsibility of Environment Canada and Health Canada. The assessment and management of priority substances under CEPA 1999 occurs in two distinct phases. Scientists must first determine whether a substance is "toxic" as defined under Section 64 of CEPA. Under CEPA 1999; a substance is defined as "toxic" if it enters or may enter the environment in amounts or under conditions that may pose a risk to human health; the environment; or to the environment that supports human life. Thus; "toxic" in the context of CEPA 1999 is a function of both the inherent properties of a substance and of the amounts; concentrations; or nature of entry of the substance in the Canadian environment. For substances determined to be "toxic"; management options are identified and implemented; in consultation with stakeholders; to reduce or eliminate the risks the substances pose to human health or the environment. There are three substances under the Stockholm Convention; which have been assessed as toxic under CEPA PSL including: hexachlorobenzene; polychlorinated dibenzodioxins and polychlorinated dibenzofurans.

**Timeframe** 1989. - ongoing

**Responsible Organisation(s)** Environment Canada and Health Canada

**Publication** <http://www.ec.gc.ca/substances/>

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**Canada**

**Title** The Categorization and Screening of the Domestic Substances List under the Canadian Environmental Protection Act 1999 (CEPA)

**Objective(s)** Environment Canada initiated the implementation of some of the new initiatives under CEPA 99. One of these initiatives involves the identification of persistent (P); bioaccumulative (B) and inherently toxic (iT) substances on the Inventory of Existing Substances. CEPA requires the Minister of the Environment and the Minister of Health to "categorize" and then "screen" substances listed on the Domestic Substances List (DSL) to determine whether they pose a risk to the health of Canadians or the environment. The DSL includes substances that were; between January 1, 1984; and December 31, 1986; in Canadian commerce; used for manufacturing purposes; or manufactured in or imported into Canada in a quantity of 100 kg or more in any calendar year.

The List has been amended from time to time and currently contains approximately 23,000 substances. Types of substances on the DSL include

simple organic chemicals; pigments; organometallic compounds; surfactants; polymers; metal elements; metal salts and other inorganic substances; as well as substances that are of "Unknown or Variable Composition; complex reaction products; or Biological materials" (referred to as UVCBs). Since most of the substances on the DSL have not undergone any environmental or human health assessment; CEPA provides for the systematic assessment of substances on the DSL that are to be carried out in two phases.

The initial phase; the categorization of substances on the DSL requires the Minister of the Environment and Health to identify substances that are : 1) persistent or bioaccumulative; and inherently toxic to human beings or to non-human organisms; and 2) identify substances that may present; to individuals in Canada; the greatest potential for exposure. The criteria for persistence and bioaccumulation are prescribed in regulations which took effect March 31, 2000. When a substance is identified as meeting the criteria for categorization; it then moves to the second phase; the screening level risk assessment. A screening level risk assessment results in one of the following outcomes:

- no further action is taken at this time; if the screening level risk assessment indicates that the substance does not pose a risk to the environment or human health;
- the substance is added to the CEPA Priority Substances List in order to assess more comprehensively the possible risks associated with the release of the substance; if the substance is not already on the Priority Substances List (see Section 1A); or
- it is recommended that the substance be added to the List of Toxic Substances in Schedule 1 of CEPA; if the screening level risk assessment indicates concerns, whether these are associated or not with the persistence or bioaccumulation properties of the substance, substances on Schedule 1 can be considered for regulatory or other controls.

Environment Canada and Health Canada initiated a pilot project which identified 123 substances representative of several chemical classes of substances on the DSL. 93 substances were determined to meet the categorization criteria for P and/or B, and iT to non-human organisms and 30 substances were identified as presenting to individuals in Canada the greatest potential for exposure.

***Timeframe***

September - ongoing  
14th 1999

***Responsible Organisation(s)***

Environment Canada and Health Canada

***Publication***

<http://www.ec.gc.ca/substances/>

***Comments***

Categorization phase to be completed by September 13, 2006 ; no legally mandated timelines for completing the screening level risk assessments

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## Canada

<b>Title</b>	Ecological Monitoring and Assessment Network (EMAN)
<b>Objective(s)</b>	<p>The Ecological Monitoring and Assessment Network (EMAN) is a national network of monitoring and research sites characterized by long term multi-disciplinary studies. Sites within a single ecozone are loosely linked in an ecological framework. The network strives to facilitate cooperation and a holistic approach to ecological enquiry and ecosystem understanding. Ecological Science Cooperatives (ESCs) is a network that promotes connections among network sites operating across the country. The network is highly decentralized and acts as a coordinating body facilitating communications among participants and providing strategic direction. EMAN is an inclusive network (i.e. those who wish to participate are welcomed). It embraces all facets of ecological enquiry (including monitoring and research) and facilitates communication among its participants and interaction with international networks. The network promotes the standardization of monitoring protocols the use of environmental indicators and the production of issue and area-based assessments.</p> <p>EMAN's Operating Goal is coordinated monitoring and research activities within a network of specific sites across Canada which address federal provincial regional and local environmental needs and which enhance the delivery of needed integrated information to decision-makers.</p>
<b>Timeframe</b>	April 1994 - ongoing
<b>Responsible Organisation(s)</b>	In April 1994 the Ecological Monitoring Coordinating Office (EMAN CO) was established. It resides in the Canada Centre for Inland Waters in Burlington Ontario and functions as the secretariat to EMAN. EMAN CO coordinates the organization of the Ecological Science Cooperatives fosters new initiatives and facilitates communication within EMAN. The Ecological Monitoring Coordinating Office located in Burlington Ontario is part of the Environmental Quality Branch of Environment Canada located in Hull Quebec.
<b>Partner(s)</b>	<p>In any Ecological Science Cooperative (ESC) a number of research organizations may be involved. These include:</p> <ul style="list-style-type: none"><li>-international agencies such as the Smithsonian Institute; UNESCO; International Long Term Ecological Research (ILTER) Network; Council for Environmental cooperation (CEC); Canada Man and the Biosphere project; and the Arctic Council</li><li>- federal agencies and departments; such as Agriculture and Agri-Food Canada; Canadian Heritage - Parks Canada (Breeding Bird Survey); Canadian Museum of Nature (Biological Survey of Canada); Fisheries and Oceans Canada; Environment Canada (Atlantic Coastal Action Plan; Remedial Action Plan; RAMSAR; Indian and Northern Affairs Canada; Natural Resources Canada - Canadian Forestry Service; Geological Survey of Canada; and Model Forests; and others;</li><li>- provincial ministries; especially environment; natural resources parks and education;</li><li>- regional and municipal governments; universities; hospital and school boards; industry; and</li><li>- non-governmental organizations (NGOs); aboriginal and local groups; and interested volunteers. See; for example; the Atlantic Maritime ESC. There are over 100 individual agencies involved in the Network.</li></ul>

**Project Funder(s)** EMAN sites are funded through their own sponsoring institutions. Neither EMAN CO nor EMAN funds research or monitoring. Each site is responsible for its own budget. EMAN CO has a small budget for seed activities to support network development. It sponsors things such as organizational meetings start-up projects to demonstrate benefits and new techniques. A major EMAN activity is the co-ordination of the National Science Meeting.

**Publication** <http://www.eman-rese.ca/>

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## Canada

**Title** National Pollutant Release Inventory (NPRI)

**Objective(s)** The NPRI is the only legislated nation-wide publicly accessible inventory of its type in Canada. One of the fundamental aspects of the NPRI is to provide Canadians with access to pollutant release information for facilities located in the communities. In addition the NPRI continues to support a number of environmental initiatives by providing information that assists governments and others to identify priorities for action encourages industry to take voluntary measures to reduce releases allows tracking of progress in reducing releases and supports a number of regulatory initiatives across Canada. Changes may be made to the NPRI. The list of substances on the NPRI from year to year. The NPRI for the 2002 reporting year lists 273 substances. Data is available for the year 2000 NPRI which lists 268 substances. Substance information reported to the NPRI includes information on substance releases to air water land and underground injection; off-site transfers in waste; and off-site transfers for recovery re-use and recycling (3Rs) and energy recovery. Polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans hexachlorobenzene were added to the NPRI for the 2000 reporting year.

**Timeframe** 1993 - ongoing

**Responsible Organisation(s)** Environment Canada

**Publication** <http://www.ec.gc.ca/pdb/npri/>

**Comments** First summary report released in 1995 for the 1993 reporting year. Annual reporting is on-going.

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## Canada

**Title** Assessments for the registration of products under the Pest Control Products Act (PCPA)

**Objective(s)** The Pest Control Products Act (PCPA) and Regulations are the primary federal legislation for the regulation of pesticides in Canada and are intended to protect people and the environment from risks posed by pesticides. Pesticides include insecticides; herbicides; fungicides; etc. that are used in agriculture; forestry; industry; public health and domestic settings. Any pesticide imported into; sold or used in Canada must first be registered under the PCPA. The PCPA is administered by the Pest Management Regulatory Agency (PMRA) of Health Canada. Its Executive Director reports to the Deputy Minister of Health. A pesticide cannot be registered under the PCPA unless the PMRA determines that any associated risks to people and the environment are acceptable. The product must also serve a useful purpose. Any aspect of the pesticide; including all uses; downstream effects and disposal; may be taken into account during the pre-market assessment. The onus rests with the applicant to conduct extensive tests to demonstrate that the risks and value of the product are acceptable. Registered products may be used only for the specific purposes listed on the approved product label. Failure to follow the directions on the pesticide label is an offence under the PCPA; which is enforced by the PMRA. Pesticides are also regulated under provincial or territorial legislation; administered by provincial departments of agriculture or environment. Provincial and territorial legislation; which focuses on the sale and application of products registered under the federal PCPA; may add to federal restrictions but may not relax them. For example; provinces and territories may require permits to be obtained before pesticides are sprayed via the air; establish specific buffer zones around sensitive areas; and impose posting requirements to identify areas of pesticide application. Federal and provincial/territorial regulators collaborate in various ways; including ensuring compliance with their respective pesticide legislation. All nine pesticides on the global POPs Convention are regulated under the PCPA and are not currently registered for use in Canada.

**Timeframe** ongoing

**Responsible Organisation(s)** Health Canada

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## Canada

<b>Title</b>	Identification of POPs under the Toxic Substances Management Policy (TSMP)
<b>Objective(s)</b>	The federal Toxic Substances Management Policy (TSMP) puts forward a preventative and precautionary approach to deal with substances that enter the environment and could harm the environment or human health. The policy provides decision makers with direction and sets out a science-based management framework to ensure that federal programs are consistent with its objectives. It also serves to support the federal government's position on the management of toxic substances in discussions with the provinces and territories and negotiations with the global community. The key management objectives are: virtual elimination from the environment of toxic substances that result predominately from human activity and that are persistent and bioaccumulative (referred to in the policy as Track 1 substances); management of other toxic substances and substances of concern throughout their entire life cycles to prevent or minimize their release into the environment (referred to in the policy as Track 2 substances). Management of both Track 1 and Track 2 substances will address as appropriate entry into the environment from both domestic and foreign sources as well as remediation of areas already contaminated by a substance. The federal government offered interested parties the opportunity to comment on the scientific justifications identifying 13 possible Track 1 substances that were released on March 22 1997. After careful consideration of the submissions made in this regard 12 substances were confirmed in July 1998 as meeting the criteria for Track 1 and as such should be virtually eliminated from the environment: aldrin; chlordane; DDT; dieldrin; endrin; heptachlor; hexachlorobenzene; mirex; PCBs; polychlorinated dioxins and furans; and toxaphene. The federal government is engaging stakeholders involved in the generation or use of confirmed Track 1 substances in order to take domestic and international actions to protect the Canadian environment from these substances.
<b>Timeframe</b>	July 1998 - ongoing (initial identification)
<b>Responsible Organisation(s)</b>	Environment Canada
<b>Publication</b>	Web site with text of TSMP - English: <a href="http://www.ec.gc.ca/toxics/toxic1_e.html">http://www.ec.gc.ca/toxics/toxic1_e.html</a> ; French: <a href="http://www.ec.gc.ca/toxics/toxic1_f.html">http://www.ec.gc.ca/toxics/toxic1_f.html</a> . Web site with links to the policy - English: <a href="http://www.ec.gc.ca/CEPARRegistry/Policies/default.cfm">http://www.ec.gc.ca/CEPARRegistry/Policies/default.cfm</a> ; French: <a href="http://www.ec.gc.ca/RegistreLCPE/Policies/default.cfm">http://www.ec.gc.ca/RegistreLCPE/Policies/default.cfm</a> . Web site with links to individual substances -English: <a href="http://www.ec.gc.ca/substances/nsb/eng/tsmp_e.htm">http://www.ec.gc.ca/substances/nsb/eng/tsmp_e.htm</a> ; French: <a href="http://www.ec.gc.ca/substances/nsb/fra/tsmp_f.htm">http://www.ec.gc.ca/substances/nsb/fra/tsmp_f.htm</a>
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## Canada

<b>Title</b>	Develop Level of Quantification (LOQ) for PCBs in stack emissions
<b>Objective(s)</b>	Under the Canadian Environmental Protection Act, the LOQ for Track 1 substances (which are toxic, bioaccumulative, persistent and primarily man-made) must be developed. The LOQ for PCBs is being developed to achieve the goal in our regulations to virtually eliminate releases of PCBs to the environment.
<b>Timeframe</b>	March, 2000.
<b>Responsible Organisation(s)</b>	Environment Canada
<b>Project Funder(s)</b>	Environment Canada

## Canada

<b>Title</b>	Canada-Wide Standards for Dioxins and Furans
<b>Objective(s)</b>	Dioxins/Furans and Hexachlorobenzene have been identified as toxic under the Canadian Environmental Protection Act and have been assessed for virtual elimination under the federal Toxic Substances Management Policy (TSMP1).
<b>Timeframe</b>	2001 - 2006
<b>Responsible Organisation(s)</b>	Canadian Council of Ministers of the Environment (CCME).
<b>Partner(s)</b>	-Stakeholder including industry, environmental groups and First Nations are participating in priority sector working groups and national workshops to develop targets for reduction and timelines for achieving these targets. -This information will then be introduced as the basis for a Canada-Wide Standard for each of these sector
<b>Project Funder(s)</b>	Funding for the development of the Canada-Wide Standards is provided by all Canadian jurisdictions through the CCME. The federal government has provided additional funding. Stakeholders also contribute their time and resources.
<b>Publication</b>	1 Toxic Substances Management Policy : <a href="http://www.ec.gc.ca/toxics/toxic1_e.html">http://www.ec.gc.ca/toxics/toxic1_e.html</a> 2 Dioxins and Furans Inventory Report: <a href="http://www.ec.gc.ca/dioxin/english/index.htm">http://www.ec.gc.ca/dioxin/english/index.htm</a> 3 Canada-Wide Standards for Dioxins and Furans: <a href="http://www.ccme.ca/3e_priorities/3ea_harmonization/3ea2_cws/3ea2e_priorities/3ea2e2_dioxins/update.html">www.ccme.ca/3e_priorities/3ea_harmonization/3ea2_cws/3ea2e_priorities/3ea2e2_dioxins/update.html</a>
<b>Comments</b>	Hexachlorobenzene is not on the list for the development of Canada-Wide Standards, but because it is released from the same sources as Dioxins/Furans, any action that will be taken for the reduction of Dioxins/Furans will also affect the reduction of Hexachlorobenzene.

**Canada**

<b>Title</b>	Chlorinated Substances Action Plan (CSAP)
<b>Objective(s)</b>	<p>The Chlorinated Substances Action Plan is part of an overall federal strategy to protect human health and the environment from the effects of toxic substances. This science-based action plan includes both regulatory and non-regulatory measures targeting chlorinated substances of concern. It is an important component of Canada's domestic and international efforts to address those substances that threaten our health and the environment.</p> <p>The CSAP approach is based on the scientific community's conclusion that current evidence does not support a complete ban on all uses and releases of chlorine and chlorinated substances. However, there is scientific evidence that the use or release of certain toxic chlorinated substances should be virtually eliminated or significantly reduced.</p> <p>Pollution prevention is at the core of the CSAP. The CSAP has five components:</p> <ol style="list-style-type: none"><li>1. Targeting critical uses and products</li><li>2. Improving scientific understanding</li><li>3. Studying public health and socio-economic effects</li><li>4. Better informing the Canadian public</li><li>5. Promoting and leading international efforts</li></ol>
<b>Timeframe</b>	ongoing
<b>Responsible Organisation(s)</b>	Environment Canada, Health Canada
<b>Partner(s)</b>	Environment Canada, Health Canada, Industry
<b>Project Funder(s)</b>	Environment Canada, Health Canada, Industry
<b>Comments</b>	The CSAP web-site is <a href="http://199.212.18.76/csap/csap2000/csap2000_e.html">http://199.212.18.76/csap/csap2000/csap2000_e.html</a>

**Canada**

<b>Title</b>	Historical uses of PCBs in Products Made and Waste Generated in North America.
<b>Objective(s)</b>	Objective of the project is to identify uses of PCBs in products and wastes in North America. This information will be used for several projects, the most immediate being a protocol to identify sources of demolition wastes likely to contain PCB paints. This will be completed in order to have wastes tested and managed in an environmentally sound manner.
<b>Timeframe</b>	Completed February, 2000. Subsequent

Protocol to be  
completed in  
Fall of 2000

**Responsible Organisation(s)** Environment Canada

**Project Funder(s)** Environment Canada

**Canada**

**Title** Historical International PCB-Laden Products exported to Canada and subsequent waste generation in Canada.

**Objective(s)** Objective of the project is to identify PCBs in products and wastes in North America of foreign origins. This information will be used for several projects, the most immediate being a protocol to identify demolition wastes likely to be coated with PCB paints. This will be completed in order to have wastes tested and managed in an environmentally sound manner.

**Timeframe** Completed  
February,  
2000.  
Subsequent  
protocol  
completed  
later in 2000  
(Fall).

**Responsible Organisation(s)** Environment Canada

**Partner(s)** Environment Canada

**Canada**

**Title** Ongoing evaluation of POPs and Heavy metals in Canada's Northern Peoples

**Objective(s)** A large amount of data has been gathered on the human exposure to and human tissue levels of POPs and various heavy metals in Arctic Canada (Northwest Territories, Nunavut, Nunavik, Yukon). This data needs to be more fully evaluated and circulated in the appropriate scientific literature. Questions such as the relationship between the levels of POPs in the diet and the resulting levels of POPs in the fetus and relationship between maternal body burdens and fetal exposure levels at high and low levels of exposure can be evaluated.

**Timeframe** ongoing

**Responsible Organisation(s)** Health Canada, Departments of Health and Social Services in the Northwest

Territories, Nunavut, and Nunavik.

**Partner(s)** Health agencies in Northwest Territories, Nunavut, Nunavik, Yukon, Centre for Indigenous Peoples Nutrition and Environment at McGill University

**Project Funder(s)** Multiple agencies.

**Canada**

**Title** Traditional Environmental Monitoring Program in the First Nations' Traditional Area for the Lesser Slave Lake Indian Bands (Driftpile, Swan River and Sucker Creek First Nations).

**Objective(s)** The overall objective of this program is to protect the Health and Safety of First Nations and the surrounding environment within the First Nations' traditional land use area. The objective of the traditional monitoring program is to assess the effects that PCBs and PCDD/F's produced at the Swan Hills Special Waste Treatment Plant have had on the local First Nations with respect to their traditional land uses.

**Timeframe** ongoing

**Responsible Organisation(s)** Three First Nations (Driftpile; Sucker Creek; and Swan River)

**Project Funder(s)** Bovar, Environment Canada, Health Canada, Indian and Northern Affairs Canada, Alberta Environment

**Comments** Long term monitoring with indeterminate end date. Annual reporting is required.

**Canada**

**Title** The Great Lakes Binational Toxics Strategy (GLBTS)

**Objective(s)** In keeping with the objective of the Revised Great Lakes Water Quality Agreement of 1978, as amended by the Protocol signed November 18, 1987 (1987 GLWQA) to restore and protect the Great Lakes, the purpose of this binational strategy (the Strategy) is to set forth a collaborative process by which Environment Canada (EC) and the United States Environmental Protection Agency (USEPA), in consultation with other federal departments and agencies, Great Lakes states, the Province of Ontario, Tribes, and First Nations, will work in cooperation with their public and private partners toward the goal of virtual elimination of persistent toxic substances resulting from human activity, particularly those which bioaccumulate, from the Great Lakes Basin, so as to protect and ensure the health and integrity of the Great Lakes ecosystem. In cases where this Strategy addresses a naturally-occurring substance, it is the anthropic sources of pollution that, when warranted, will be targeted for reduction through a life-cycle management approach so as to achieve naturally-occurring levels. An underlying tenet of this Strategy is that the governments cannot by their actions alone achieve the goal of virtual

elimination. This Strategy challenges all sectors of society to participate and cooperate to ensure success.

The goal of virtual elimination will be achieved through a variety of programs and actions, but the primary emphasis of this Strategy will be on pollution prevention. This Strategy reaffirms the two countries' commitment to the sound management of chemicals, as stated in Agenda 21: A Global Action Plan for the 21st Century and adopted at the 1992 United Nations Conference on Environment and Development. The Strategy will also be guided by the principles articulated by the International Joint Commission's (IJC) Virtual Elimination Task Force (VETF) in the Seventh Biennial Report on Great Lakes Quality.

This Strategy has been developed under the auspices of the Binational Executive Committee (BEC), which is charged with coordinating the implementation of the binational aspects of the 1987 GLWQA. The BEC is co-chaired by EC and USEPA, and includes members of the Great Lakes states, the Province of Ontario, and other federal departments and agencies in Canada and the United States.

The Strategy establishes specific reduction challenges for an initial list of Persistent Toxic Substances targeted for virtual elimination. A majority of the POPs proposed for the global UNEP POPs Agreement (aldrin, dieldrin, chlordane, DDT, hexachlorobenzene, mirex, PCBs, dioxins/furans and toxaphene) are Level 1 substances around which governments will concentrate actions and efforts. The remaining two POPs proposed for the UNEP Agreement (endrin and heptachlor) are Level 2 substances which are identified by one or both countries as having the potential to significantly impact the Great Lakes ecosystem through their use and/or release.

**Timeframe**

Challenge milestones to be met between 1997 and 2006 with ongoing options for assessment and renewal.

**Responsible Organisation(s)**

Canada and the United States

**Partner(s)**

This is a collaborative process between Environment Canada, the United States Environmental Protection Agency in consultation with other federal departments and agencies, Great Lakes States, the province of Ontario, Tribes and First Nations as well as public and private partners.

**Publication**

The GLBTS web-site is [www.epa.gov/glnpo/bns](http://www.epa.gov/glnpo/bns)

The Binational Toxics Strategy's last annual progress report was issued in December 1999 and can be found at [www.epa.gov/glnpo/bns/documents.html](http://www.epa.gov/glnpo/bns/documents.html)

- The Binational Toxics Strategy has Substance-specific workgroups, and they are key to the success of the BNS. Each workgroup is following a

"four-step analytical process" for organizing its activities related to meeting the BNS Challenge goals. The four steps include gathering information analyzing current regulations, initiatives, and programs; identifying cost-effective options to achieve further reductions beyond those required by regulations; and implementing actions to work toward the goal of virtual elimination of the targeted substances. Some of the workgroups are still in the initial stages of gathering information regarding baseline levels and sources of the substances, while others have moved on to identifying cost-effective options to achieve reductions. Various workgroup highlights over 1999 are presented in the Binational Toxics Strategy's Annual Progress Report.

## **Canada**

***Title***

The Sound Management of Chemicals (SMOC) initiative under the North American Agreement on Environmental Cooperation (NAAEC) - North American Regional Action Plans (NARAPs)

***Objective(s)***

Objective of the Project and Geographical Coverage: B  
Council Resolution #95-5, Sound Management of Chemicals is a document stating how the Governments of Canada, Mexico and the United States will cooperate to improve the sound management of chemicals in North America. The Resolution gives priority to the management and control of substances of mutual concern that are persistent, bioaccumulative and toxic, but also allows for cooperation on a broader scale for the sound management of chemicals in the three countries. Council Resolution #95-5 was developed under the authority of the North American Agreement on Environmental Cooperation (NAAEC) and advances many of the commitments and obligations set out in the NAAEC. The Council (of Ministers) is the governing body of the Commission for Environmental Cooperation (CEC), which was established as part of the NAAEC, an environmental side agreement to the NAFTA.

Council Resolution #95-5 required that three substances, in addition to PCBs, be selected from among 12 persistent organic pollutants identified in the United Nations Environment Programme (UNEP) Governing Council Decision 18/32 of May 1995, and certain heavy metals, such as cadmium, mercury and lead.

At its second meeting held in Washington on 25-26 January 1996, the Working Group decided that mercury, DDT and chlordane would be the subject of North American Regional Action Plans (NARAPs) in addition to PCBs. These selections were made after having consulted with colleagues, officials and interests from each of the respective countries. The selected substances are also the subject of discussion in other international for a primarily because they are persistent, bioaccumulative and toxic and are transported across national boundaries through air currents, watersheds and traded products.

All of the substances listed in the UNEP Governing Council Decision were considered by the Working Group when developing this initial group of NARAPs. Some of these substances were not chosen for NARAPs because

the Parties had already banned their use (e.g., toxaphene). The Parties agreed however to work together to promote action on these substances in other international forums.

The NARAPs on PCBs, DDT, chlordane, Phase I of the NARAP on mercury and the substance selection process were all approved in 1997. The second phase of the NARAP on mercury was completed in June 1999. Work on NARAP implementation has started with an inventory of North American sites where mercury levels are high.

The Council has agreed to look at further substances for the development of NARAPs. Nomination dossiers for three substances proposed for the global UNEP POPs Agreement (dioxins/furans and hexachlorobenzene) have been submitted for consideration as candidate substances for the development of NARAPs. Lead is being considered for possible future NARAP development.

**Responsible Organisation(s)**

Canada, the United States and Mexico

**Comments**

The NARAPs website is [www.cec.org](http://www.cec.org)

**Canada**

**Title**

Long term health effects of neonatal exposure to breast milk contaminants, using the female rat as animal model.

**Objective(s)**

The objective of this research program is to test the biological plausibility that neonatal exposure to POPs present in breast milk, leads to adulthood reproductive health impairments and an increased risk of developing breast cancer.

The in utero and early postnatal periods are critical phases of development during which the infant is more susceptible to the toxic effects of persistent organochlorines. During these critical stages of development, individuals receive the highest exposure levels to organochlorines. The long term reproductive/developmental health effects following neonatal exposure to low doses of breast milk organochlorine contaminants is being studied by comparing the hormone metabolism, endocrine, hepatic and reproductive effects in the 21 day old female rat to those of the aging rat. Breast cancer is the most common cancer among women, and some suggest that exposure to POPs or altered estrogen levels in utero, increases the risk of developing breast cancer later in life. These hypotheses are being tested in the methylnitrosourea-treated rat following neonatal exposure to breast milk POPs.

**Timeframe**

March 2002  
(end of TSRI).

**Responsible Organisation(s)**

Health Canada, Environmental and Occupational Toxicology Division

**Partner(s)** 1) Health Canada  
 2) University of Ottawa, The Loeb Research Institute  
 3) University of Québec, INRS-Santé/IAF

**Project Funder(s)** 1) Health Canada  
 2) Toxic Substances Research Initiative (TSRI)

**Canada**

**Title** Monitoring activities under the Residual Discharge Information System (RDIS)

**Objective(s)** Environment Canada's Residual Discharge Information System (RDIS) is a microcomputer-based, menu-driven software package that allows for the compilation, maintenance and reporting of air emissions data, by regions, provinces and for Canada. The system is designed to store information from all major Canadian emission sources, of man-made and natural origin. When source data on specific pollutants is not available, emission discharge factors are used to estimate the emissions. These factors indicate the rate at which a contaminant is released into the environment as the result of a given activity. Using this data, the system can summarize yearly emissions by plant, by province or nation wide.

**Timeframe** 1985 - ongoing

**Responsible Organisation(s)** Environment Canada

**Partner(s)** Provincial environmental office partners through the activities of the Emissions and Projections Working Group (EPWG) who collaborate to build a national database of sources of emissions.

**Publication** summaries available on the Internet at [www.ec.gc.ca/pdb](http://www.ec.gc.ca/pdb)

**Comments** 5 year cycle with annual beginning in 2000

**Central African Republic**

**Title** 1. Enquêtes sur le Terrain sur l'utilisation des Pops dans les Différentes Régions du Pays  
 2. Sensibilisation de toutes les couches Sociales aux Polluants organiques Persistants (POPs) en R.C.A. sur ses effets nocifs sur la Santé et L'Environnement et aussi sur certaines solutions de Remplacement

**Objective(s)** Réduire ou Eliminer l'Accumulation des Polluants Organiques Persistants en R.C.A.

**Timeframe** ongoing

**Responsible Organisation(s)** Ministère des Eaux et Foret, Chasses Pêches de l'Environnement et du Tourisme B.P. 830



<b>Partner(s)</b>	- Ministère de la Santé Publique - Ministère de l'Agriculture - Ministère du Commerce
<b>Project Funder(s)</b>	1. Achat Matériels Consommables 2. Ateliers d' Information et de Formation des Décideurs et du Public (4 Ateliers/an) sur les Pops 3. Séminaire d'Information et Sensibilisation des Acteurs
<b>Publication</b>	-Bande Thèque de la Radio Centrafrique -Grille des Emissions de la Radio Centrafrique
<b>Comments</b>	-Pour l'heure nous avons une tranche d'antenne de 30 minutes par semaine a la Radio Centrafrique sur la Convention de Stockholm sur les polluants organiques persistants (Pops). Sa pertinence et son impact sur l'homme et Envir. La réalisation d'1 bulletin sur les polluants Org. Persist. est souhaitable  C'est une activite planifiée. Elle est continue dans le temps
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## **Chad**

<b>Title</b>	Projet gestion des pesticides au Sahel
<b>Objective(s)</b>	Renforcer les capacités de gestion des pesticides en vue de réduire les risques liés à leur utilisation dans les pays membres du CILSS (Burkina Faso, Cap Vert, Gambie, Guinée Bisau, Mali, Mauritanie, Niger, Senegal et le Tchad)
<b>Timeframe</b>	1998 - 2001
<b>Responsible Organisation(s)</b>	Institut du Sahel (INSAH/CILSS) (Comité Sahel des Pesticides)
<b>Partner(s)</b>	Pays-Bas/FAO/INSAR
<b>Project Funder(s)</b>	Pays-Bas
<b>Publication</b>	Projet GCP/RAF/335/NET (Gestion des Pesticides au Sahe)
<b>Comments</b>	Le projet travaille avec les organisations nationales et ONG impliquées dans la distribution et utilisation des pesticides tant au niveau national que régional.

## **Chile**

<b>Title</b>	National inventory of POPs contaminated sites.
<b>Objective(s)</b>	To make a national inventory of POPs contaminated or potentially contaminated sites.

**Timeframe** 2003 - January 2004

**Responsible Organisation(s)** - Comision Nacional del Medio Ambiente, CONAMA(National Commission of the Environment).- INTEC Chile

**Partner(s)** UNEP Chemicals

**Project Funder(s)** GEF

**Publication** <http://www.conama.cl>(spanish)

**Comments** This project does not have any monitoring activity.

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## Chile

**Title** National inventory of Dioxins and Furans emission sources

**Objective(s)** To make an inventory of Dioxins and Furans emission sources, and to device an action plan to face this emissions.

**Timeframe** 2003 - January 2004

**Responsible Organisation(s)** - Comision Nacional del Medio Ambiente, CONAMA (National Commission for the Environment)  
 - Servicio Agricola y Ganadero, SAG (Agricultural and Livestoke Service)  
 - Ministerio de Salud (Ministry of Health)

**Partner(s)** UNEP Chemicals

**Project Funder(s)** GEF

**Publication** <http://www.conama.cl>  
 (spanish)

**Comments** This project do not support any monitoring activity.

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## Chile

<b>Title</b>	"Characterization of Polychlorinated Biphenyls (PCBs) in urban atmosphere, within the Santiago Metropolitan Region, Chile".
<b>Objective(s)</b>	To preliminary estimate the concentration levels of in the urban air, in order to contribute to decision makers together an estimation about the presence and possible implication of the atmospheric PCBs within the Metropolitan Area.
<b>Timeframe</b>	2001 - 2001
<b>Responsible Organisation(s)</b>	Japan International Cooperation Agency (JICA)
<b>Partner(s)</b>	- Comision Nacional del Medio Ambiente, CONAMA (National Commission for the Environment) - Centro Nacional del Medio Ambiente, CENMA (National Center for the Environment)
<b>Project Funder(s)</b>	- Comision Nacional del Medio Ambiente, CONAMA (National Commission for the Environment) - Japan Cooperation Agency, JICA - Centro Nacional del Medio Ambiente, CENMA (National Center for the Environment)
<b>Publication</b>	"Informe Final Caracterización de Bifenilos Policlorados (PCBs) en Atmósfera Urbana de la Región Metropolitana de Chile" CONAMA Obispo Donoso 6, Providencia P.O. Box 265, Correo 55 Santiago, CHILE
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## Chile

<b>Title</b>	National Inventory of Polychlorinated Biphenyls (PCBs).
<b>Objective(s)</b>	To make a national inventory of PCBs and a proposal of a national action plan on PCBs, which will be included in the National Implementation Plan (NIP), according to the objectives of the GEF/UNEP country pilot project and the Stockholm Convention on POPs.
<b>Timeframe</b>	2003 - January 2004
<b>Responsible Organisation(s)</b>	- Comision Nacional del Medio Ambiente, CONAMA (National Commission for the Environment) - Universidad Concepcion, Centro EULA-Chile (University of

Concepcion, EULA-Chile Center)

**Partner(s)** UNEP Chemicals

**Project Funder(s)** GEF

**Publication** [http://www.conama.cl\(spanish\)](http://www.conama.cl(spanish))

**Comments** This project does not have any monitoring activity, but it will include those data grown up in Chile by the Regionally Based Assessment Persistent Toxic Substances.

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## Chile

**Title** National Inventory of obsolete POPs pesticides.

**Objective(s)** To make a national inventory of obsolete POPs pesticides and to elaborate a national action plan to eliminate this pesticides.

**Timeframe** 2003 - 2003

**Responsible Organisation(s)**  
 - Comision Nacional del Medio Ambiente, CONAMA(National Commission for the Environment)  
 - Servicio Agricola y Ganadero, SAG(Agricultural and Livestock Service)

**Partner(s)** UNEP Chemicals

**Project Funder(s)** GEF

**Publication** <http://www.conama.cl>  
[http://www.sag.gob.cl\(spanish\)](http://www.sag.gob.cl(spanish))

**Comments** This project does not have any monitoring activity.

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## Chile

<b>Title</b>	Diagnostic of Persistent Organic Pollutants (POPs): National Inventory of PCBs
<b>Objective(s)</b>	To elaborate a PCBs national profile and source inventory. To characterize some environmental samples containing PCBs.
<b>Timeframe</b>	2000 - 2001
<b>Responsible Organisation(s)</b>	Comision Nacional del Medio Ambiente, CONAMA (National Environment Committee)
<b>Partner(s)</b>	Centro EULA-Chile, Universidad de Concepcion (EULA Centre, University of Concepcion)
<b>Project Funder(s)</b>	Comision Nacional del Medio Ambiente, CONAMA (National Environment Committee)
<b>Publication</b>	<a href="http://www.conama.cl">http://www.conama.cl</a> (spanish only)
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## Chile

<b>Title</b>	Ecological Monitoring and Assessment Network (EMAN)
<b>Objective(s)</b>	<p>The Ecological Monitoring and Assessment Network (EMAN) is a national network of monitoring and research sites characterized by long term, multi-disciplinary studies. Sites within a single ecozone are loosely linked in an ecological framework. The network strives to facilitate cooperation and a holistic approach to ecological enquiry and ecosystem understanding. Ecological Science Cooperatives (ESCs) in the network promote connections among the network sites operating across the country. The network is highly decentralized and acts as a coordinating body, facilitating communications among participants and providing strategic direction. EMAN is an inclusive network, (i.e. those who wish to participate are welcomed. It embraces all facets of ecological enquiry (including monitoring and research) and facilitates communication among its participants and interaction with international networks. The network promotes the use of environmental indicators and the production of issue and area-based assessments.</p> <p>EMANs Operating Goal is coordinated monitoring and research activities within a network of specific sites across Canada which attempt to address federal, provincial, regional and local environmental needs.</p>
<b>Timeframe</b>	ongoing
<b>Responsible Organisation(s)</b>	In April 1994, the Ecological Monitoring Coordinating Office (EMCO) was established. It resides in the Canada Centre for Inland Waters in Burlington, Ontario and functions as the secretariat to EMAN. EMCO coordinates the

organization of the Ecological Science Cooperatives, fosters new initiatives, and facilitates communication within EMAN. The Ecological Monitoring Coordinating Office, located in Burlington, Ontario, is one of two offices that make up the Indicators, Monitoring, and Assessment Branch of Environment Canada. The Indicators and Assessment Office is situated in Hull, Québec, The Branch sits within the Ecosystem Conservation Directorate of the Environmental Conservation Service of the Department.

**Partner(s)**

In any Ecological Science Cooperative (ESC), a number of research organizations may be involved. These include:

- international agencies, such as the Smithsonian Institute, UNESCO, International Long Term Ecological Research (ILTER) Network, Council for Environmental cooperation (CEC), Canada Man and the Biosphere project, and the Arctic Council
- federal agencies and departments, such as Agriculture and Agri-Food Canada, Canadian Heritage - Parks Canada (Breeding Bird Survey); Canadian Museum of Nature (Biological Survey of Canada), Fisheries and Oceans Canada, Environment Canada (Atlantic Coastal Action Plan, Remedial Action Plan, RAMSAR, Indian and Northern Affairs Canada, Natural Resources Canada - Canadian Forestry Service, Geological Survey of Canada, and Model Forests, and others;
- provincial ministries, especially environment, natural resources parks and education;
- regional and municipal governments, universities, hospital and school boards, industry; and
- non-governmental organizations (NGOs), aboriginal and local groups, and interested volunteers. See, for example, the Atlantic Maritime ESC.

There are over 100 individual agencies involved in the Network.

**Project Funder(s)**

EMAN sites are funded through their own sponsoring institutions. How does the Ecological Monitoring Coordinating Office (EMCO) fund Ecological Science Co-operative (ESC) sites? Neither EMCO nor EMAN funds research or monitoring. Each site is responsible for its own budget. EMCO has a small budget for seed activities to support network development. It sponsors things such as organizational meetings, start-up projects to demonstrate benefits, and new techniques. A major EMAN activity is the co-ordination of the National Science Meeting.

**Comments**

The EMAN website is: [www.cciw.ca/eman/](http://www.cciw.ca/eman/)

**Colombia**

**Title**

Environmental Quality Assessment in Colombia : Surface water resources and soils

**Objective(s)**

To determine physical, chemical and biotic variables in time and space, measured by the network of environmental laboratories coordinated by IDEAM, in order to permanently know the environmental chemical map (water, soils, ecosystems) and understand the deterioration or recovery processes of the environmental surroundings in the country, regions and localities

**Timeframe** 1997 - ongoing

**Responsible Organisation(s)** INSTITUTO DE HIDROLOGIA, METEOROLOGIA Y ESTUDIOS AMBIENTALES, IDEAM (Institute of Hydrology, Meteorology and Environmental Studies)

**Partner(s)** REGIONAL AUTONOMOUS CORPORATIONS

**Project Funder(s)** INSTITUTO DE HIDROLOGIA, METEOROLGIA Y ESTUDIOS AMBIENTALES, IDEAM (Institute of Hydrology, Meteorology and Environmental Studies)

**Publication** www.ideam.gov.co  
Other publications are: The Environment in Colombia, 2000

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## Colombia

**Title** Organochlorinated pesticides; PCBs; HAPs and Phenols

**Objective(s)** Water Quality Monitoring Program included in different parts of the Bogota's river basin

**Timeframe** October 2002 - no fixed

**Responsible Organisation(s)** Corporacin Autnoma Regional de Cundinamarca - CAR-

**Project Funder(s)** CAR

**Publication** Corporacin Autnoma Regional de Cundinamarca

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## Colombia

**Title** Organochlorine pesticides in the upper basin of the Cauca river

**Objective(s)** Water Quality Monitoring Program included pesticides in the Cauca river

**Timeframe** January 2001 - December 2001

**Responsible Organisation(s)** Regional Autonomous Corporation of Valle del Cauca - CVC

**Partner(s)** none

**Project Funder(s)** CVC

**Publication** Data available by request.

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## **Congo**

**Title** Projet: Inventaire de Polluants Organiques Persistants au Congo

**Objective(s)** Mise en place d'un recueil de données statistiques des différents POPs (pesticides, fongicides, herbicides,...) utilisés au Congo.

**Responsible Organisation(s)** Ministère chargé de l'Environnement

**Partner(s)** Nous sommes à la recherche de partenaires pour le financement du projet.

**Project Funder(s)** Nous espérons obtenir l'aide financière de l'Union Européenne à travers le 8ème FED. Pour l'instant nous n'avons pas encore obtenu confirmation.

**Publication** Michel Kouka-Mapengo

**Comments** Est assujetti à l'obtention de cette aide financière.  
Nous n'avons pas encore obtenu de financement. Nous avons néanmoins introduit une requête au sein de l'Union européenne pour obtenir un financement.

## **Costa Rica**

**Title** Desarrollo e Implementación de un Sistema de Vigilancia de las Intoxicaciones con Plaguicidas. Experiencia en Costa Rica.

**Objective(s)** El objetivo del presente plan es evaluar y monitorear los casos de intoxicaciones por plaguicidas en Costa Rica.

**Timeframe** Indefinido

**Responsible Organisation(s)** Ministerio de Salud.

**Partner(s)** MASICA (OPS).

**Project Funder(s)** MASICA (OPS).

**Publication** Literatura adjunta.

**Comments** Este proyecto cuenta con una base de datos que recoge las intoxicaciones según las boletas expuestas en la literatura adjunta. Actualmente se ha



ampliado a los demás productos químicos.

## **Costa Rica**

**Title** Control de Intoxicaciones por Plaguicidas

**Objective(s)** Costa Rica

**Responsible Organisation(s)** Dr. Rogelio Pardo Evans, Ministro de Salud

**Partner(s)** MASICA

**Project Funder(s)** (Dr. Roberto Castro Grobbo) Departamento de Sustancias Toxicas y Indicina del Trabajo

**Publication** Dirección Protección al Ambiente Humano.

**Comments** En el oficio no se consideró este proyecto ni un proyecto de control de toda producción químicas

## **Cote d'Ivoire**

**Title** Project pour le developpement d'une methodologie globale appliquée a la gestion écologiquement rationnelle des PCB

**Objective(s)** Ce project a donné lieu a l'esecution des activités ci-dessous:  
1. L'inventaire des PCB en Cote d'Ivoire.  
2. Un projet de décret a été préparé avec l'assistance technique de tous les partenaires institutionnels, privés et la société civile sous la supervision d'un juriste et du consultant du PNUE

2000 -

**Responsible Organisation(s)** Ministere de L'environnement et du cadre de vie

**Project Funder(s)** UNEP: Groupes des Substances Chimiques, Secretariat de la Convention de Bale

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## **Czech Republic**

**Title** Middle European Monitoring of PBT Compounds in Kosetice Observatory, South Bohemia

**Objective(s)** The main aim of integrated monitoring programme is to determine and predict the state of ecosystems (or catchments) and their changes from a long-range perspective, with respect to the regional variation and impact of air pollution, especially nitrogen, sulphur and ozone, and including effects on biota. The Kosetice Observatory is the National Focal Point of ICP-IM in the Czech Republic.

**Timeframe** 1988 - ongoing

**Responsible Organisation(s)** RECETOX (Research centre for Environmental Chemistry and EcoTOXicology), Masaryk University Brno

**Partner(s)** CHMI - Czech Hydrometeorological Institute

**Project Funder(s)** CHMI - Czech Hydrometeorological Institute

**Publication** <http://www.recetox.muni.cz/index.php?language=en&id=530>

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## **Czech Republic**

**Title** Monitoring of sludges and sediments applied on soil

**Objective(s)** Monitoring of selected POPs in sludges and sediments intended to be applied on soils

**Timeframe** 1998 - ongoing

**Responsible Organisation(s)** Ministry of Environment

**Partner(s)** Central Institute for Supervising and Testing in Agriculture (UKZUZ)

**Project Funder(s)** Ministry of Environment

**Publication** Annual report in czech, short english version also available.  
<http://www.ukzuz.cz>

**Comments** ongoing, PCB since 1998, PAH since 2000,

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## **Czech Republic**

<b>Title</b>	The state of the load of agriculturally used soils by risky elements and persistent organic pollutants.
<b>Objective(s)</b>	To clarify the state of the load of agricultural soils in the Czech Republic by risky elements and compounds. The data are summarized and used for the making and update of limit values of risky compounds in the soil.
<b>Timeframe</b>	1993 - not specified
<b>Responsible Organisation(s)</b>	Research Institute for Soil and Water Conservation Prague Ministry of Agriculture of Czech Republic
<b>Project Funder(s)</b>	Ministry of Agriculture of Czech Republic
<b>Publication</b>	Data are stored in the Research Institute for Soil and Water Conservation (database) and are published in annual reports (in Czech). Graphic out-put - maps of the load of soil by B(a)P, fluoranthene and the sum of PAHs are available in the RISWC, scale 1: 200 000.
<b>Comments</b>	The project is still running, every year are three departments of Czech Republic observed. About 50% of total amount of departments were observed.
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## **Czech Republic**

<b>Title</b>	Monitoring of feeding-stuffs
<b>Objective(s)</b>	Monitoring of selected POPs in feeding-stuffs and some raw materials used for preparation of mixed feeds
<b>Timeframe</b>	2000 - ongoing
<b>Responsible Organisation(s)</b>	Central Institute for Supervising and Testing in Agriculture (UKZUZ)
<b>Project Funder(s)</b>	Ministry of Agriculture
<b>Publication</b>	Annual report in czech, <a href="http://www.ukzuz.cz">http://www.ukzuz.cz</a>
<b>Comments</b>	PCB since 2000, PCDD/F since 2001, DDT, DDE, DDD, HCB since 2002
<b>Contact</b>	Mr. Jiri Zbiral UKZUZ, Hroznova 2, CZ-656 06, Brno, Czech Republic +420 543 548 329

jiri.zbiral@ukzuz.cz

## **Czech Republic**

**Title** Monitoring of soil contamination in the Czech Republic

**Objective(s)** Monitoring of selected POPs in various types of soils

**Timeframe** 1994 - ongoing

**Responsible Organisation(s)** Central Institute for Supervising and Testing in Agriculture (UKZUZ)

**Project Funder(s)** Ministry of the Agricultural

**Publication** Annual report in czech, short english version also available.  
<http://www.ukzuz.cz>

**Contact** Mr Jiri Zbiral  
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CZ-656 06  
Brno, Czech Republic  
+420 543 548 329  
jiri.zbiral@ukzuz.cz

## **Czech Republic**

**Title** Environmental Way into common Europe

**Objective(s)** Increase the environmental awareness

**Timeframe** 1.9.1999 - 30.6.2000

**Responsible Organisation(s)** Agentura GAIA  
Lublaviska' 18

**Partner(s)** Schools, journalists, state institutions

**Project Funder(s)** NROS Foundation (PHARE)  
Ministry of Foreign Affairs

**Publication** UNEP, UNIDO, Diverse Women for Diversity, A SEED, IPEN

**Comments** The goal of our project is to teach causes of all EARTH problems. Is DNA the solution?

## **Czech Republic**

**Title** Monitoring of Pops Chemicals in Breast Milk & Assessment of Related Health Risk for Breast Fed Children

<b>Objective(s)</b>	In the 6 localities of the Czech Republic samples of breast milk are collected (up to 15 samples at each locality) and analysed individually to detect spatial distribution of human exposure to POPs in the Czech Republic.
<b>Timeframe</b>	1999 - 2001
<b>Responsible Organisation(s)</b>	Institute of Hygiene & Epidemiology First Faculty of Medicine
<b>Partner(s)</b>	Axis Varilab s.r.o. CZ 252 46 VRANE n/VTAVOU, VLTAVSKA 13 CZECH REPUBLIC
<b>Project Funder(s)</b>	Ministry of Environment of the Czech Republic
<b>Comments</b>	Financial sources available cover analysis of breast milk samples. If there are available some additional funds we can extend the study by blood sampling or by analysis of the autopsy materials.

## Denmark

<b>Title</b>	National Environmental Monitoring Programme
<b>Objective(s)</b>	The Danish National Monitoring Programme is an integrated nation-wide programme for monitoring of terrestrial habitats, water bodies and the biodiversity within these. The overall objectives are to establish the status of terrestrial habitats and water bodies and their pressures. The programme must be designed to- fulfil attainment of Denmark's international monitoring obligations and commitments (Conventions and EU directives)- prove the effect of national action plans, and identifying attainment of targets- provide information on the effect of other programmes of measures, including establishing the status of habitats and water bodies in relation to national legislation- improve the scientific basis of decisions for future national action plans, international initiatives to introduce improvements on the quality of terrestrial and aquatic habitats.
<b>Timeframe</b>	1998 - 2003
<b>Responsible Organisation(s)</b>	The Danish Ministry of Environment
<b>Partner(s)</b>	The Danish Counties
<b>Project Funder(s)</b>	The Danish Government
<b>Publication</b>	website: <a href="http://ovs.dmu.dk/">http://ovs.dmu.dk/</a> in Danish and English. Publications can be found from the website.
<b>Comments</b>	A revised programme for the periode 2004-2009 will follow the current programme when it is completed
<b>Contact</b>	Ms. Susanne Boutrup National Environmental Research Institute, Vejlsoevej 25, DK 8600 Silkeborg, Denmark

+45 8920 1400  
sub@dmu.dk

## **Dominican Republic**

**Title** Estudio Especial Rio Haina-Mano Guayabo  
Republica Dominica

**Objective(s)** 1. Realizar Monitoreo en los ríos Haina -Manoguyabo para determinar la calidad de sus Aguas.

2. Los objetivos inmediatos, están dirigidos a un programa de investigación que posibilite la creación de una base informativa suficiente para elaborar un diagnostico después de haberse producido un derrame de hidrocarburo de manera accidental procedente de un gasoducto perteneciente a la Compañía Falcombridge Dominicana en la cercanías del río Manoguyabo y desarrollar las acciones para el saneamiento ambiental del entorno hídrico.

**Timeframe** Abril 2002 - Sep 2002

**Responsible Organisation(s)** Corporación De Acueducto y Alcantarillado de Santo Domingo. CASSD

**Partner(s)** Junta de Calidad Ambiental de Puerto Rico

**Publication** Informe del resultado analítico de las muestras tomadas del río Haina y Manoguyabo elaborado por la Junta de Calidad Ambiental de Puerto Rico

**Comments** -Fase inmediata : Abril-Mayo del 2002 preparación caracterización de fuentes contaminantes  
-Fase Mediata : Mayo de 2002 Establecer la calidad de las aguas y dinámica de ecosistemas  
-Fase Extendida: Mayo de 2002 Sep de de 2002 Determinación de las bases para un plan de manejo y aplicación de medidas correctivas en las aguas hídricas

**Contact** Indhira De Jesus

## **Egypt**

**Title** National Water Quality Availability Management (NAWQAM)

**Objective(s)** Assist the government of Egypt, through the Ministry of Water Resources and Irrigation (NWRI) with the overall management of its water resources within the context of responsive and coordinated system for sustainable water resources.

**Timeframe** 1997 - 2004

**Responsible Organisation(s)** National Water Research Centre (NWRC)

**Project Funder(s)** Canadian (CIDA) & national Water Research Centre (NWRC)

**Publication** National Water Research Centre (NWRC)- Ministry of Water Resources and Irrigation (NWRI)

**Comments** Website and/or publication (indicate the language of the sources and where possible, from where the publications can obtained.)

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Maadi  
Cairo, Egypt  
(+202) 5256452  
tarek\_elruby@yahoo.com

## **Egypt**

**Title** The collection, assembly and evaluation of data on source environmental impacts of Persistent Toxic Substance across the globe

**Objective(s)** To deliver comprehensive regionally based assessment of the damage and threats posed by PTS, and to evaluate and agree the priorities between chemical related environmental issues at the regional level in order to focus subsequent interventions on the most important and pressing issues

**Timeframe** 1/4/2000 - 23/9/2002

**Responsible Organisation(s)** Regional team member Dr. Assem Barakat

**Partner(s)** EEAA, Ministry of Agriculture (central Agricultural Pesticide Lab, National Research institute for Oceanogr. Fish, Alex. Egypt), Faculty of Science, Faculty of Agriculture

**Project Funder(s)** GEF

**Publication** Assem O. Barakat, PH,D  
PROFESSOR, ORGANIC GEOCHEMISTRY  
Ho.(202) 035463250 Mo.(202) 0101161246

**Comments** The use of these pesticides is forbidden since 1996.  
Needs for assistance: Capacity building and on developing national strategies and legislation (financial and technical) at different levels identifying contaminated sites

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Egypt  
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tarek\_elruby@yahoo.com

## **Estonia**

<b>Title</b>	Marine Monitoring. Hazardous substances in the Estonian coastal waters fish ( Base: HELCOM COMBINE Programme
<b>Objective(s)</b>	To compare the level of POPs in selected species of biota from different geographical regions of the Baltic Sea in order to detect possible contamination patterns. To measure levels of contaminants in selected species of biota at specific locations over time in order to detect whether levels are changing in response to the changes in input of contaminants to the Baltic Sea.
<b>Timeframe</b>	1976 - 1994; ongoing
<b>Responsible Organisation(s)</b>	Estonian Environment Research Centre under Ministry of the Environment of Estonia
<b>Partner(s)</b>	Tartu University Marine Institute, HELCOM
<b>Project Funder(s)</b>	State Budget
<b>Publication</b>	Roots, O. 1996. Toxic chlororganic compounds in the ecosystem of the Baltic Sea, Estonian Environment Information Centre, 144p ( ISBN-9985-9072-0-5 ) ( data 1976-1991 ); Roots, O & Simm, M. 2002 . POPs in the Baltic fish- SECOTOX 2002. Book of Abstracts. 7th Regional Meeting of the Central and Eastern European Section, Brno, Czech Republic, 53-57 ( data 1994-2001 ) Roots, O. 1999. The Effect of environmental pollution on human health in the Baltic States ( Assessment and Regional Differences ), 120p. ( ISBN 9985-881-13-3 ) and State of Environment in Estonia on the threshold of XXI century, Estonian Environment Information centre, Tallinn, 2001, 96p. ( www.envir.ee/ministeerium/trykised/keskkond21_inglise.pdf ). ( data 1996-1998 ) ; Roots, O., Simm, M., Otsa, Lahne, R. 2002. Dioxin concentrations on the Estonian coastal areas fish organism. 28th Estonian Chemistry Days. Abstracts of Scientific Conference, Tallinn, 2002, 128-129. Internet homepages: www.chemweb.com ( Environmental Chemistry - O. Roots 3 publications ); recetox.muni.cz ( TOCOEN Report No. 150 a ); www.thesa.ru ( Ecological Chemistry ), etc.
<b>Comments</b>	POPs monitoring belong to Estonian State Monitoring Programme, starting 1994.
<b>Contact</b>	Mr OTT ROOTS 10 617 Tallinn Marja 4D ESTONIA +372-611-2964 ott@klab.envir.ee

## **European Commission**

<b>Title</b>	Pilot Project on "Integrated dioxin/PCB Monitoring in the Baltic Region"
<b>Objective(s)</b>	To develop an integrated environment & health monitoring for dioxins/PCBs in



the Baltic Region, linking environmental monitoring data to fish monitoring data and to human health data.

**Timeframe** 2003 - ongoing

**Responsible Organisation(s)** HELCOM project, European Commission as lead organisation

**Project Funder(s)** partly by European Commission

**Publication** Additional information and the reports are available at:  
<http://europa.eu.int/comm/environment/dioxin/index.htm>

**Contact** Mrs Birgit Van Tongelen  
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Environment Directorate-  
General, B-1049 Brussels  
+32-2-29 96 764  
Birgit.Van-  
Tongelen@cec.eu.int

## **European Commision**

**Title** Dioxin Emissions in Candidate Countries

**Objective(s)** To build up a basis for a "harmonised dioxin emission estimation for Candidate Countries" and to contribute to the capacity building in Candidate Countries.

**Timeframe** 2003 - 2004

**Responsible Organisation(s)** European Commission, Directorate-General Environment

**Project Funder(s)** European Commission, Directorate-General Environment

**Publication** Additional information and the reports are available at:  
<http://europa.eu.int/comm/environment/dioxin/index.htm>

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Birgit.Van-  
Tongelen@cec.eu.int

## **European Commision**

**Title** Preparatory Actions in the Field of Dioxins and PCBs

**Objective(s)** To provide a systematic overview on contamination levels of dioxins and PCBs for important environmental compartments, feedingstuffs and food. Furthermore, to give an overview on sources, pathways, fate, levels and human exposure with respect to dioxins, PCBs and relevant brominated substances and to discuss causal relations and consequences in the light of the existing knowledge.

**Timeframe** 1999 - 2002

**Responsible Organisation(s)** European Commission, Directorate-General Environment in cooperation with Directorate-General Health and Consumer Protection

**Project Funder(s)** European Commission

**Publication** Additional information and the reports are available at: <http://europa.eu.int/comm/environment/dioxin/index.htm>

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**Federated States of  
Micronesia**

**Title** The SPREP Persistent Organic Pollutants Project helped assess the chemicals that are currently stockpiled in the four States comprising the FSM.

**Objective(s)** The project was set out to inventory the presence of POPs in the four FSM States as well as other countries covered by the SPREP organization. Phase 1 was to assess the quantity of stockpiled chemicals. Phase 2 was to introduce appropriate training on storage and packing of these chemicals. The third phase was then to remove the chemicals on island. Unfortunately, the SPREP project is having funding difficulties.

**Timeframe** Phase 2 was - no information  
meant to start  
September  
2001.

**Responsible Organisation(s)** The Department of Health, Education and Social Affairs is responsible for the National Implementation of the POPs Project. Each EPA is responsible at the State level.

**Partner(s)** South Pacific Regional Environmental Programme (SPREP).

**Project Funder(s)** AusAid.

**Publication** FSM POPs Survey document finalized in 1999.

**Comments** If further funding does not eventuate to complete the SPREP project, FSM will have to source other funding donors. There is limitation on island expertise in the proper storage and disposal of these chemicals.

## **Fiji**

**Title** Fiji: Enabling Activities for the Development of a National Plan for Implementation of the Stockholm Convention on POPs

**Objective(s)** The main objective of this project is intended to create sustainable capacity for the Government of Fiji to fulfil its obligations under the Stockholm Convention particularly the preparation of a National Implementation Plan for POPs. This will enable Fiji to: (i) prepare ground for implementation of the Convention; (ii) satisfy its reporting and other obligations under the convention; and (iii) strengthen its national capacity to manage POPs and chemicals generally

**Timeframe** January 2003 - August 2004

**Responsible Organisation(s)** Ministry of Local Government Housing Squatter Settlement and Environment

**Partner(s)** Ministry of Agriculture, Occupational Health and Safety Department, Ministry of Health, Chemical Companies, Industry Representatives, Solicitor Generals Office, Non Government Organisations, Land Transport Authority, Education Institutes, Customs Department and the Medical Sector

**Project Funder(s)** United Nations Environment Programme

**Comments** This project has just started so there is no data available. By the end of the project there will be a very comprehensive report on the status on chemical management in Fiji and a detailed chemical inventory with emphasis on POPs

**Contact** Ms Vandana Naidu  
G P O Box 2131  
(679) 3311699  
popsfiji@connect.com.fj

## **Fiji**

**Title** Ozone depletion- Monitoring the amount of ODP imported and used in the country by questionnaires.  
Emission from plastic burning.  
Management of POPs- Identification and stocktaking and suitable way of disposal

**Objective(s)** Management of chemicals in order to eliminate the threat posed by toxic

chemicals (agricultural/industrial) towards the environment and human health.

**Responsible Organisation(s)**

Department of Environment, MAFF, Ministry of Health (Pharmacy)

**Partner(s)**

SPREP. Looking for potential partners for setting up a proper assessment and monitoring of Pesticide residues and other toxic chemicals.

**Project Funder(s)**

Government of Fiji; AUSAID

**Comments**

Fiji do not have proper laboratory facilities and expertise to carry out activities such as identifying the composition of waste chemical residues analysis and emission monitoring.

Project timeframe is 4- 5 years. For new projects, it depends on securing the funds.

## **Finland**

**Title**

Determination of organohalogen compounds from the foodstuffs of animal origin (meat, milk, egg, fish)

**Objective(s)**

The objective is to monitor the levels of residues in food of animal origin.

**Timeframe**

ongoing

**Responsible Organisation(s)**

National Veterinary and Food Research Institute

**Project Funder(s)**

Finnish government.

**Comments**

The national residue monitoring programme is carried out annually according to our national legislation and to the legislation of the European Community.

National Veterinary and Food  
Research Institute  
P.O.Box 368 (Hämeentie 57)  
00231 Helsinki, Finland.

## **Finland**

**Title**

Safety and nutritional quality of Finnish food

**Objective(s)**

The aim of the project was to obtain the most accurate picture of the contaminant levels of various Finnish foods.

**Timeframe**

Project 1: - Project 1: 1995  
1990/1991 Project 2:  
Project 2: Ongoing  
1995/1996

**Responsible Organisation(s)**

Agricultural Research Centre of Finland; Food Research / Chemistry Laboratory.

**Partner(s)** Ministry of Agriculture and Forestry; Finnish Food Industry.

**Project Funder(s)** Ministry of Agriculture and Forestry; Finnish Food Industry; Agricultural Research centre of Finland.

Agricultural Research Centre  
of Finland  
Food Research / Chemistry  
Laboratory.  
FIN-31600 JOKIOINEN

## **Finland**

**Title** Monitoring of harmful substances in terrestrial environment

**Objective(s)** To monitor the fate and effects of PCBs; organochlorine pesticides and heavy metals in common shrew (*Sorex araneus*); red wood ant (*Formica* sp.) and moose (*Alces alces*). in two background areas. Suitability of minsk; raccoon dog; fox and pine marten for monitoring of organochlorine substances is being investigated.

**Timeframe** 1998 - ongoing

**Responsible Organisation(s)** Finnish Environment Institute

**Partner(s)** Finnish Game and Fisheries Research Institute; Finnish Forest Research Institute

**Project Funder(s)** Finnish environmental administration; Ministry of Agriculture and Forestry

**Publication** Finnish Environment Institute database KertymSrekisteri" (in Finnish); scientific publications "

**Contact** Mr Juha-Pekka Hirvi  
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358-9-40 3000  
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## **Finland**

**Title** Survey of dioxins in fish for human consumption

**Objective(s)** To monitor dioxin-like PCBs and PCDD/Fs in the marine and freshwater fish species used as food. Activity is part of the prerequisites for the derogation from the EU's Directive for maximum residue limit of dioxin in fish.

**Timeframe** 2001 - 2006

**Responsible Organisation(s)** National Veterinary and Food Research Institute; Ministry of the Agriculture and Forestry

**Project Funder(s)** Ministry of Agriculture and Forestry

**Contact** Ms Anja Hallikainen  
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rasto.fi

## **Finland**

**Title** Monitoring of PCBs; OCs; chlorophenols; anisoles and veratroles; PCDD/Fs in fish and other aquatic organisms in freshwater lakes and coastal areas.

**Objective(s)** To monitor PCBs and other chlorinated compounds in Northern pike (*Esox lucius*; L.); roach (*Rutilus rutilus*; L.) and vendace (*Coregonus albula*; L.) and freshwater mussel (*Anodonta piscinalis*) in inland waters and in Northern pike cod (*Cadus morhua*; L.) and Baltic herring (*Clupea harengus*; L.) in the coastal areas (from 1970's). Since 1980's coastal monitoring has included Baltic mussel (*Macoma baltica*) and isopod crustacean (*Mysis relicta*).

**Timeframe** 1970's - ongoing

**Responsible Organisation(s)** Finnish Environment Institute

**Project Funder(s)** Finnish environmental administration

**Publication** Scientific publications; Data base KertymSrekisteri" (in Finnish)"

**Contact** Mr Matti Verta  
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358-9-40 3000  
Matti.Verta@vyh.fi

## **Finland**

**Title** Mussel watch (*Anodonta piscinalis*) on organochlorine compounds in the fresh water recipients.

**Objective(s)** Monitoring of fate and transformation of the chemical pulp and paper industry discharges (chlorinated compounds).

**Timeframe** 1988 - ongoing

**Responsible Organisation(s)** Finnish Environment Institute

**Project Funder(s)** Finnish environmental administration  
**Publication** Project reports  
**Contact** Mr Matti Verta  
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FIN-00251 Helsinki  
358-9-403000  
Matti.Verta@vyh.fi

## **Finland**

**Title** Monitoring of deposition quality in Finland  
**Objective(s)** Monitoring of PCBs; PAHs and organochlorine pesticides in two background areas.  
**Timeframe** 1990's - ongoing  
**Responsible Organisation(s)** Finnish Environment Institute  
**Project Funder(s)** Finnish environmental administration  
**Publication** Scientific publications  
**Contact** Mr Matti Verta  
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## **Finland**

**Title** Effects of environmental toxicants on reproduction of Baltic salmon (the M74 syndrome)  
**Objective(s)** The main goal of the project is to find out causes for the M74 syndrome. One of the subprojects (title above) is concentrated to investigate a possible role of organochlorine compounds in the syndrome. For that purpose samples for OC analyses (including e.g. DDT with metabolites, PCBs, PCDD/Fs, HCB, HCHs) have been collected in salmon mainly at stripping of eggs, but also from open sea around the Baltic. Samples for comparisons have been collected from the Arctic R. Tenjoki.  
**Timeframe** 1982 - ongoing  
**Responsible Organisation(s)** Finnish Game and Fisheries Research Institute  
**Partner(s)** National Public Health Institute (in Kuopio); Department of Chemistry; University of Jyväskylä.

**Project Funder(s)** Finnish Game and Fisheries Research Institute  
Ministry of Agriculture and Forestry  
Academy of Finland, Nordic Council of Ministers.

**Publication** Scientific publications.

**Comments** First sampling of OC analyses was performed in 1982 and the programme still continues. Samples have been collected yearly, but in analyses, there are gaps.

Finnish Game and Fisheries  
Research Institute  
P.O.Box 6  
FIN-00721 Helsinki/ Finland

## **Finland**

**Title** Monitoring of bioaccumulating compounds (Chlordane; HCB; DDT; PCBs) in the aquatic environment.

**Objective(s)** To study the levels and trends of bioaccumulating compounds in the aquatic environment (mainly in animals).

**Timeframe** 1978 - ongoing

**Responsible Organisation(s)** Finnish Environmental Institute (FEI).

**Project Funder(s)** FEI

## **France**

**Title** Réseau National de Bassin (RNB)  
Réseaux des eaux souterraines  
Réseaux des Agences de l'Eau.

**Objective(s)** Connaissances générales de l'évolution spatio-temporelles de la qualité des cours d'eau et des eaux souterraines.  
Evaluation de l'efficacité globale des politiques de lutte contre la pollution.  
Information des gestionnaires et du public.  
Suivi de la contamination des eaux par les micropolluants dont les POPs.

**Timeframe** ongoing

**Responsible Organisation(s)** 6 Agences de l'Eau françaises.  
Ministère de l'Environnement et de l'Aménagement de Territoire.

**Publication** Sites internet: [www.eau\\_rhin-meuse.fr](http://www.eau_rhin-meuse.fr) / [www.rnde.tm.fr](http://www.rnde.tm.fr) / [www.rdb.eaurmc.fr](http://www.rdb.eaurmc.fr) / [www.eau-artois-picardie.fr](http://www.eau-artois-picardie.fr)

**Comments** Ces réseaux existent depuis de nombreuses années, les mesures sont réalisées périodiquement. Réseaux pérennes.



## France

<b>Title</b>	Dioxines : données de contamination et d'exposition de la population française
<b>Objective(s)</b>	<p>Cette étude a pour but d'évaluer le niveau d'exposition aux dioxines et furanes par voie alimentaire de la population française en général, ainsi que de différentes classes d'individus présentant des régimes alimentaires spécifiques:</p> <ul style="list-style-type: none"><li>- les nourrissons et les enfants en bas âge (0 à 2 ans), avec 3 sous-classes d'âge dans cette population</li><li>- les enfants (2 à 9 ans),</li><li>- les adolescents (10 à 14 ans).</li></ul> <p>Les données présentées s'appliquent à la population générale française, dont l'alimentation résulte d'achats en petites et grandes surfaces ou en marchés, donc d'origines géographiques diversifiées. En conséquence, elles ne reflètent pas les niveaux d'exposition spécifiques à certaines catégories de population.</p> <p>Le niveau d'exposition de la population générale française a été estimé à partir :</p> <ul style="list-style-type: none"><li>- de données de consommation basées sur deux études couvrant le régime alimentaire des diverses classes d'individus,</li><li>-de données de contamination en dioxines et furanes de différentes catégories d'aliments entrant dans le régime alimentaire de ces individus.</li></ul>
<b>Timeframe</b>	1996 - 2000
<b>Responsible Organisation(s)</b>	<ul style="list-style-type: none"><li>- AFSSA : Agence française de sécurité sanitaire des aliments.</li><li>- Conseil Supérieur d'Hygiène Publique de France, Section Alimentation et Nutrition.</li></ul>
<b>Partner(s)</b>	<ul style="list-style-type: none"><li>- Ministère de l'Agriculture et de la Pêche, Direction Générale de l'Alimentation.</li><li>- Direction Générale de la Concurrence, de la Consommation et de la Répression des Fraudes (DGCCRF).</li><li>- Institut National de Veille Sanitaire</li><li>- Centre Rhône-Alpes d'Épidémiologie et de Prévention Sanitaire (CAREPS)</li><li>- Observatoire des Consommations Alimentaires</li><li>- Profession agroalimentaire</li></ul>
<b>Project Funder(s)</b>	<ul style="list-style-type: none"><li>- AFSSA : Agence française de sécurité sanitaire des aliments.</li><li>- Ministère de l'Agriculture et de la Pêche, Direction Générale de l'Alimentation.</li><li>- Direction Générale de la Concurrence, de la Consommation et de la Répression des Fraudes (DGCCRF).</li></ul>
<b>Publication</b>	<p>Information et rapport disponibles à l'adresse internet suivante:</p> <p><a href="http://www.afssa.fr">http:// www.afssa.fr</a></p>

**Comments**

Etude réalisée en 1999-2000 à partir de données obtenues entre 1996 et 1999.

**Gambia, The**

**Title** PCB-Inventory and Health and environmental safety dealing with industrial products

**Objective(s)**

- Establishment of a country-wide Inventory of PCB, PCB containing equipment, PCB associated waste
- To carry out a risk assessment
- To develop map for sound management of PCBs
- Sensitization of the public

**Timeframe** 2001/2002 - ongoing

**Responsible Organisation(s)** National environment agency

**Partner(s)** National Water and Electricity Company (NAWEC)  
German Technical Cooperation (GTZ)

**Project Funder(s)** German Technical Cooperation (GTZ)

**Publication** Report of the country-wide inventory of PCB equipment and risk assessment in the Gambia, by Yves Guibert, consultant, Lagnieu, France. Email: hoppal@club-internet.fr

**Contact** Mrs. Ndoye Fatoumata Jallow  
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PMB 48  
Banjul, The Gambia  
220-223-206/224867  
nea@gamtel.gm

**Gambia, The**

**Title** 1) Case Study on Inventory of PCBs  
2) A mission on the Preliminary Inventory of Hazardous Wastes (including POPS) in Gambia

**Objective(s)**

- 1) To determine the amount and location of PCBs in the country and to devise a strategy for their destruction.
- 2) To conduct a preliminary review of the hazardous waste situation in the country, by covering the legal, technical and institutional aspects of their management.

**Timeframe** ongoing

**Responsible Organisation(s)** National Environment Agency

**Partner(s)** National Water and Electricity Company (NAWEC), Departments of State for

Agriculture, Health, Trade, Industry and Employment; Oil companies; Technical Training Institutes; Radville Farms; Gambia Groundnut Council; Medical Research Council.

**Project Funder(s)**

1) UNEP Chemicals  
2) Basel Secretariat

**Comments**

1) The PCB Case Study is not finalised. Technical assistance is awaited from UNEP Chemicals.  
2) The mission on assessment of the hazardous waste situation was for a duration of two weeks.

## Germany

**Title**

European Monitoring and Evaluation Program (EMEP)

**Objective(s)**

Measurement of  
- POP concentrations in gasphase and particulate phase;  
- Wet deposition

**Timeframe**

January 2003 - ongoing

**Responsible Organisation(s)**

Federal Environmental Agency (UBA), Berlin/Germany

**Partner(s)**

none

**Project Funder(s)**

Federal Environmental Agency (UBA), Berlin/Germany

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## Germany

**Title**

Analysis of POP substances in sewage sludge

**Objective(s)**

safeguard that no contaminated sludge is applied to agricultural soil

**Timeframe**

ongoing

**Responsible Organisation(s)**

responsible authorities of the Federal States

**Project Funder(s)**

Federal States

**Comments**

Concentrations of certain substances (i.a. PCDD/Fs and PCBs) are regularly determined in sewage sludge. These data are collected by the responsible authorities of the Federal States and reported regularly to the European Commission (article 16 of directive 91/271/EEC)

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## Germany

**Title** German Environmental Specimen Bank

**Objective(s)** Sampling and storage of representative environmental and human specimens for an early identification of pollution trends and their ecotoxicological relevance as well as for retrospective monitoring

**Timeframe** 1985 - ongoing

**Responsible Organisation(s)** Federal Ministry of Environment, Nature Conservation and Nuclear Safety (general responsibility) and Federal Environmental Agency (administrative coordination)

**Partner(s)** Fraunhofer Institute Molecular Biology and Applied Ecology, Schmallenberg (responsible for the archive, sampling of soil and inorganic analysis)University Trier, Institute for Biogeography (responsible for sampling and characterization of environmental specimens)ERGO Forschungsgesellschaft, Hamburg (responsible for organic analysis)University Muenster (responsible for sampling, characterization, analysis and storage of human specimens)

**Project Funder(s)** Federal Ministry of Environment, Nature Conservation and Nuclear Safety

**Publication** [www.umweltprobenbank.de](http://www.umweltprobenbank.de) (German and English version). This website includes a description of the concept of the German ESB, further information and the possibility for data retrieval.

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## Germany

**Title** Dioxin reference measuring program of the Government and Federal States

**Objective(s)** monitoring dioxin contamination in the environment, foodstuff, feedingstuff and human samples over a long period to determine temporal and spatial trends.

**Timeframe** 1994 - 2004(ongoing)

**Responsible Organisation(s)** Government/Federal States (Länder) joint working group on DIOXINS in Germany, Lead Ministry: Federal Environmental Ministry; Governmental and state agencies German Dioxin Database: Federal Environmental Agency former Federal Institute for Consumer Safety and Veterinary Medicine

**Publication** German Dioxin Database, Federal Environmental Agency 3 and 4 report of the Government/Länder working group on DIOXINS 2002, (Language: German, English version is under way) Publication can be obtained at the book trade and at Federal Environmental Agency ISBN 3-00-009326-5 Internet <http://www.umweltbundesamt.de>

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## Germany

**Title** Monitoring on Permanent Soil Monitoring Sites of the federal States of Germany

**Objective(s)** Monitoring of a) state of soils (background values, concentration of hazardous compounds etc.), b) spatial and temporal trends of changes in pedologic, physical and chemical parameters of selected soil sites

**Timeframe** 1985 - ongoing

**Responsible Organisation(s)** Geological and environmental surveys of the federal States (Länder). Coordination of data flow, methods, and evaluation is performed by the working group Bund-Länder-Arbeitsgemeinschaft Bodenschutz (LABO) and the German Federal Environmental Agency (UBA)..

**Project Funder(s)** Federal States, Federal Ministries on Environment

**Publication** <http://www.bmu.de/download/dateien/bodendauer.pdf> (in German)

**Comments** Responsibility for arrangement and operation of permanent monitoring sites (BDF = Boden- Dauerbeobachtungsflächen) is taken by the Federal States, respectively. Number of parameters determined and frequency of measurements differs considerably among States. Emphasis is not primarily on POPs but on soil parameters in general with a focus on heavy metals

Starting of the programmes differs by the several Länder, earliest started in 1985. At present all 16 Länder performed at least the first assessment, some did the first periodic investigation, German wide assessment started in 2002. First German wide assessment finished in 2004

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## Germany

**Title** -CAMP - Comprehensive Atmospheric Monitoring Programme/ in the frame of OSPAR /Oslo Paris Convention for the Protection of the Marine Environment of the North-East Atlantic/ = A  
  
-EGAP - Expert Group on Atmospheric Pollution / Atmospheric Monitoring programme in the frame of HELCOM /Baltic Marine Environment Protection Commission/ = B  
  
-EMEP - European Monitoring and Evaluation Program = C

**Objective(s)** A= Quantification of air input of pollutants to the Sea; at this stage only share of wet deposition  
B= Quantification of air input of pollutants to the Sea;at this stage only share of wet deposition

**Timeframe** A = North-Sea - ongoing station -  
Westerland  
since July 1992  
B = Baltic-Sea station - Zingst  
since July 1992  
C = Kehl  
(south west Germany),  
only for EMEP

**Responsible Organisation(s)** Federal Environmental Agency Berlin/Germany (UBA) belonging to Federal Ministry of Environment, Nature Protection and Nuclear Safety

**Project Funder(s)** Funded by the Federal Ministry of Environment, Nature Protection and Nuclear Safety

**Publication** OSPAR reports - working group INPUT / [www.ospar.org](http://www.ospar.org) / english  
HELCOM reports - working group MONAS / [www.helcom.fi](http://www.helcom.fi) /english EMEP database

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## Germany

<b>Title</b>	Monitoring Programme of the Joint Water Commission of the Federal States (LAWA) providing information about the status of surface waters in Germany
<b>Objective(s)</b>	Providing Information about the status of surface waters in Germany
<b>Timeframe</b>	ongoing
<b>Responsible Organisation(s)</b>	Joint Water Commission of the Federal States (LAWA = Länder Arbeitsgemeinschaft Wasser)
<b>Partner(s)</b>	In case of transboundary waters the corresponding International Commissions for Protection of River Rhine, River Oder, River Danube and River Elbe
<b>Project Funder(s)</b>	Federal States
<b>Publication</b>	Environmental Policy:Water Resources Management in Germany published by Federal Ministry for the Environment, Nature Conservation and Nuclear Safety for the river Rhine: <a href="http://www.iksr.org/y">http://www.iksr.org/y</a>
<b>Comments</b>	This Monitoring Programme includes/includes Aldrin, Dieldrin, Endrin, DDT, Heptachlor, Hexachlorobenzene, PCBs and in some river basins polyhalogenated dioxines and furanes. Since all pesticide POPs have already been are banned for many years now the (regular) analysis of these substances has been discontinued by and by.
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## Germany

<b>Title</b>	Monitoring of pesticidal substances in groundwater supplies in Germany
<b>Objective(s)</b>	compilation of data on measured concentrations of pesticides in groundwater in Germany
<b>Timeframe</b>	ongoing
<b>Responsible Organisation(s)</b>	Monitoring programmes are within the responsibility of the Federal States.
<b>Partner(s)</b>	Water authorities of the Federal States and commercial water suppliers
<b>Project Funder(s)</b>	Federal States of Germany
<b>Publication</b>	on request
<b>Comments</b>	Concentrations of pesticidal substances in drinking water must not exceed 0.1 µg/L (Aldrin Dieldrin and Heptachlor 0.03 µg/L), irrespectivly of toxicity. Since groundwater is the major source for drinking water in Germany water suppliers analyse raw waters (i.a.) for pesticidal (agricultural/non-agricultural)

residues, according to likelihood of presence..

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**Germany**

**Title**

Ambient air: "Exposure/Emission monitoring": wet deposition measurements in the framework of the network of the Environmental Agency /FEA, two continuous Air Monitoring Sites at the coast of the Baltic Sea (Zingst) and on the North sea Island Sylt (Weterland).

**Objective(s)**

The aim is to establish seasonal variations, maximum environmental concentrations and trends.  
Chlorpesticides: alpha-HCH; gamma-HCH; HCB; Heptachlor; Aldrin; Dieldrin; Endrin; p,p'-DDE; p,p'-DDD; o,p-DDT; p,p'-DDT. The concentrations measured are general

**Timeframe**

ongoing

**Partner(s)**

HELCOM, OSPAR

**Germany**

**Title**

Preparatory actions in the field of dioxin and PCBs

**Objective(s)**

Objective of the monitoring part of the project: analysis of dioxin-like PCBs in food and feedingstuff sample from all over Europe.

**Timeframe**

2001 - 2002

**Responsible Organisation(s)**

For monitoring part of the project: Oekometric GmbH - The Bayreuth Institute of Environmental Research

**Project Funder(s)**

European Commission

**Publication**

As an ongoing project no report or publication available up to now

**Germany**

**Title**

Combustion of printed circuit boards and analysis of thermal degradation products



<b>Objective(s)</b>	Evaluation of printed circuit boards from different suppliers concerning formation and emission of POPs during use and under increased temperature. Thermal degradation experiments, POPs analysis and comparable risk assessment.
<b>Timeframe</b>	1999 - 2000
<b>Responsible Organisation(s)</b>	Oekometric GmbH - The Bayreuth Institute of Environmental Research
<b>Project Funder(s)</b>	Motorola Advanced Technology Europe GmbH, Germany.
<b>Publication</b>	<p>- Combustion of Printed Circuit Boards and Analysis of Thermal Degradation Products. Final Report No. 646/99. Oekometric, Bayreuth, 2000.</p> <p>- Hosseinpour J., Waechter G., Rottler H. (2001): Testing Concept for Comparable Evaluation of Emissions of Brominated Flame Retardants and Thermal Degradation Products: Comparison of Halogenated and Halogen-free Flame Retarded Printed Wiring Boards. In: Abstracts of The Second International Workshop on Brominated Flame Retardants, BFR 2001, May 14-16, Stockholm, Sweden, 207-211.</p> <p>- Stutz M., Riess M., Tungare A.V., Hosseinpour J., Waechter G. and Rottler H. (2000): Combustion of Halogen-free Printed Wiring Boards and Analysis of Thermal Degradation Products. Proceedings Electronic Goes Green 2000, 127 - 132.</p> <p>Publication available from: Oekometric GmbH (pdf file) Project report under property of Motorola Advanced Technology Europe GmbH</p>

## Ghana

<b>Title</b>	Monitoring of pesticides.
<b>Objective(s)</b>	To review current usage patterns of pesticides. To identify and quantify levels of organochlorines residues in environmental samples.
<b>Timeframe</b>	1998 - 2005
<b>Responsible Organisation(s)</b>	Water Research Institute (CSIR) University of Ghana.
<b>Partner(s)</b>	Water research Institute University of Ghana.
<b>Project Funder(s)</b>	Government of Ghana.
<b>Comments</b>	Pesticides monitored are: lindane< 5UG/g; 2,4,5-TCB<%UG/g; Dieldrin<50UG/g; Endrin<50UG/g; DDT<15UG/g; DDD<10UG/g. These were analyzed in water and sediments. Aldrin 10-30 UG/g in tomato; Heptachloreporide 5-200ng/g in sediment.

## **Ghana**

<b>Title</b>	Monitoring of pesticides in cocoa beans.
<b>Objective(s)</b>	To detect residue limits for export in cocoa from all over the country. To determine the extent of current usage of banned pesticides in the country.
<b>Timeframe</b>	1987 - 2001
<b>Responsible Organisation(s)</b>	Ghana cocoa board (quality control division).
<b>Partner(s)</b>	University of Ghana, Legon, Accra.
<b>Project Funder(s)</b>	Ghana cocoa board.
<b>Comments</b>	POPs analyzed are DDT derivatives, Aldrin and Dieldrin, all the organochlorines in the "dirty dozen" have been stopped for cocoa and have been replaced by others. Of late, there have been complaints about the level of these pesticides in the exported cocoa.

## **Greenland**

<b>Title</b>	Monitoring and Assessment of POPs in Greenland and the Faroe Islands
<b>Objective(s)</b>	The objective of the project is to monitor and assess the levels of POPs in humans and in the marine, the terrestrial, and the freshwater environments in Greenland and the Faroe Islands. The project is part of the Danish implementation of the Arctic Monitoring and Assessment Programme (AMAP)
<b>Timeframe</b>	ongoing
<b>Responsible Organisation(s)</b>	The Danish Environmental Protection Agency
<b>Partner(s)</b>	National research institute and universities
<b>Project Funder(s)</b>	The Danish Environmental Protection Agency
<b>Publication</b>	Data are stored in AMAPs Thematic Data Centres
<b>Comments</b>	The monitoring project is an ongoing project. The next assessment will be published in 2003 by AMAP

## **Honduras**

<b>Title</b>	Residuos de plaguicidas organoclorados en tres matrices ambientales de la zona sur del pais
<b>Objective(s)</b>	Medir los niveles de plaguicidas OC en sedimento, agua y moluscos bivalvos recolectados en la zona del golfo de Fonseca

**Timeframe** Enero 2001 - Abril 2002

**Responsible Organisation(s)** Centro de Estudios y Control de Contaminantes, CESCO. Secretaria de Recursos Naturales y Ambiente, SERNA

**Partner(s)** Dirección General de Pesca/ DIGEPESCA. Secretaria de Agricultura y Ganaderia/ SAG

**Project Funder(s)** CESCO

**Publication** Monografía CESCO, a ser publicada en junio de 2003

**Comments** Esta es una zona de actividad agrícola y ganadera con uso extensivo de plaguicidas de diferente tipo. Además es una zona susceptible a daños ecológicos por el arrastre de gran cantidad de plaguicidas almacenados que fueron arrastrados por el río Choluteca durante el fenómeno del Huracán Mitch en 1998.

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## **Hungry**

**Title** Environmental health risk assessment of chlorinated organic pollutants. Concentration of PCBs, DDT and metabolites and HCH isomers in the breast milk.  
Preparations for the International Agreements on limitation of persistent organic environmental pollutants and heavy metals in the atmosphere, 1997.  
Preparation of background documents required to the international agreements on heavy metals and POPs emission, 1997.  
Annual monitoring program of chlorinated hydrocarbons in import crops.

**Objective(s)** Assessment and evaluation of the main pollution sources of selected POPs (PCBs, Dioxins, chlorinated pesticides) and contaminated sites in Hungary. Monitoring of environmental indicators and human exposure. Assessment of contamination in soil, ground water and water resources.  
20-50 breast milk samples/year, Hungary.

**Timeframe** 1999 - 2002

**Responsible Organisation(s)** -Fodor József National Center for Public health- National Institute of Environmental health, Budapest.  
-Fodor József National Center for Public health- National Institute of Food Hygiene and Nutrition, Budapest.  
-Plant Health and Soil Conservation Station, Budapest.

**Partner(s)** WHO-ECEH, Bilthoven, The Netherlands; Environmental Protection Inspectorates, Hungary; Institute of Environmental Management, Budapest; Country Institutes of the National Public Health and Medical Officers' Service.

**Project Funder(s)** National Environmental health action Programme.

**Publication** Fodor József National Centre for Public health and its Institutes, Ministry of Environmental Protection, Ministry of Agriculture and Regional Development.

**Comments** Hungary has no actual programme on pesticides, as preparations are banned.

**Iceland**

**Title** National Assessment and Monitoring Programme

**Objective(s)** Baseline information about POPs in marine sediments, and time-trends of POPs in marine biota. Time-trend information about POPs in human blood. Time-trend information about POPs in air and precipitation The marine programme is restricted to the continental shelf surrounding Iceland, but the results are reported to the ICES database in Copenhagen and thus become available for assessment of larger geographic area.

**Timeframe** ongoing

**Responsible Organisation(s)** Environmental and Food Agency of Iceland

**Partner(s)** -Marine Research Institute  
-University of Iceland, department of Pharmacology  
-The Icelandic Fisheries Laboratories  
-The Icelandic Meteorological office

**Project Funder(s)** Governmental funding

**Iceland**

**Title** Persistent organochlorines in air and precipitation

**Objective(s)** To monitor organochlorine transport to Vestmannaeyjar, Iceland

**Timeframe** 1995 - Ongoing

**Responsible Organisation(s)** Dept. Pharmacol.Toxicol., Univ. Iceland and The Icelandic meteorological Inst.

**Project Funder(s)** Ministry for the environment

**Iceland**

**Title** Development of organochlorine pollution in Iceland

**Objective(s)** To assess time trends in organochlorine pollution in Black Guillemots caught between 1975 and 1995, in Breiðafjörður Iceland.

**Timeframe** 1999 - 2001

**Responsible Organisation(s)** Dept. of Pharmacol. Toxicol., University of Iceland and Icelandic Inst. Nat. History

**Partner(s)** Marine Research Institute, The Icelandic Fisheries Laboratories and industry representatives.

**Project Funder(s)** Icelandic Science Fund

## **Iceland**

**Title** PCB contamination at dumpsites in Iceland

**Objective(s)** To assess local PCB leakage from 4 different dumpsites in Iceland

**Timeframe** 1999 - 2000

**Responsible Organisation(s)** Dept. Pharmacol.Toxicol., Univ. Iceland and Icelandic Inst. Nat History.

**Project Funder(s)** Ministry for the environment

## **Indonesia**

**Title** Enabling activities to facilitate early action on the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in Indonesia

**Objective(s)**

1. To strengthen national capacity and to enhance knowledge and understanding amongst decision makers, managers, the industry and the public at large on POPs to develop and formulate a National Implementation Plan
2. To be able to meet the obligations of the Stockholm Convention and manage the elimination of POPs

**Timeframe** June 2002 - June 2004

**Responsible Organisation(s)** Ministry of the Environment and the Republic of Indonesia

**Partner(s)** United Nations on Industrial Development (UNIDO)

**Project Funder(s)** Global Environmental Fund (GEF)

**Comments** This project is not covered all geographical area in Indonesia to get to know the distribution and impact of the POPs on the environment. Therefore needed to extend the project with the additional fund for the inventory study on POPs distribution in Indonesia

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## **Iran**

<b>Title</b>	At Sea Training Programme"ASTP"
<b>Objective(s)</b>	<p>The major objectives of the At Sea Training Programme (ASTP) are summarized as follows:</p> <ol style="list-style-type: none"><li>1) Carry out a pilot ambient monitoring activity in the Caspian Sea (screening project) in order to create an up to date high quality contaminants data, to fill the gaps and serve as supplementary inputs to Transboundary Diagnostic Analysis"TDA", Regional Strategic Action Programme SAP", and National Action Plans "NAPs".</li><li>2) Mapping the distribution of major contaminants (oil and non-oil) in bottom sediment of the Caspian Sea marine environment focusing on Persistent pollutions.</li><li>3) On-Board training course for the region on ambient pollution monitoring including methodology, sampling, sample handling and preservation, sample analyses, quality control/quality assurance and data management.</li><li>4) Carry out a regional Inter comparison/inter calibration – quality control exercises among Caspian Littoral States laboratories on contaminants analysis.</li></ol> <p>Initiate the activities in order to improve pollution monitoring and assessment in the region.</p>
<b>Timeframe</b>	2000 - 2001
<b>Responsible Organisation(s)</b>	<p>GEF-UNDP Caspian Environment Programme "CEP"</p> <p>Theme for Effective Regional Assessment of Contaminant Levels " ERACL".</p>
<b>Partner(s)</b>	Caspian Littoral States: Azerbaijan, Islamic Republic of Iran, Russian Federation , Kazakhstan and Turkmenistan
<b>Project Funder(s)</b>	GEF-UNDP Caspian Environment Programme "CEP"
<b>Publication</b>	<p><a href="http://www.caspianenvironment.org">www.caspianenvironment.org</a></p> <p>Note: After full assessment, the data and information will be found on the above-mentioned website. Meantime part of the report will be available via contact person or via Data and Information Management division"DIM" of the Project Coordinating Unit "PCU" of the CEP as indicated on the website</p>
<b>Comments</b>	Complete assessment and report preparation will be finalized by early 2002

## **Italy**

<b>Title</b>	Feasibility study on reduction of atmospheric emission of PCDD/F, PAH and HCB from industrial sources.
<b>Objective(s)</b>	Evaluation of emissions of Dioxins and Furans from selected metal working plants and determination of Country-specific emission factors, North-Italy

**Timeframe** 2000 - ongoing  
**Responsible Organisation(s)** ENEA (National Agency for New Technology, Energy and Environment)  
**Partner(s)** Associazione Industriali Bresciana  
**Project Funder(s)** Ministry of Environment

**Italy**

**Title** Evaluation of the PCB and Dioxin levels in the Venice Lagoon and of the related environmental and health risk  
**Objective(s)** Monitoring of the PCB and Dioxin levels in sediments and biota of Venice Lagoon in order to assess the level of human health risk for the resident population.  
**Timeframe** 1999 - 2002  
**Responsible Organisation(s)** Istituto Superiore di Sanita (National Public Health Research Institute), Viale Regina Elena 299-00161, Rome  
**Partner(s)** Ministry of Environment  
**Project Funder(s)** Istituto Superiore di Sanita & Ministry of Environment

**Italy**

**Title** Monitoring of the PCB and Dioxin levels in food stuffs.  
**Objective(s)** Characterization of the exposure of population associated to the PCB and dioxin intake.  
**Timeframe** ongoing  
**Responsible Organisation(s)** Istituto Superiore di Sanita (National Public Health Research Institute), Viale Regina Elena 299-00161, Rome  
**Partner(s)** Ministry of Health  
**Project Funder(s)** Istituto Superiore di Sanita & Ministry of Health

**Italy**

**Title** Collection and assessment of data on Persistent Toxic Substances in the Venice Lagoon

**Timeframe** 2002 - 2002

**Responsible Organisation(s)** Istituto Superiore di Sanita (National Public Health Research Institute), Viale Regina Elena 299-00161, Rome

**Partner(s)** ICRAM

**Project Funder(s)** ICRAM

**Comments** Research Programme

## **Italy**

**Title** Theoretical Study of Persistent Toxic Substances transport through different environmental compartments

**Timeframe** 2002 - 2003

**Responsible Organisation(s)** Istituto Superiore di Sanita (National Public Health Research Institute), Viale Regina Elena 299-00161, Rome

**Project Funder(s)** CORIDA : University Consortium of Venice

**Comments** Research Project

## **Italy**

**Title** Characterisation of sediments and mussels quality in the Venice Lagoon

**Objective(s)** This research project aims to determine, between other substances, dioxins in mussels and sediments of the Venice Lagoon

**Timeframe** 2002 - 2003

**Responsible Organisation(s)** Istituto Superiore di Sanita (National Public Health Research Institute), Viale Regina Elena 299-00161, Rome

**Project Funder(s)** Veneto Region

**Comments** Research Project

## **Jamaica**

**Title**

1. Establishing an Inventory of Obsolete Pesticides in Jamaica
2. Registration and re-registration of pesticides for use in Jamaica
3. Public Awareness Campaign



**Objective(s)**

1. To establish quantities of obsolete pesticides in stock and to dispose of such pesticides.
2. To prevent introduction and re-registration of banned pesticides.
3. To provide information to the consumers on the dos and donts of pesticides use and build public resistance to POPs

**Timeframe** ongoing

**Responsible Organisation(s)** PCA

**Partner(s)** Ministry of Agriculture (through RADA)

**Project Funder(s)** German Government (GTZ)  
Pesticide Control Authority (PCA)

**Comments** A register of pesticides is now available to the public in both the print and electronic media. Included in the register is a list a banned pesticides which include those indentified by POPs (Aldrin, Chlordane, Dieldrin, DDT, Endrin, Heptachlor, Mirex, Toxophene, Hexachlorobenzene)

## Japan

**Title** An emission inventory for dioxins, furans and co-planar PCBs

**Objective(s)** To grasp the annual emission inventory for dioxins, furans and co-planar PCBs, from various sources

**Timeframe** 1999 - ongoing

**Responsible Organisation(s)** Ministry of the Envionment

**Partner(s)** Local govornments

**Project Funder(s)** Ministry of the Envionment

**Publication** <http://www.env.go.jp/en/topic/dioxins.html>

**Comments** This program is based upon "Law Concerning Special Measures against Dioxins ". It is also strongly related to the Japanese PRTR.

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## Japan

**Title** Environmental Monitoring of dioxins

**Objective(s)** To grasp the state of air, surface water, underground water, sediments and land pollution by dixons, furans and co-planer PCBs throuout the country.

**Timeframe** 2000 - ongoing

**Responsible Organisation(s)** Ministry of the Environment

**Partner(s)** Local governments

**Project Funder(s)** Ministry of the Environment

**Publication** <http://www.env.go.jp/en/topic/dioxins.html>

**Comments** This program is based upon "Law Concerning Special Measures against Dioxins".

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## Japan

**Title** Monitoring of hazardous water pollutants (dioxins, furans and PCBs are included)

**Objective(s)** To grasp the state of public water pollution by hazardous chemicals including dioxins, furans, PCBs at a number of monitoring points throughout the country.

**Timeframe** 1971 - ongoing

**Responsible Organisation(s)** Ministry of the Environment, Ministry of Land, Infrastructure and Transport, Local governments

**Partner(s)** Local governments

**Project Funder(s)** Local governments (partly founded by the Ministry of the Environment)

**Comments** Previously data (1971-1999) of POPs had been collected by this survey. Now Ministry of the Environment launches "POPs Monitoring" to collect the data focused on POPs. Especially in dioxins, monitoring has been implemented based upon "This program "Law Concerning Special Measures against Dioxins".

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## Japan

**Title** Surveillance of the amount of dioxins and furans emitted from waste incinerators.

**Objective(s)** To grasp the amount of Dioxins and Furans emitted from waste incinerators (geographical coverage).  
All waste incinerators regulated by Waste Management and Public Cleansing Law in Japan.

**Timeframe** 1997 - ongoing

**Responsible Organisation(s)** Ministry of Health and Welfare

**Project Funder(s)** Ministry of Health and Welfare

## Japan

**Title** Pollutant Release and Transfer Register  
(Requirement of reporting for the amount of releases to the environment of chemical substances)

**Objective(s)** To grasp the state of quantities of chemical substances both released to the environment and transferred in the waste in the whole country.

**Timeframe** 1999 - ongoing

**Responsible Organisation(s)** Environment Agency  
Ministry of International Trade and Industry

**Partner(s)** Local governments  
Other ministries / Agencies

**Project Funder(s)** Environment Agency  
Ministry of International Trade and Industry

**Comments** The Law was promulgated in July 1999. Report will be submitted each year from 2002.

This program is based upon "The Law Concerning Reporting, etc. of Release to the Environment of Specific Chemical Substances and Promoting Improvements in their Management" and designed not only for monitoring of POPs but also other chemicals which may be hazardous to human health and/or environment. PCBs and dioxins and furans are designated as target substances

## Japan

**Title** POPs Monitoring in Japan

**Objective(s)** To monitor environmental levels and their trends of POPs chemicals

**Timeframe** 2002 - ongoing

**Responsible Organisation(s)** Ministry of the Environment

**Partner(s)** National Institute for Environmental Studies

**Project Funder(s)** Ministry of the Environment

**Publication** Previous data have been published in English as entitled: Chemicals in the Environment (or KUROHON or Black book) from the Ministry of the Environment)  
Website address is <http://www.env.go.jp/en/index.html>

**Comments** Monitoring of dioxins; furans and coplanar-PCBs are conducted separately according to Law concerning special measures of Dioxins (Law No.105; 1999).  
  
Majority of POPs and many other chemicals have been monitored in recent decades by the Ministry of the Environment; but a new monitoring specific for POPs (see Comments) will be reorganized and start from the fiscal year 2002.

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## Japan

**Title** Pesticide Monitoring System Development Project (PMDP)  
- To develop a comprehensive system for monitoring pesticide residues and pesticide formulations.

**Objective(s)** 1. To improve the method(s) of analysis of pesticide residue and pesticide formulations.  
2. To improve the method(s) and technology of supervised pesticide residue trials in crop.  
3. To improve the method(s) and technology of market basket research for establishing MRLs and the pesticide safe use.  
4. To provide necessary information for safe handling and proper use of pesticide.

**Timeframe** March 1997 - March 2002

**Responsible Organisation(s)** Department of Agriculture  
Bureau of Plant Industry (BPI)  
Fertilizer and Pesticide Authority (FPA)

**Partner(s)** Japan International Cooperation Agency (JICA)

**Project Funder(s)** Philippine Government  
JICA

**Publication** National Pesticide Analytical Laboratory (NPAL)  
Laboratory Services Division  
Bureau of Plant Industry

**Comments** The PMDP is a JICA-Project Type Technical Cooperation established for the purpose of improving the national monitoring program on pesticide residue and pesticide formulation in the country.

**Japan**

**Title** Environment Survey and Wildlife Monitorin

**Objective(s)** To grasp the concentration of various chemicals including POPs in the air, surface water, sediment and some kinds of wildlife throughout the country.

**Timeframe** 1974 - ongoing

**Responsible Organisation(s)** Environment Agency.

**Partner(s)** Local governments.

**Project Funder(s)** Environment Agency.

**Jordan**

**Title** Side effect of pesticides on the environment in Jordan

**Objective(s)** Follow up the previous study that had been conducted in 1-01-92 through 31-12-94

**Timeframe** 1-01-2000 - 31-12-2004

**Responsible Organisation(s)** The General Corporation for Environment Protection

**Partner(s)** -Ministry of Agriculture  
-The Royal Scientific Society  
-Jordan University  
-The University of Science and Technology

**Project Funder(s)** Jordan Government

**Publication** The General Corporation for Environment Protection

**Comments** The study is still conducted

**Korea**

**Title** National Research Project on Endocrine Disrupters including POPs (1999-2008)

<b>Objective(s)</b>	Objectives: To establish risk management scheme for endocrine disrupters (EDs) by conducting health and the environmental risk assessment, involving various research activities on risk identification, establishment of monitoring and assessment system, consumption patterns, residual levels in the environmental media, etc.
<b>Timeframe</b>	1999 - ongoing
<b>Responsible Organisation(s)</b>	Ministry of Environment and the National Institute of Environmental Research
<b>Partner(s)</b>	Korea Food and Drug Administration, Korea Institute of Science and Technology, National Institute of Agricultural Science and Technology and the Provincial Health and Environment Research Institute
<b>Project Funder(s)</b>	Government
<b>Publication</b>	The draft medium and long term plan on EDs (1999-2008) (prepared by Ministry of Environment.
<b>Comments</b>	The detailed timeframe finalized in 1999.

## **Korea**

<b>Title</b>	National Marine Environment Monitoring
<b>Objective(s)</b>	Objectives: To establish a national database network for assessment and identification of environmental quality To establish the national standard analysis method for production of data with high quality.
<b>Timeframe</b>	1997 - ongoing
<b>Responsible Organisation(s)</b>	National Fisheries Research & Development Institute
<b>Partner(s)</b>	- East Sea Regional Fisheries Research Institute - West Sea Regional Fisheries Research Institute - South Sea Regional Fisheries Research Institute
<b>Project Funder(s)</b>	- Ministry of Maritime Affairs & Fisheries (MOMAF) - Republic of Korea
<b>Comments</b>	PCB is being studied. Additionally, PAHs and organochlorine pesticides will be studied starting in 2000. (Korean coastal areas: 20 sites.)

## **Kyrgyz Republic**

<b>Title</b>	Environmental pollution assessment by the POPs reminders
<b>Objective(s)</b>	Determination of environmental pollution level

**Timeframe** 1976 - ongoing

**Responsible Organisation(s)** Department of ecology and environmental monitoring, The Main Administration of hydrometeorology

**Partner(s)** Department of plant protection and chemistrization, Department of sanitary and epidemiological supervision

**Project Funder(s)** Government

**Publication** publications, Russian

**Comments** 1976-1992 - twice a year, since 1992 - periodically

**Contact** Omor Rustembekov  
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54-79-00

## Laos

**Title** POPs chemical survey and data collection within Lao P.D.R.

**Objective(s)** -To identify the number of Persistent Organic Pollutants and its importing sources.  
-To identify the use of Persistent Organic Pollutants and its effect to human health and the environment

**Timeframe** May 2000 - June 2000

**Responsible Organisation(s)** Science Technology and Environment Agency.

**Partner(s)** - Science Technology and Environment Agency  
- Ministry of Agriculture and Forestry  
- Ministry of Industry and Handicraft  
- Ministry of Trade  
- Ministry of Health

**Project Funder(s)** Will be asking from UNEP Chemicals

**Comments** This project is the first priority of persistent organic pollutants activities in Lao PDR.

## Latvia

**Title** Preparation of the POPs National Implementation Plan under the Stockholm Convention

**Objective(s)** To create sustainable capacity and ownership in Latvia to meet the country's obligations under the Stockholm Convention, including preparation of a Persistent Organic Pollutants - POPs National Implementation Plan.

**Timeframe** 2002 - 2004

**Responsible Organisation(s)** Ministry of Environment

**Partner(s)** "Vides projekti", Ltd.Latvian Environmental Agency, Environment State Inspectorate

**Project Funder(s)** UNDP/ GEF

**Publication** www.varam.gov.lv (English/ Latvian)  
www.lva.gov.lv (English/ Latvian)  
www.vvi.gov.lv (English/ Latvian)

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## **Lebanon**

**Title** Matrix effects in the immunoassay analysis of DDT in soils

**Timeframe** 2002 - 2002

**Responsible Organisation(s)** American University of Beirut

**Partner(s)** Ministry of Environment

**Project Funder(s)** Info not available

**Comments** Research activity

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## **Lebanon**

**Title** The relationship of dietary intake to DDE residues in breast milk

**Objective(s)** The correlation between tuna fish and high fat meat with DDE content in breast milk

**Responsible Organisation(s)** American University of Beirut



**Partner(s)** Ministry of Environment

**Project Funder(s)** Info not available

**Comments** Research activity

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## **Lebanon**

**Title** Assessment of Dioxins in soil matrices- case study

**Objective(s)** Preliminary detection of Dioxins presence in soil matrices as basis for national inventory

**Timeframe** 1998 - 2000

**Responsible Organisation(s)** Ministry of Environment

**Partner(s)** UNEP chemicals

**Project Funder(s)** UNEP chemicals

**Comments** case study for the government

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## **Lebanon**

**Title** Development of national implementation plan for the management of Persistent Organic Pollutants

**Objective(s)** To strengthen national capacity to manage POPs and to assist in meeting the obligations under Stockholm convention

**Timeframe** 2003 - 2005

**Responsible Organisation(s)** Ministry of Environment

**Partner(s)** UNEP chemicals-UNDP

**Project Funder(s)** GEF

**Comments** GEF 12 countries project on POPs-UNEP chemicals

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## **Lithuania**

**Title** STATE ENVIRONMENT MONITORING

**Objective(s)** Organization, coordination, management, data processing, reporting.

**Responsible Organisation(s)** 1. Ministry of Environment of the Republic of Lithuania  
2. Environmental Protection Agency (EPA). Environment research department of the EPA.  
3. 8 Regional Environmental Protection Departments (sampling).

**Project Funder(s)** State

**Publication** Annual reports on the state of environment; GIS on hot spots; <http://aaa.am.lt>

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## **Madagascar**

**Title** Inventaire national des PCBs

**Objective(s)** Connaître la quantité des PCBs existant au pays en vue de mettre en place un plan d'action national

**Timeframe** Août 2002 - Août 2003

**Responsible Organisation(s)** Ministre de l'Environnement : Rabotoarison Sylvain

**Partner(s)** - Société distribution Eau et Electricité à Madagascar (JIRAMA)  
- Direction des Protection des Végétaux

**Project Funder(s)** PNUE

**Comments** suite de l'inventaire préliminaire qu'on a fait en 1999

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MINISTERE DE  
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## **Mexico**

**Title** Registro de Emisiones Y Transferencia de Contaminantes

**Objective(s)** Brindar información de las emisiones y transferencias de COPS a nivel nacional, por empresa emisora y tipo sustancia, para fundamentar la toma de decisiones relativa a la prevención y control de COPS en México, así como para concientizar a la población sobre los riesgos relativos a dichas sustancias

**Timeframe** 2003 - ongoing

**Responsible Organisation(s)** Secretaria de Medio Ambiente Recursos Naturales  
Subsecretaría de Gestión para la Protección al Ambiente  
Dirección General de Gestión de la Calidad del Aire y Registro de Emisiones y Transferencia de Contaminantes

**Partner(s)** Instrumentación del Registro de Emisiones y Transferencia de Contaminantes en las entidades federativas de la Republica Mexicana, en complemento al RETC nacional. Plan de acción para fomentar la comparabilidad de los registros de emisiones y Manejo Adecuado de las Sustancias Químicas (MASQ)

**Project Funder(s)** Secretaria de Medio Ambiente y Recursos Naturales

**Publication** Se esta construyendo la pagina web

**Comments** Las modificaciones del articulo 109 de la Ley General del Equilibrio Ecológico y Protección al Ambiente, publicadas el 31 de diciembre del 2001, establecen la obligatoriedad de integrar un Registro de Emisiones y Transferencia de Contaminantes, a nivel nacional de acceso publico, que contemple información de sustancias tóxicas, en los cuales se incluye a los CPS. Por lo que la información de emisiones y transferencia ocurridas en el año 2002 serán recibidas en el año 2003. El primer año de publicación del RETC, con datos preliminares, se realizara para finales del 2003

EL RETC es un programa permanente que recopila e integra información, proporcionada anualmente por las empresas, ubicada en una base de datos electrónica publica. En esta base de datos se podrá realizar la consulta estadística año con año de los establecimientos que consuman, produzcan o generen COPS.

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## **Mexico**

**Title** Status Report of the PCBs in Mexico

**Objective(s)** To identify the volume of PCBs already destroyed the volume to be destroy and the internal and external infrastructures capabilities for the PCBs treatment.

**Timeframe** 2001 - 2002

**Responsible Organisation(s)** National Institute of Ecology. Ministry of Environment and Natural Resources

**Partner(s)** None

**Project Funder(s)** National Institute of Ecology

**Publication** disqre@ine.gob.mx

**Comments** The report will also consider the abandon sites contaminated with PCBs in order to define strategic remediation actions.

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## **Mexico**

**Title** Status Report of the dioxins and furans in Mexico

**Objective(s)** To identify the main sources of dioxins and furans ant to calculate their emissions to the atmosphere using the EPA emissions factors

**Timeframe** 2001 - ongoing

**Responsible Organisation(s)** National Institute of Ecology; Ministry of Environment and Natural Resources

**Partner(s)** Commission for Environmental Cooperation (CEC)

**Project Funder(s)** Commission for the Environmental Cooperation (CEC)

**Publication** The report will be in Spanish in the CEC web page and you can request directly to the mail address: [disqre@ine.gob.mx](mailto:disqre@ine.gob.mx)

**Comments** Using the EPA emission factors we calculated the dioxins and furans Mexican releases we found that our main sources are different to the USA sources so we have to adequate the emission factors for specific sources such the cement industry and others

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## **México**

**Title** Migración de atrazina en el suelo agrícola

**Objective(s)** Investigar los procesos de migración de atrazina en suelos agrícolas

**Timeframe** 1999 - proyecto continua

**Responsible Organisation(s)** Instituto Mexicano de Tecnología del Agua

**Partner(s)** Dr. Manfred Van Afferden  
Dra. Anne M. Hansen  
M.C. Evaristo Martínez  
M.C. Rosa Angelica Guillen  
Ing. Luis Carlos González

**Project Funder(s)** Comisión Nacional del Agua  
Instituto Mexicano de Tecnología del Agua  
Consejo Nacional de Ciencia y Tecnología

**Publication** -Hansen, A.M., y M. van Afferden (2000) Migracion de agroquimicos en agua y suelo. XVI Congreso Nacional de Hidraulica, Morelia, Mich., p3-8  
-Hansen, A.M., M. van Afferden, E. Martinez y S. Tamari (2000). Migracion de agroquimicos en suelo agricola. El Acueducto. 4a. Epoca, no. 11 p 25-27  
-Hansen, A.M. G. Villalba y M. Tiscareno-Lopez (1998) Adsorción-degradación de 2, 4-D en suelo agrícola. VIII Congreso Nacional de irrigación, Gomez Palacio, Dur., p5.20-24  
-Hansen, A.M., M. van Afferden, O. Quintero-Martinez, E. Martinez y R.A. Guillen-Graces (1999) Migracion de agroquimicos en suelos agricolas y cuantificación en el agua drenada. Anuario IMTA 1999, 67-74  
-Hansen, A.M., M. van Afferden, O. Quintero, E. Martinez y R.A. Guillen-Graces 2000, "Migracion de agroquimicos en suelo agrícola y cuantificación en el agua drenada a nivel parcelario (Etapa III)" Documento Tecinco, Proyecto TH-2015, Instituto Mexicano de Tecnología del Agua y Comision Nacional del Agua

-Hansen, A.M., M. van Afferden, O. Quintero, E. Martinez R.A. Guillen-Graces, S. Tamari y L. Lugo, 1999 "Migración de agroquímicos en suelo agrícola y cuantificación en el agua drenada a nivel parcelario (Etapa II)" Documento Técnico, Proyecto TH-9919, Instituto Mexicano de Tecnología del Agua y Comisión Nacional del Agua.

-Hansen, A.M., V.M. Arroyo, O. Quintero, S. Tamari y C. Mariano, 1998. "Migración de agroquímicos en el suelo y cuantificación en los excedentes de agua drenada a nivel parcelario (primera de tres etapas)", Informe final del proyecto HC-9814 . IMTA y CAN

-Guillen Garces Rosa Angelica, 2001. Influencia de la Biodegradación en la Migración de Herbicidas (2, 4-D y Atrazina) en Suelos Tropicales. Tesis de Maestría en Ingeniería (Ambiental). Universidad Nacional Autónoma de México.

-Gonzalez Marquez Luis Carlos, 2003. Migración de Herbicidas (Atrazina y 2, 4-D) en Suelo del Distrito de Riego 063, Guasave, Sin. Tesis de Maestría en Ingeniería (Ambiental). Universidad Nacional Autónoma de México

**Comments**

Formación de recursos humanos: 2 Msc y 1 PhD

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**México**

**Title**

Plan Nacional de Monitoreo de Compuestos Orgánicos

**Objective(s)**

Diseñar e instrumentar un programa de monitoreo que provea datos reales que permitan conocer y dimensionar las zonas con problemas de compuestos orgánicos persistentes y los efectos producidos

**Timeframe**

2003 - no especificado

**Responsible Organisation(s)**

Comisión Nacional del Agua  
Gerencia de Saneamiento y Calidad del Agua  
Subgerencia de Laboratorios y Monitoreo  
Red Nacional de Monitoreo

**Partner(s)**

Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)  
Subsecretaría de Gestión para la Protección Ambiental  
Comisión Nacional del Agua (CAN)  
Instituto Nacional de Ecología (INE)  
Instituto Mexicano de Tecnología del Agua (IMTA)

**Project Funder(s)**

Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)

**Publication**

<http://www.acs.org/>; <http://nvl.nist.gov/>; <http://www.epa.gov/>;  
<http://jchemed.chem/>; <http://state.nj.us/>; <http://oehha.org/>;  
<http://ehp.niehs.nih.gov/> (all english)

-Determination of Polychlorinated Biphenyls (PCBs) in River and Bay Sediments; An undergraduate Laboratory Experiment in Environmental Chemistry Using Capillary Gas Chromatography with Electron Capture Detection. -Kegley, Susan E., Hansen, Kristen J., Cunningham, Kevin L., J. Chem. Educ. 1996 (73) 558  
 In Proceedings of 1997 TAPPI Environmental Conference and Exhibit, Minneapolis. Fenner-Crisp, R. A.; Fisher R. P. Endocrine Disruptors: Risk Assessment, Regulatory Issues and Research, MN, May5-7, 1997; TAPPI Press: Atlanta, GA, 1997; p. 699  
 -Barsona, C. P. and J. Thomas. Endocrine Disorders of Occupational and Environmental Origin. Occupational Medicine. 7:3 479-502. 1992  
 -Birnbaum, L. S. Developmental Effects of Dioxins and Related Endocrine Disrupting Chemicals. Toxicology Letters. 82/83: 743-750. 1995  
 -US Environmental Protection Agency Risk Assessment Forum. Special Report on Environmental Endocrine Disruption: An Effects Assessment and Analysis. 1997

**Comments**

Actualmente se esta elaborando el plan de monitoreo para cubrir los principales cuerpos de agua nacionales

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**Moldova**

**Title**

The EU TACIS project EnvReg 9705 "Vulcanesti Pesticide Dump Site Investigation"

**Objective(s)**

The objective of this project was an initial risk assessment of this contaminated site and preparation of a feasibility study for its clean up.

**Timeframe**

1999 - 2000

**Responsible Organisation(s)**

Ministry of Environmental and Territorial Development of the Republic of Moldova (actually Ministry of Ecology, Construction and Territorial Development ).

**Partner(s)**

The National Institute of Ecology, Republic of Moldova; Institute "Acvaproiect", Republic of Moldova;"AGEOM", Republic of Moldova and other national organisations and institutions OVE ARUP and Partners International Ltd

**Project Funder(s)**

EU TACIS Programme

**Publication**

Final Report can be obtained in the following organizations: Ministry of Ecology, Construction and Territorial Development of the Republic of Moldova, The National Institute of Ecology of the Republic of Moldova, Ove Arup and Partners International Ltd, State Hydrometeorological Service of the Republic of Moldova  
 Languages: English and Romanian.

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## **Moldova**

**Title** The EU TACIS project "Accident Emergency Warning System and Monitoring Laboratory and Information Management for Ukraine & Moldavia parts of the Danube River Basin"

**Objective(s)** Sector: Water resources.  
Providing the equipment, training and expert advice required for establishing AEWS and TNMN system in Ukraine and Moldova. Monitoring of chemical pollution of surface water and sediments in Danube River Basin, including certain POPs.

**Timeframe** 1998 - 2000

**Responsible Organisation(s)** Ministry of Environment and Territorial Development (actually Ministry of Ecology, Construction and Territorial Development).

**Partner(s)** The National Institute of Ecology of the Republic of Moldova, State Hydrometeorological Service of the Republic of Moldova and other institutions

**Project Funder(s)** EU TACIS Programme

**Publication** Final Report can be obtained in the following organizations:  
Ministry of Ecology, Construction and Territorial Development of the Republic of Moldova; The National Institute of Ecology of the Republic of Moldova  
State Hydrometeorological Service of the Republic of Moldova  
Languages: English and Romanian.

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## **Moldova**

**Title** Monitoring of Potentially Hazardous Chemicals in the Environment and Man

**Objective(s)** POPs Monitoring Development, including DDT, HCH and its isomers, PCP, Heptachlor, PCC, 2,4-D

**Timeframe** Planned to - ongoing  
start in 2003



**Responsible Organisation(s)** Ministry of Health of the Republic of Moldova

**Partner(s)** Ministry of Agriculture and Food Industry, Ministry of Ecology, Construction and Territorial Development

**Project Funder(s)** Ministry of Health

**Publication** Ministry of Health of the Republic of Moldova

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## **Moldova**

**Title** ENVREG 9701 Prut Basin Water Management

**Objective(s)** To improve the water quality of the Prut River and indirectly that of the Danube; Specific objective: to assess the water resources in the Prut River basin, and their effects on the end users; to improve monitoring system and analytical measurements in order to gather data and generate an information system for the Moldavian sector of the Prut River; to develop Water Management strategy for urban and rural communities in the Prut River basin.

**Timeframe** 1998 - 2000

**Responsible Organisation(s)** Ministry of Environment of the Republic of Moldova (actually Ministry of Ecology, Construction and Territorial Development ).  
EU Consultant: ICWS Ltd. , The Netherlands

**Partner(s)** Institute "ACVAPROJECT", State Service "Hydrometeo", National Institute of Ecology; AGeoM; National Scientific and Practical Centre of Preventive Medicine; Academy of Sciences of the Republic of Moldova and other institutions.

**Project Funder(s)** The EU TACIS Programme

**Publication** Final Report can be obtained in the following organizations:  
Ministry of Ecology, Construction and Territorial Development of the Republic of Moldova, The National Institute of Ecology of the Republic of Moldova, State Hydrometeorological Service of the Republic of Moldova  
Languages: English and Romanian.

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## **Moldova**

<b>Title</b>	Monitoring of chemical contaminants in food products
<b>Objective(s)</b>	a) Identification, measuring and surveillance of chemical contamination of food with organochlorine pesticides (HCH, HCB, DDT and metabolites) and PCBs; 8 districts located in the region of Moldavia b) Development of the national surveillance methodology for food chemical contaminants.
<b>Timeframe</b>	a. 2002 - a. 2005 b. 2001 b. 2005
<b>Responsible Organisation(s)</b>	Institute of Public Health - Iasi
<b>Partner(s)</b>	8 Districtal Directorates of Public Health from the region of Moldavia
<b>Project Funder(s)</b>	Ministry of Health
<b>Comments</b>	<p>Preliminary results regarding chemical contaminants in vegetables, dairy, meat, fish, mushroom, cooked meal, showed different sub-regional concentrations, some of them being higher than maximum admissible concentrations, according with national norms.</p> <p>Environmental Chemistry laboratory, Environmental health department, institute of Public Health Iasi Str. V. Babes nr. 14 6600 Iasi Romania 40 032 141520 huracarmen@usa.net</p>

## **Moldova**

<b>Title</b>	Assessment of organochlorine pesticides' levels, in the soil of water catchment areas of the main towns in Moldavia region.
<b>Objective(s)</b>	To identify the levels of soil contamination in relation with the pesticides migration into the ground waters, used as sources for drinking water.
<b>Timeframe</b>	2001 - 2005
<b>Responsible Organisation(s)</b>	Institute of Public Health - Iasi
<b>Partner(s)</b>	8 Districtal Directorates of Public Health from the region of Moldavia
<b>Project Funder(s)</b>	Ministry of Health
	Environmental Chemistry laboratory, Environmental

health department, institute  
of Public Health Iasi  
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## **Moldova**

**Title** Sanitary Surveillance of Prut River, a Source of Drinking Waters for Riparian Localities.

**Objective(s)** Assessment of drinking water quality and health related risks.

**Timeframe** a. 1993 - a. 1999  
b. 1998 b. 2001

**Responsible Organisation(s)** Institute of Public Health Iasi (Romania).

**Partner(s)** Districtual Inspectorates of Public Health (Romania)

**Project Funder(s)** Ministry of Health (Romania).  
Ministry of Health (Romania).

**Comments** The levels of DDT in Prut River show a decreasing trend; the levels of metabolites as well as levels of herbicides (Atrazin, Simazin and Propazin) show an increasing trend. The efficiency of water treatment processes at water works is very low for this kind of chemical contamination.

Data to Annex 1 were prepared in conformity with the letter of National Centre of Preventive Medicine, Chisinau, Republic of Moldova.

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## **Moldova**

**Title** Estimation of the Impact of the runoff from pesticides dump in the Southern part of the Republic of Moldova.

**Objective(s)** To investigate the different POPs chemicals on the territory around the pesticide dump (4 thousands tons of pesticides: DDT and other). To investigate the different POPs chemicals on the territory around the pesticide dump (4 thousands tons of pesticides: DDT and other).

**Timeframe** 2000 - 2002

**Responsible Organisation(s)** National Institute of Ecology

**Project Funder(s)** Government of the Republic of Moldova

**Comments** Data to Annex 1 were prepared in conformity with the letter National Institute of Ecology.

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## **Monaco**

**Title** Continuous monitoring of the marine environment in Monaco

**Objective(s)** Monitoring of :  
- Heavy metals  
- Organic contaminants in samples of biota (mussels) and sediments

**Timeframe** 2001 - ongoing

**Responsible Organisation(s)** -Département des Travaux publics et des Affaires sociales, Direction de l'Environnement, de l'Urbanisme et de la Construction

**Partner(s)** This project is run in the framework of the Convention of Barcelona (MEDPOL Phase III)

**Project Funder(s)** This project is financed by the Principality of Monaco

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## **Morocco**

**Title** Inventaire des équipements à PCB

**Objective(s)** -Evaluation quantitative et qualitative de tous les équipements à PCB  
-Elaboration d'un plan d'action national pour une gestion écologiquement rationnelle des équipements à PCB

**Timeframe** Juillet 2000 - Mai 2004

**Responsible Organisation(s)** Secrétariat d'Etat chargé de l'Environnement

**Partner(s)** Départements ministériels concernés; le secteur privé, CMPP.

**Project Funder(s)** Direction du Développement et de la Coopération Suisse

**Publication** www.minenv.gov.ma

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## **Myanmar**

**Title** Preliminary Evaluation Study of Inlay Lake Region for the concentration of POPs.

**Objective(s)** To evaluate the content of residue level of POPs.

**Responsible Organisation(s)** Ministry of Agriculture and Irrigation (MOAI), Myanma Agriculture Service (MAS), Plant Protection Division (PPD).

**Partner(s)** None

**Project Funder(s)** Myanma Agriculture Service, Ministry of Agriculture and Irrigation.

**Publication** Final report on Preliminary Evaluation Study of Inlay Lake Region for the concentration of POPs.

**Comments** 1. In order one water sample, Aldrin content surpassed RCRA (Resource Conservation and Recovery Act) action level.  
2. In a standing crop (Ground Nut) , Dieldrin content was detected higher than RCRA level.

3. In sediment studies, five sample out of samples are found to surpass the RCRA action level for Aldrin, Dieldrin, BHC isomers and DDT isomers.

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## **New Zealand**

**Title** NZ Organochlorines Programme

**Objective(s)** To develop a NZ Organochlorines Management Strategy comprising standards, guidelines and an action plan to address priority issues associated with organochlorine emissions, wastes and contaminated sites.

**Timeframe** 1999 - ongoing

**Responsible Organisation(s)** Ministry for the Environment in association with other relevant Government Departments

**Project Funder(s)** NZ Government

**Publication** -"A strategy for Managing PCBs", Ministry for the Environment, June 1988;  
-"Safe Management of PCBs: Code of Practice", 2nd Edition December 1988;  
-"Phasing out small PCB holdings", 3rd Edition, August 1995;  
-"Reporting on Persistent Organochlorines in New Zealand", Ministry for the Environment, September 1998.  
-Scientific reports from the Organochlorines Programme can be accessed from the following web-site:  
<http://www.mfe.govt.nz/issues/waste/ocreports.htm>

**Comments** Actions taken to reduce hazards:  
-PCBs: withdrawn from service; use of materials containing PCBs above 50ppm is banned;  
- All POPs pesticides have been deregistered (i.e. illegal to use without a permit). Initiatives by some regions to collect and destroy waste pesticides from the rural sector.  
- Dioxins: regulations being developed to control emissions from industrial sources; ambient environmental criteria also being developed

## **Nicaragua**

**Title** Estudios de contaminación (Mrex)Cuencas Hídricas por plaguicidas y estudio sobre la contaminación en áreas cercanas a entirro de plaguicida que realiza el Istituto Iternacional de Recursos Naturales de Gran Bretaña. Esta información se basa en datos preliminares de los Estudios. Todos los resultados de los análisis estarán listos en este primer semestre del año. Cabe mencionar que estas muestras son aguas de pozos ya clausurados

El MARENA a través del Programa de Manejo de Plaguicidas está realizando estudios de Impacto Ambiental los que contemplan Zonas Hídricas del país y estudios en cultivos de consumo nacional que se realizan en la Zona Norte de Nicaragua. Estos estudios aún no han concluido, por lo tanto no tenemos resultados finales, solamente informes técnicos preliminares. Los estudios están siendo financiados por un aporte del Banco Mundial al Gobierno de Nicaragua. PROMAP/MARENA

## **Niger**

<b>Title</b>	Coordination technique interministérielle chargée des polluants organiques persistants au Niger.
<b>Objective(s)</b>	Surveillance et gestion rationnelle des produits chimiques et des POPs en particulier sur l'ensemble de la République du Niger.
<b>Timeframe</b>	ongoing
<b>Responsible Organisation(s)</b>	Surveillance et gestion rationnelle des produits chimiques et des POPs en particulier sur l'ensemble de la République du Niger.
<b>Partner(s)</b>	-DPV Direction de l'Environnement, Direction de la Santé Publique, Direction de l'Hygiène et de l'Assainissement, Université AM. -Direction du Commerce (I et E), Direction du Plan, Distributeurs agréés de pesticides.
<b>Project Funder(s)</b>	Service de législation et de Règlementation phytosanitaire. Direction de la Protection des Végétaux.
<b>Publication</b>	Niamey, le 19/10/1999.
<b>Comments</b>	Instituer et organiser la coordination technique, mener des activités programmées sur la gestion rationnelle des produits chimiques, prendre des décisions avec les POP et former les intervenants, assister aux réunions et conférences.

## **Norway**

<b>Title</b>	INPUT/CAMP: Atmosfjrisrk tilfjrsel av forurensning til Nordsjfen (Atmospheric inputs of pollutants to marine waters)
<b>Objective(s)</b>	The objective of the programme is to monitor the atmospheric inputs of persistent organic pollutants and heavy metals to the marine waters (North Sea)

**Timeframe** 1992 - ongoing

**Responsible Organisation(s)** The Norwegian Pollution Control Authority (SFT)

**Partner(s)** The programme is the Norwegian contribution to the Oslo- and Paris Convention (OSPAR) working group INPUT/Comprehensive Atmospheric Monitoring Programme (CAMP). Results may also be reported to the European Monitoring and Evaluation Programme (EMEP) under the Convention on Long-range Transboundary Air Pollution (CLRTAP)

**Project Funder(s)** The Norwegian Pollution Control Authority

**Publication** Annual reports 1995-2000 (in Norwegian; English summary): Monitoring of long-range transported air pollutants. Last year's report is available on web. See also: [www.sft.no](http://www.sft.no) ; [www.miljo.no/miljostatus](http://www.miljo.no/miljostatus)

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## **Norway**

**Title** Overvaking av miljøgifter i luft på Svalbard (Monitoring of hazardous substances in air at Svalbard)

**Objective(s)** The objective of the programme is to map the concentrations in air of persistent organic pollutants and heavy metals at Svalbard

**Timeframe** Start - ongoing  
1993/1994

**Responsible Organisation(s)** The Norwegian Pollution Control Authority (SFT)

**Partner(s)** Results are reported to the Arctic Monitoring and Assessment Programme (AMAP). Results may also be reported to the European Monitoring and Evaluation Programme (EMEP) and to the Comprehensive Atmospheric Monitoring Programme (CAMP)

**Project Funder(s)** The Norwegian Pollution Control Authority

**Publication** Annual reports 1995-2000 (in Norwegian; English summary): Monitoring of long-range transported air pollutants. Last year's report is available on web. See also: [www.sft.no](http://www.sft.no) ; [www.miljo.no/miljostatus](http://www.miljo.no/miljostatus)

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## Norway

<b>Title</b>	Overvaking av milj°gifter i fisk og skalldyr fra Grenlandsfjordene (Monitoring of hazardous substances in fish and shellfish in the Greenland fjords)
<b>Objective(s)</b>	The main aim of the monitoring programme is to follow the development of PCDF/PCDDs and other compounds in edible organisms after a 99% reduction in 1989-90 in the load from industry
<b>Timeframe</b>	1980 - ongoing
<b>Responsible Organisation(s)</b>	The Norwegian Pollution Control Authority; industrial companies and municipalities in the Grenland area
<b>Project Funder(s)</b>	The Norwegian Pollution Control Authority; industrial companies and municipalities in the Grenland area
<b>Publication</b>	annual reports since 1980ties (in Norwegian; English summary). See also: <a href="http://www.sft.no">www.sft.no</a> ; <a href="http://www.miljo.no/miljostatus">www.miljo.no/miljostatus</a>
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## Norway

<b>Title</b>	Milj°gifter i havner (Hazardous substances in harbours)
<b>Objective(s)</b>	On the basis of screening surveys; the Norwegian Pollution Control Authority (SFT) together with the Norwegian Food Control Authority (SNT) wanted a more thorough mapping of status with respect to hazardous substances in sediments and marine organisms in harbours. Emphasis has been put on edible organisms.
<b>Timeframe</b>	1997 - ongoing
<b>Responsible Organisation(s)</b>	The Norwegian Pollution Control Authority (SFT)
<b>Partner(s)</b>	The Norwegian Food Control Authority (SNT)
<b>Project Funder(s)</b>	SFT; SNT
<b>Publication</b>	Summary reports for each of the regions. See also: <a href="http://www.sft.no">www.sft.no</a> ; <a href="http://www.miljo.no/miljostatus">www.miljo.no/miljostatus</a> ; <a href="http://www.snt.no">www.snt.no</a>

**Comments** The survey started in 1997 and has covered parts of the Norwegian coastline in northern; southern and eastern Norway. A limited number of counties are covered in separate surveys. The survey is performed by several consultants; either alone or in cooperation. The number of harbours exceeds 20 Also county and municipal administrations have participated in the performance and funding of this survey.

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## **Norway**

**Title** Joint Assessment and Monitoring Programme (JAMP) in Norway

**Objective(s)** The general purpose of the JAMP is to assess the state of contamination in the marine environment in order to provide a basis for remedial action. More specific purposes; such as health reasons; ecological impact; regional variation and temporal trend are given for the different subprogrammes.

**Timeframe** 1981 - ongoing  
(Oslofjord)

**Responsible Organisation(s)** The Norwegian Pollution Control Authority (SFT)

**Partner(s)** The programme is the Norwegian contribution to the Oslo- and Paris Convention (OSPAR) Joint Assessment and Monitoring Programme (JAMP)

**Project Funder(s)** The Norwegian Pollution Control Authority

**Publication** Numerous reports: annual and summary reports since 1983. See also: [www.sft.no](http://www.sft.no) ; [www.miljo.no/miljostatus](http://www.miljo.no/miljostatus)

**Comments** Results are also reported to and stored at ICES. The monitoring programme is extensive; but not all analyses are performed each year.

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## **Norway**

<b>Title</b>	Arctic Monitoring and Assessment Programme Norwegian Implementation Plan
<b>Objective(s)</b>	Providing reliable and sufficient information on the status (incl. trends) of, and threats to, the Arctic Environment, and providing scientific advice on actions to be taken in order to support Arctic governments in their efforts to take remedial and preventive actions relating to contaminants.
<b>Timeframe</b>	ongoing
<b>Responsible Organisation(s)</b>	Norwegian Pollution Control Authority (SFT)
<b>Partner(s)</b>	Several agencies and research institutes in Norway, e.g.: - NorMarine Research Inst., Beigen - Directorate for Nature Management, Trondheim, - Norwegian Polar Inst., Tromsø - Norwegian Radiation Protection Authorities, Oslo
<b>Project Funder(s)</b>	Norwegian Authorities -(SFT)
<b>Comments</b>	Monitoring each year. Status report on POPs in Oct. 2000, more comprehensive report in 2002 and 2006

## **Norway**

<b>Title</b>	Annual report on direct and riverine inputs to Norwegian coastal waters (OSPAR-RIO)
<b>Objective(s)</b>	Assess waterborne inputs to the maritime area of the OSPAR Convention
<b>Timeframe</b>	ongoing
<b>Responsible Organisation(s)</b>	Norwegian Pollution Control Authority (SFT)
<b>Partner(s)</b>	Norsk Vannteknologisk Senter A/S P.O. Box 6875 Rodeløkka
<b>Project Funder(s)</b>	Norwegian Authorities (SFT)
<b>Comments</b>	Long term monitoring- Annual reports  Includes selected metals, gamma HCH, PCB (until 1999), nutrients, and organic material.

## **Peru**

<b>Title</b>	Determinacion de efectos en suelos agricolas por el uso intensivo de plaguicidas COPs. El Proyecto se encuentra en fase de elaboracion y formara parte del Plan Nacional de Implementacion del Convenio de Estocolmo en el Peru'.
<b>Objective(s)</b>	Identificar posibles lugares contaminados con plaguicida COPs, la magnitud de dicha contaminacion y alternativas de solucion.

**Timeframe** 2003 - not specified

**Responsible Organisation(s)** Servicio Nacional de Sanidad Agraria-Senasa

**Partner(s)** Comision Nacional de Plaguicidas: Integrado por SENASA, Direccion General de Salud Ambiental-DIGESA, Instituto Nacional de Recursos Naturales-INRENA, Instituto Nacional de Proteccion del Medio Ambiente para la Salud-INAPMAS, La Universidad Nacional Agraria La Molina, Sociedad Nacional de Entomologia, Comité para la Proteccion de Cultivos-PROTEC y otros miembros invitados tales como ONGs y gremios de productores.

**Project Funder(s)** En proceso de identificacion

**Publication** Proximamente se envontrara' en la pagina Web del SENASA:  
http://www.senasa.gob.pe

**Comments** El Peru' ha decidido presentar su Proyecto para la elaboracion del Plan Nacional de Implementacion al GEF, a través del PNUMA come Agencia Cooperante principal y de la FAO como Agencia complementaria en temas agricolas. Se espera que este proycto especifico se recoja como parte de les actividades a ser implementadas en la ejecucion del Plan.

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## **Peru**

**Title** 1. This is not a special project, it is a common activity of the plan protection Direction of SENASA:  
- Obsolete pesticides inventory.  
- Supervision and pursuit of pesticides out of technical specifications.  
2. Ministry of Health is working in a polychlorobyphenyl sources inventory

**Objective(s)** 1. In SENASA, this coverage is at national level and we need to know about quantities of obsolete pesticides in Peru and the POP's specially.  
2. Identify products that contain PCB's. Their use, location, volume, origin and final disposition in order to establish a National Management Program for this wastes.

**Timeframe** ongoing

**Responsible Organisation(s)** 1. Servicio Nacional de Sanidad Agraria - SENASA on pesticides for agricultural use.  
2. Dirección General de Salud Ambiental - DIGESA on pesticides for domestic use.

**Project Funder(s)** SENASA.

## **Philippines**

**Title** Pesticide Monitoring System Development Project (PMDP)  
- To develop a comprehensive system for monitoring pesticide residues and pesticide formulations.

**Objective(s)** 1. To improve the method(s) of analysis of pesticide residue and pesticide formulations.  
2. To improve the method(s) and technology of supervised pesticide residue trials in crop.  
3. To improve the method(s) and technology of market basket research for establishing MRLs and the pesticide safe use.  
4. To provide necessary information for safe handling and proper use of pesticide.

**Timeframe** March 1997 - March 2002

**Responsible Organisation(s)** Department of Agriculture  
Bureau of Plant Industry (BPI)  
Fertilizer and Pesticide Authority (FPA)

**Partner(s)** Japan International Cooperation Agency (JICA)

**Project Funder(s)** Philippine Government  
JICA

**Comments** The PMDP is a JICA-Project Type Technical Cooperation established for the purpose of improving the national monitoring program on pesticide residue and pesticide formulation in the country.

## **Philippines**

**Title** Implementation of Republic Act 6969 or Toxic & Hazardous & Nuclear Waste Act.

**Objective(s)** Part of RA 696 is to develop a Priority Chemical List (PCL). The list is composed of chemicals which are highly toxic (POPs) in terms of their persistence & tendency to bio-accumulate through the food chain.

**Timeframe** ongoing

**Responsible Organisation(s)** EMB

**Partner(s)** DOH, PNRI, DND, DOLE, DOST, DFA

**Project Funder(s)** RA 6969- WHO & DENR (EMB)

**Publication** RA 6969 and DAO 38, 39, 29, 58.

**Comments** The EMB is presently evaluating chemicals listed as PCL to be included in DAO 58 in co-ordination with EPA who is the government agency mandated for the regulation of fertilizers and pesticides. The EMB is currently evaluating industrial chemicals for the purpose.

## **Poland**

**Title** Within the framework of the International Odra Project (IOP), (<http://odra.ing.uni.wroc.pl>), a scientific team of the Department of Water Pollution Control, Maritime Branch of the Institute of Meteorology and Water Management in Gdansk carried out Sub-project 10 entitled: "Anthropogenic organic substances: origin, distribution and impact on the water ecosystem". The aim of this sub-project was to assess pollution level of toxic organic substances in the selected points in the Odra basin as well as pollution input to the Baltic Sea.

**Objective(s)** In 1997 (the first year of IOP), the studies were focussed on sediments taken from ten to twenty points in the upper Odra afflicted with summer flood. The sediment samples were analysed for PAHs and polysaccharides. The obtained results related to flood 1997 were published in Acta hydrochim. hydrobiol., 27 (1999). In the period 1998 - 2000 (spring and autumn), water and sediments were sampled five times from about sixty points located along the Odra and Warta rivers and their tributaries.

**Timeframe** 1997 - 2001

**Responsible Organisation(s)** Ministry of the Environment  
Wawelska 52/54  
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Institute of Meteorology and Water Management Podlesna 61  
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**Partner(s)**

1. University of Hamburg, Institut für Anorg. und Angew. Chemie - Prof. Dr. A. Knöchel and University of Mining and Metallurgy, Dept of Environ. Protection, Cracow - Prof. Dr. E. Helios Rybicka - Organisation, coordination, analytical quality assurance and data base.
2. University of Hamburg, Institut für Organische Chemie - Prof. Dr. W. Francke - Trace analysis of organic pollutants.
3. University of Mining and Metallurgy, Dep. of Environ. Protection, Cracow - Prof. Dr. E. Helios Rybicka - Chemical speciation, accumulation and release of heavy metals in suspended matter and bottom sediments.
4. Ernst-Moritz-Arndt-Uni. Greifswald, FR Geowissenschaften - Pr. Dr. K.-H. Henning - Composition of the suspended particulate matter.
5. University of Hamburg, Institut für Anorg. und Angew. Chemie - Prof. Dr. A. Knöchel - Behaviour of heavy metals and organometallic compounds in particulate matter, sediments and humic fractions.
6. University of Wroclaw, Institute of Geological Sciences - Dr. L. Poprawski - Spatial distribution of contaminants.
7. Bundesanstalt für Gewässerkunde - Dr. A. Müller - Evaluation of reference

areas for sediments and determination of the amount of pollutants entering the Odra Lagoon by suspended matter.

8. TU Bergakademie Freiberg, Institut für Mineralogie - Prof. Dr. P. Beuge - Assessment, development and influenceability of the heavy metal status.

9. Institute of Meteorology and Water Management, Wrocław - Dr. J. Blachuta - Structure and functionality of the ecosystem of the Odra

10. Institute of Meteorology and Water Management, Gdansk - Dr. E.

Niemirycz - Microorganic pollution: indicators, sources and metabolism

11. Agricultural University of Szczecin - Prof. Dr. M. Protasowicki - Speciation of heavy metals in the sediments and behaviour of chlorinated pollutants.

12. Technical University of Gdansk, Chemical Faculty - Prof. Dr J. Namiesnik, Prof. Dr J. Biernat - Organic Micropollutants in the Odra River

**Project Funder(s)**

The International Odra Project (IOP) is supported by the Federal Ministry of Research, Technology, Education and Science of the Federal Republic of Germany and by Foundation of Polish-German Cooperation

**Publication**

1. <http://odra.ing.uni.wroc.pl>

2. The results related to the flood 1997 published in Acta hydrochim. hydrobiol., 27 (1999);

3. The results related the whole project published in the Status Reports 1997 - 2000 are available in the Department of Water Pollution Control, Maritime Branch of the Institute of Meteorology and Water Management in Gdansk.

4. Polish-German cooperation in the field of science and techniques, Federal Ministry of Education and Scientific Research (BMBF) in cooperation with the State Committee for Scientific Research (KBN), brochure from the Polish-German Symposium, 3 October 2000.

**Comments**

In the process of preparation of the next stage of IOP project, (IOPII)

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**Poland**

**Title**

Dioxins in municipal wastewater sludge as a criteria of non-industrial use

**Timeframe**

2001 - 2002

**Responsible Organisation(s)**

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**Project Funder(s)**

State Committee for Scientific Research

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## **Poland**

<b>Title</b>	Action of polychlorinated biphenyls and its metabolites on ovarian function
<b>Objective(s)</b>	PCB belongs to a group of chemicals, characterized with the possibility of imitation of some hormones. Molecules of these compounds will recognise hormone receptors in cells; they can change their quantity, in relation how they can react directly with hormones also influence their work. The consequence of this are disorders of endocrine function observed both at people as well as at animals. There are some data showing similarity of PCB compare to thyroid and steroids hormones. Beside the evidence on estrogenic activity of PCB, appear report relate antyestrogen action of some PCB. This difference is due to ability of some PCB to bond with Ah-R (aromatic hydrocarbon receptor) receptors present in cells. It is not known also, what is the reason so different effects e.g. act as estrogens or antiestrogen. Distinguish problem, which is unclear, and require additional research is toxic action of PCB metabolites. Hydroksylatio is basic metabolic transformation of these compounds one from rings at contribution livers' monooksygenaze dependend from cytochrome P-450. Hydroxylated metabolite is main PCB metabolite. Investigations of the last two years showed, that hydroksylated metabolites PCBs (OH-PCBs) show similar action to estrogens, because they can bond e.g. in uterus with this hormone receptors in cells. Estrogenic action of OH-PCBs is 4- 30 fold higher than PCBs. 38 OH-PCBs became identified in blood serum. Among them 5 congeners predominates and this they make up significant part of detected metabolites in plasma, serum and total blood. Additionally, OH-PCBs are easily transported through placenta to foetus what was showed studying content of this metabolites in vein of umbilical cord and blood of mother. Because it has been shown both in vitro as in vivo that OH-PCB acted as endocrine disrupters theirs presence and accumulation in tissues makes serious threat. Particularly this is most important problem in view of marking in foods' products as in biological material individual congeners of PCB and not theirs metabolites So, till now it is difficult to speak about delimitation of permissible dose of this congeners in environment.
<b>Timeframe</b>	1998 - ongoing
<b>Responsible Organisation(s)</b>	Laboratory of Physiology and Toxicology of Reproduction, Department of Animal Physiology, Institute of Zoology Jagiellonian University Ingardena 6 PL 30-060 Krakow
<b>Project Funder(s)</b>	State Committee for Scientific Research 1/3 Wspólna Str.PL 00-529 Warsaw 53 tel.: (+48-22)-529-27-18
<b>Publication</b>	1.Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on luteal cell function. Tissue culture approach. Gregoraszczuk E., Zabielyny E., Pieklo R., Grochowalski A., Wójtowicz A., Mika M. Organohalogen Compounds 42: 67-72, 2. Accumulation of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in porcine



- follicles after in vitro exposure to TCDD: effects on steroid secretion and cell proliferation. Grochowalski A\*, Pieklo R., Gasinska A., Chrzaszcz R., Gregoraszczyk E. *Cytobios* 102: 21-31, 2000
3. Dose- and time-dependent effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on progesterone secretion by porcine luteal cells cultured in vitro. Gregoraszczyk E.L., Wójtowicz A., Zabielyny M, Grochowalski A., J. *Physiol Pharm.* 51: 127-135, 2000
  4. 2,3,7,8-tetrachlorodibenzo-p-dioxin alters follicular steroidogenesis in time- and cell- specific manner. Pieklo R., Grochowalski A., Gregoraszczyk E.L. *Exp. Clin. Endocr & Diab.* 108: 1-6, 2000
  5. Time dependent and cell-specific action of polychlorinated biphenyls (PCB 153 and PCB 126) on steroid secretion by porcine theca and granulosa cells in mono- and co- culture" Wojtowicz A.K., Gregoraszczyk EL., Lyche JL., Ropstad E. *J. Physiology Pharmacol* 51: 555-568, 2000
  6. 2,3,7,8-tetrachlorodibenzo-p-dioxin action on metabolism of cholesterol and testosterone by follicular cells in culture. Gregoraszczyk EL., Pieklo R., Grochowalski A. *Organohalogen Compounds* 49: 330-333, 2000
  7. PCB 153 action on steroid secretion by cultured in vitro porcine theca and granulosa cells Wojtowicz AK., Gregoraszczyk EL., Mika M. *Organohalogen Compounds* 49: 363-369, 2000
  8. Polychlorinated biphenyls in placental tissue from normal versus abnormal pregnancy outcomes; preliminary results. Grochowalski A., Milewicz T., Krzywda A., Krzysiek J., Gregoraszczyk E. *Pol Journ Gynecol Invest* 3:71-74, 2000
  9. Estrogenic and antiestrogenic effect of in vitro treatment of follicular cells with 2,3,7,8-tetrachlorodibenzo-p-dioxin. Grochowalski A., Chrzaszcz R., Pieklo R., Gregoraszczyk E.L., *Chemosphere* 43/4-7 : 823-827, 2001
  10. Aryl hydrocarbon receptor-linked inhibition of luteal cells progesterone secretion in 2,3,7,8-tetrachlorodibenzo-p-dioxin treated cells: evidence that key lesion occurs prior to or during pregnenolone formation. Gregoraszczyk EL., Zabielyny E., Ochwat D., *J Physiol Pharmacol* 52: 303-311, 2001
  11. Estrus cycle-dependent changes in the steroid secretion by pig ovarian cells exposed in vitro to polychlorinated biphenyl PCB 153 . Wojtowicz A., Gregoraszczyk E. *Endocrine Regulation* 35: 225-230, 2001
  12. Polichlorinated biphenyls (PCB 126 and PCB 153 action on proliferation and progesterone secretion by cultured in vitro porcine luteal cells. Augustowska K., Wojtowicz A., Kajta M., Ropstad E., Gregoraszczyk EL., *Exp Clin Endocrinol Diabetes* 109: 416-418, 2001
  13. In vitro exposure of porcine follicular cells to PCB 153 alters steroid secretion but not their viability. Gregoraszczyk EL., Wójtowicz A. *The Scientific World* 2: 261-267, 2002
  14. Dioxin exposure and porcine reproductive hormonal activity. Gregoraszczyk EL. *Cad. Saude Publica, Rio de Janeiro*, 18: 453-462, 2002

**Comments**

At present we are the only team in Poland and there are only few such teams in the world which consider investigation action of pure PCBs congeners as factors disrupting endocrine function applying physiological model co-culture of follicular cells.

Both in Poland and in the world there are no data comparing action of PCB and their metabolites ovarian steroidogenesis and studying mechanisms of their action.

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## **Poland**

**Title** The analysis of the possibility of signature by Poland the protocols on heavy metals and persistent organic pollutants to the Convention on Long-range Transboundary Air Pollution

**Objective(s)** The analysis of national emission of POPs, identification of emission trends and the prognosis for emission in future (until 2010). It was the basis for assessing the possibility of performing by Poland the basic obligations of the protocols, as well as a study of compliance.

**Timeframe** Ongoing

**Responsible Organisation(s)** On request of the Ministry of Environment Protection, Natural Resources and Forestry prepared by the Institute of Environmental Protection

**Project Funder(s)** National Fund for Environmental Protection and Water Management

## **Poland**

**Title** Organochlorine pesticide concentrations in the drinking water from a region of extensive agriculture in Poland

**Objective(s)** Detection of organochlorine pesticides (DDT, heptachlor, lindane, metoxychlor) in drinking water samples collected from water intakes (deep wells and dug wells) in Warka-Grójec and Lublin rural regions of Poland

**Timeframe** 1994 - 2000

**Responsible Organisation(s)** Department of Clinical Toxicology, Institute of Agricultural Medicine

**Project Funder(s)** Department of Clinical Toxicology, Institute of Agricultural Medicine

**Poland**

**Title** Development of underlying assumptions for a project to limit inflow, to water bodies, of dangerous substances produced or in use in the economy sector.

**Objective(s)** As the first stage of the project implementation, a questionnaire was developed, to identify sources of industrial sewage, containing dangerous substances, in particular aldrin, dieldrin, endrin, and hexachlorobenzene. In the second stage of project a plan of actions was designated to decrease the pollution of water bodies, by dangerous substances, to the level compliant with the requirements of the UE regulations. Estimations of necessary financial resources for implementing by the economy sector of Poland the requirements of EU in this area were also carried out.

**Timeframe** 2000

**Responsible Organisation(s)** Ministry of Environment, Department of the Environmental Protection

**Partner(s)** DHV Polska  
00-182 Warszawa, 9 Dubois St.  
Poland

**Project Funder(s)** PHARE, Project Nr. PL 9608.01.03

**Publication** Reports available at the Ministry of Environment  
  
Ministry of Environment  
Department of the  
Environmental Protection  
Warsaw, 52/54 Wawelska  
St.  
Poland

**Poland**

**Title** Development of underlying assumptions for a project to limit inflow, to water bodies, of dangerous substances produced or in use in the economy sector (second stage).

**Objective(s)** In the second stage of project a plan of actions was designed to decrease the pollution of water bodies, by dangerous substances, to the level compliant with the requirements of the UE regulations. The plan also includes propositions of actions for elimination of use and replacements for some dangerous substances.

**Timeframe** 2000

**Responsible Organisation(s)** Ministry of Environment,  
Department of the Environmental Protection

**Partner(s)** DHV Polska  
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**Project Funder(s)** PHARE , Project Nr. PL 9608.01.03  
**Publication** reports available at the Ministry of Environment  
  
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Department of the  
Environmental Protection  
Warsaw , 52/54 Wawelska  
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Poland

## **Portugal**

**Title** Measurement of Atmospheric Emissions of Dioxins and Furans in Selected Sources in Portugal  
**Objective(s)** Measurement of stack emissions of dioxins and furans  
**Timeframe** 1999 - 2000  
**Responsible Organisation(s)** IDAD - Instituto do Ambiente e Desenvolvimento  
**Partner(s)** ERGO - FORSCHUNGSGESELLSCHAFT mbH  
**Project Funder(s)** LUA - NRW  
**Comments** Ongoing project

## **Portugal**

**Title** External Monitoring Programme of LIPOR II  
**Objective(s)** This program focuses in the monitoring of dioxin / furan levels in ambient air, soil, sediments and food.  
**Timeframe** 1998 - 2002  
**Responsible Organisation(s)** IDAD - Instituto do Ambiente e Desenvolvimento [2]  
**Partner(s)** University of Aveiro  
**Project Funder(s)** LIPOR

## **Romania**

**Title** 1.Environmental Programme for the Danube River Basin  
2. Research studies

<b>Objective(s)</b>	1. Task Annual Projects financed by Ministry of Waters and Environmental Protection (MoWEP) since 2000 for Trans-National-Monitoring-Network (TNMN) - Romanian sector of Danube River 2. Special survey studies financed by MoWEP and/or Ministry of Education and Research (MoER) for different hydrographical basins
<b>Timeframe</b>	1.ongoing 2.casually
<b>Responsible Organisation(s)</b>	MoWEP National Institute of Research-Development for Environmental Protection - ICIM Bucharest: Integrated Monitoring and Water Quality Department
<b>Project Funder(s)</b>	1. Ministry of Waters and Environmental Protection (MoWEP) 2.MoWEP and/or Ministry of Education and Research (MoER)
<b>Comments</b>	Identification and assessment of the concentration levels in water and sediments of organic micropollutants, some of them being from those 12 chemicals of Stockholm Convention List.
<b>Contact</b>	Mr Aurel Varduca Spl. Independentei no.294, sector 6, Bucharest 78, 77703 +40 21 221 57 66/211 varduca@icim.ro

## **Romania**

<b>Title</b>	Enabling Activities to Facilitate Early Action in the Implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in Romania.
<b>Objective(s)</b>	To assist Romania to fulfil its obligation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in Romania.
<b>Timeframe</b>	1 August 2003 - July 2004
<b>Responsible Organisation(s)</b>	-Ministry of Water and Environmental Protection -National Research-Development Institute for Environmental Protection
<b>Partner(s)</b>	Polytechnical University of Bucharest
<b>Project Funder(s)</b>	United Nations Industrial Development Organization- UNIDO
<b>Contact</b>	Mr Mihai Lesnic Spl. Independentei 294, sector 6 Bucharest, Romania + 40 021 221.92.04 mihai_lesnic@yahoo.com

## Romania

<b>Title</b>	1.The assessment of Transport; Transfer and Transformation processes of POP'S ( DDTs congeners and other organochlorine pesticides; PCBs ) in the aquatic ecosystems 2. Environmental Programme for the Danube River Basin PHARE
<b>Objective(s)</b>	Identification and assessment of the concentration levels in water column and sediments
<b>Timeframe</b>	1999 - 2001
<b>Responsible Organisation(s)</b>	Ministry of Waters and Environment Protection. National Institute of Research - Development for Environmental Protection - ICIM Bucharest.
<b>Project Funder(s)</b>	Ministry of Research and Education.
<b>Comments</b>	Identification and assessment of the concentration levels in water and sediments of organic micropollutants in some section of National Water Monitoring System
<b>Contact</b>	Mr Aurel Varduca Spl. Independentei NO.264, sector 6 Bucharest 78, 77703 + 40 1 221 57 58/211 varduca@dr.com

## Romania

<b>Title</b>	Assessment of body burden with organochlorine pesticides residues.
<b>Objective(s)</b>	To establish the body burden with organochlorine pesticides residues in order to investigate the link between environmental contamination and the most likely health effects.
<b>Timeframe</b>	2000 - 2004
<b>Responsible Organisation(s)</b>	To establish the body burden with organochlorine pesticides residues in order to investigate the link between environmental contamination and the most likely health effects.
<b>Partner(s)</b>	hospital
<b>Project Funder(s)</b>	Ministry of health
<b>Comments</b>	previous assessments identified organochlorine pesticides residues in blood, mother milk and placenta  Environmental Chemistry laboratory, Environmental health department, institute of Public Health Iasi Str. V. Babes nr. 14, 6600 Iasi, Romania

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huracarmen@usa.net

## **Romania**

**Title** Surveillance and assessment of pesticides residues in food in Timis County; development of HPLC method of analysis of pesticides residues in food.

**Objective(s)**

- To identify the most used pesticides (first 10 formulated compounds) in Timis County, during the last 5 years;
- To identify the pattern of food consumption in Timis County (first 5 categories of food products) and their contamination (types and level of pesticides residues present in these food products);
- To display this information on the county's map.

**Timeframe** 2000 - 2010

**Responsible Organisation(s)** Institute of Public Health  
Prof. Dr. Leonida Georgescu  
Timisoara

**Project Funder(s)** Ministry of Health

**Comments** The aim of the project is to substantiate the sanitary norms

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## **Romania**

**Title** Monitoring of chemical contaminants in food products

**Objective(s)**

- a) Identification, measuring and surveillance of chemical contamination of food with organochlorine pesticides (HCH, HCB, DDT and metabolites) and PCBs; 8 districts located in the region of Moldavia
- b) Development of the national surveillance methodology for food chemical contaminants.

**Timeframe** a) 2002 - a) 2005  
b) 2001 b) 2005

**Responsible Organisation(s)** Institute of Public Health - Iasi

**Partner(s)** 8 Districtal Directorates of Public Health from the region of Moldavia

**Project Funder(s)** Ministry of Health

**Comments** Preliminary results regarding chemical contaminants in vegetables, dairy,

meet, fish, mushroom, cooked meal, showed different sub-regional concentrations, some of them being higher than maximum admissible concentrations, according with national norms.

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## **Romania**

<b>Title</b>	Assessment of pollution levels of soil, water and vegetables by nitrates and pesticides, in Moldavia.
<b>Objective(s)</b>	To measure the concentrations of nitrates and organochlorine pesticides in soil, water and vegetables.
<b>Responsible Organisation(s)</b>	Institute of Public Health Iasi.
<b>Partner(s)</b>	Districtual Inspectorates of Public Health
<b>Project Funder(s)</b>	Ministry of Health
<b>Comments</b>	Nitrates and organochlorine pesticides were found in all investigated samples, sometimes at concentrations exceeding the Maximum Admissible Concentrations.  Environmental Chemistry Laboratory Environmental Health Department Institute of Public Health Iasi Str. V. Babes nr. 14, 6600 Iasi, Romania 40-32-141520

## **Romania**

<b>Title</b>	Assessment of organochlorine pesticides' levels, in the soil of water catchment areas of the main towns in Moldavia region.
<b>Objective(s)</b>	To identify the levels of soil contamination in relation with the pesticides migration into the ground waters, used as sources for drinking water.



**Timeframe** 2001 - 2005  
**Responsible Organisation(s)** Institute of Public Health - Iasi  
**Partner(s)** 8 Districtal Directorates of Public Health from the region of Moldavia  
**Project Funder(s)** Ministry of Health

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## **Romania**

**Title** Dioxins monitoring in the environment  
**Timeframe** 2000 - 2001  
**Responsible Organisation(s)** Chemical Research Institute - Bucharest  
**Project Funder(s)** Ministry of Waters, Forests and Environmental Protection  
**Contact** Ms. Elena Popovici  
 Ministry of Waters, Forests  
 and Environmental Protection  
 Environmental Monitoring  
 Directorate  
 popovic@mappm.ro

## **Romania**

**Title** Sanitary surveillance of River Prut, a source of drinking water for riparian localities.  
**Objective(s)** Assessment of drinking water quality and health related risks.  
 4 Riparian Districts: Botosani, Iasi, Vaslui, Galati.  
**Timeframe** a. 1993 - a. 1998  
 b. 1999 b. 2001  
**Responsible Organisation(s)** Institute of Public Health Iasi

**Partner(s)** Districtual Inspectorates of Public Health

**Project Funder(s)** Ministry of Health

**Comments** The levels of DDT in Prut River show a decreasing trend; the levels of metabolites as well as levels of herbicides (Atrazin, Simazin, Propazin) show an increasing trend. The efficiency of water treatment processes at water works is very low for this kind of chemical contamination.

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## **Romania**

**Title** Assessment of organochlorine pesticides and PCBs levels in sources of water and in drinking water of the main towns in Moldavia region.

**Objective(s)** To identify the level of water contamination

**Timeframe** 2002 - 2005

**Responsible Organisation(s)** Institute of Public Health - Iasi

**Partner(s)** 8 Districtual Directorates of Public Health from the region of Moldavia

**Project Funder(s)** Ministry of Health

**Comments** a previous descriptive epidemiologic study suggested a causal link between chemical water contamination and the incidence of some chronic diseases (including cancer).

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## **Romania**

**Title**

1. Investigation regarding the presence of dioxins in environment, in impact area of Yugoslav conflict.
2. Researches concerning transboundary pollution with persistent organic

pollutants (POPs) produced by the industrial activities from the West area of Romania.

<b>Objective(s)</b>	1.- Elaboration of analysis procedures using a study regarding the presence of dioxins in various types of samples: water, sediments, fish, vegetation 2.- Identification of industrial stationary emission sources; - Elaboration / adaptation of analyse methods; - Pollution assessment on environment factors - air/water; - Elaboration of depolluting solutions;
<b>Timeframe</b>	1. 1999 - 1. 1999 2. 2000 2. 2001
<b>Responsible Organisation(s)</b>	1. Ministry of Waters, Forests and Environment Protection 2. Ministry of Industry and Trade - Directorate for Products Quality Improvement and Environmental Protection
<b>Partner(s)</b>	1. Institute for Chemical Researches - Bucharest 2. National Research - Developing Institute for Industrial Ecology - Bucharest
<b>Project Funder(s)</b>	1. Ministry of Waters, Forest and Environment Protection 2. National Agency for Science, Technology and Innovation
<b>Comments</b>	2. It is taken into consideration: a. Identification of industrial polluting sources and assessment of transboundary pollution; b. To establish the monitoring program for the hot industrial sources and for the environment factors potential affected; c. To establish the opportunity to stop the production or to replace fabrications; d. To establish possibilities for pollution reduction by revamping, clean production and/or implementation of some depolluting procedures.

## **Romania**

<b>Title</b>	Researches concerning transboundary pollution with persistent organic pollutants (POPs) produced by industrial activities from the West Area of Romania
<b>Objective(s)</b>	- identification of industrial stationary emission sources; - elaboration/adaptation of analyze method; - pollution assessment on environment factors - air/water; - elaboration of depolluting solutions; - geographical area: West Area of Romania (Half West Area)
<b>Timeframe</b>	1999 - 2001
<b>Responsible Organisation(s)</b>	Ministry of Industry and Trade Directorate for Environmental Protection and Industrial Products Quality
<b>Partner(s)</b>	National Research Development Institute for Industrial Ecology

**Project Funder(s)**

National Agency for Science, Technology and Innovations.

**Comments**

It is taken into consideration:

- a) Identification of industrial polluting sources and assessment of transboundary pollution;
- b) To establish the monitoring program for the hot industrial sources and for the environment factors potential affected;
- c) To establish the opportunity to stop the production or to replace fabrications;
- d) To establish possibilities for pollution reduction by revamping, clean production and/or implementation of some pollution decreasing procedures.

Updated information regarding the state of the project:

Were realized the following aspects:

- identification, with the Territorial Protection Agencies support from 17 counties (Alba, Arad, Bihor, Caras - Severin, Cluj, Dolj, Gorj, Hunedoara, Maramures, Mehedinti, Mures, Olt, Salaj, Satu-Mare, Sibiu, Timis, Valcea) of all the industrial potential pollutants from the west half side of Romania working in the folloing field of activity: power plant, ferrous metallurgy, non ferrous metallurgy, organic and inorganic chemical industry, wood processing;
- selection taking into account the activity profile and productive capacity of the representative units with environmental potential impact;
- elaboration of a questionnaire for the selected units containing the following data:activity profile (raw materials used and products obtained), technologies applied, theoretical productive capacity and productive capacity in 1999, number of the stationary sources/technology/installation generating emission into the atmosphere and the geometrical parameters of the stationary sources);
- sending of the questionnaire to the selected representative units;
- collecting and analyze of the data received;
- assessment of the POPs atmospheric emission level in 1999 using the received data and emission factors recommended by US EPA AIR CHIEF program and EPA CORINAIR - EMEP program.

**Saudi Arabia**

**Title**

Monitoring of obsolete and banned Agrochemicals in the Kingdom of Saudi Arabia Project

**Objective(s)**

To ban the use and introduction of the 10 mentioned pesticides in the Kingdom of Saudi Arabia

**Timeframe**

ongoing

**Responsible Organisation(s)**

Ministry of Agriculture and Water, Research Department

**Partner(s)**

Ministry of Commerce, "SACO"

**Project Funder(s)**

Saudi Arabia

## **Signapore**

<b>Title</b>	Monitoring of POPs in Singapore
<b>Objective(s)</b>	To assess the levels of POPs in Singapore
<b>Timeframe</b>	1999 - ongoing
<b>Responsible Organisation(s)</b>	Ministry of the Environment
<b>Partner(s)</b>	National Environment Agency
<b>Project Funder(s)</b>	Ministry of the Environment
<b>Contact</b>	Ms. Jacin Chan Ministry of the Environment, International Relations Department Environment Building 40 Scotts Road #23-00 Singapore 228231 65-67319087 Jacin_Chan@env.gov.sg

## **Singapore**

<b>Title</b>	Routine monitoring of pesticides listed in WHO Guidelines for drinking-water quality in raw and drinking water
<b>Objective(s)</b>	To monitor the concentrations of pesticides in water that are listed in WHO Guidelines for drinking-water quality to ensure that they are within the guideline values
<b>Timeframe</b>	1992 - ongoing
<b>Responsible Organisation(s)</b>	Public Utilities Board
<b>Project Funder(s)</b>	Self-funding
<b>Publication</b>	<a href="http://www.pub.gov.sg">http://www.pub.gov.sg</a> Water Department, Public Utilities Board, Singapore
<b>Contact</b>	Mr King Nyau Tiew 65 Woodleigh Park Off Upper Serangoon Road S(357875) 6731 3533/6380 9804 tiew_king_nyau@pub.gov.sg

## **Slovakia**

**Title** Evaluation of the exposure of the selected population sub-group to POPs.

**Objective(s)** Study on nutritional exposure to chlorinated pesticides: DDT, hexachlorocyclohexane, hexachlorobenzene, their degradation products and/or metabolites (chlorinated benzene, chlorinated phenols) as well as polychlorinated biphenyl's. Matrices included: total diet, food chain items, human biological samples: mother milk, blood, urine, placenta. Nutritional risk assessment. Geographical coverage: Slovak Republic.

**Timeframe** 01-01-1997 - 12-31-2000

**Responsible Organisation(s)** Institute of Preventive and Clinical Medicine, National Reference Centre for Pesticide Residues, Limbová 14, 833 01 Bratislava- Slovak Republic.

**Partner(s)** Bilateral co-operation: Institute for Ecological Chemistry, GSF, Neuherberg, Germany.

**Project Funder(s)** Health Ministry of the Slovak Republic.

**Comments** Detailed information and data sources on POPs in the Slovak republic available in the original POPs Profile Information Reporting forms sent in UNEP Chemicals in 1998.

## **Slovenia**

**Title** At the time being there is no project running in the Republic of Slovenia which main goal is monitoring or assessment of POPs. Some of POPs chemicals are included in different national monitoring; for example in monitoring of drinking water and food in monitoring of groundwater; see water and surface water and in monitoring of air...Our country has been selected as one of 12+1 countries for the running UNEP/GEF pilot project: Development of National Implementation Plans for the Management of Persistent Organic Pollutants (POPs).

**Objective(s)** The objective is to strengthen national capacity to manage persistent organic pollutants and to fulfil our obligations under the Stockholm POPs Convention.

**Timeframe** Pilot project: 2002 - Pilot project: 2004

**Responsible Organisation(s)** Lead Ministry: Ministry of Health; National Chemicals Bureau

**Partner(s)** Ministry of Environment and Spatial Planning. Ministry of Agriculture Forestry and Food and other involved ministries who are participated in Intersectoral Committee for the sound management of chemicals

**Project Funder(s)** For the Pilot Project: GEF together with the World Bank. For the national monitorings: different ministries (e.g. Ministry of Health; Ministry of Environment and Spatial Planning and Ministry of Agriculture; Forestry and Food).under the Slovenian Government

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## **South Korea**

**Title** National Research Project on Endocrine Disrupters including POPs (1999-2008)

**Objective(s)** Objectives: To establish risk management scheme for endocrine disrupters (EDs) by conducting health and the environmental risk assessment, involving various research activities on risk identification, establishment of monitoring and assessment system, consumption patterns, residual levels in the environmental media, etc.

**Responsible Organisation(s)** Ministry of Environment and the National Institute of Environmental Research

**Partner(s)** Korea Food and Drug Administration, Korea Institute of Science and Technology, National Institute of Agricultural Science and Technology and the Provincial Health and Environment Research Institute

**Project Funder(s)** Government

## **South Korea**

**Title** Preliminary Environmental survey on POPs (1998) monitoring of POPs in the coastal area of Korea.

**Objective(s)** Objectives:  
To establish a national data base using state-of-the-art sampling, preservation, and analysis methodologies which are consistently applied.  
To use the information in the data base to estimate coastal environmental quality  
To establish a statistical basis for detecting spatial and temporal change  
To identify coastal areas of Korea that might benefit from more intensive study.

**Timeframe** 1999 - 2001

**Responsible Organisation(s)** Korea Ocean research and Development Institute (KORDI)

**Partner(s)** Cheju National University and the Seoul National University

**Project Funder(s)** Ministry of Maritime Affairs and Fisheries (MOMAF) and the Republic of Korea

**Publication** Report will be published at the end of each year by KORDI.

**Comments** April- December 1999 (1st Year). Monitoring of POPs in bivalves and sediment

## **Sri Lanka**

**Title** Monitoring of Organochlorines and Pesticides in water bodies including PCBs.

**Objective(s)** To obtain baseline data to ascertain the extent of contamination

**Timeframe** ongoing

**Responsible Organisation(s)** Chemical & Environmental Technology Division, Industrial Technology Institute ( ITI ).

**Project Funder(s)** Clients who are involved in infrastructure development project.

**Publication** Print media

**Comments** Monitoring is carried out at the request of clients to obtain baseline data for EIA studies.

## **Sweden**

**Title** National Environmental Monitoring Programme. Programme area: POPs chemicals

**Objective(s)** To establish time trends for selected POPs and metals in different media. Inventory of "new chemicals" Measurements on a yearly basis. No time limit set for the monitoring programme.

**Timeframe** ongoing

**Responsible Organisation(s)** SEPA (Swedish Environmental Protection agency)

**Project Funder(s)** The Swedish Government

**Publication** <http://www.naturvardsverket.se/dokument/mo/modok/datavard.htm> (so far in swedish only)

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## Sweden

**Title** National Environmental Monitoring Programme. Programme area: POPs chemicals.

**Objective(s)** National area: the aim is to cover the whole country. Time trends for selected POPs and metals in different media. Inventory of "new chemicals."

**Timeframe** ongoing

**Responsible Organisation(s)** Swedish Environmental Protection Agency.

**Project Funder(s)** The Swedish Government.

## Switzerland

**Title** Risk analysis regarding agricultural use of fertilizers from waste materials

**Objective(s)** Monitoring of hazardous materials including POPs in fertilizers obtained from waste materials like sewage sludge or waste incineration residues

**Timeframe** 2000 - ongoing

**Responsible Organisation(s)** Direct responsibility: Mentioned Federal Research institute for Agricultural Ecology and Production

**Partner(s)** Federal Office of Agriculture + BUWAL (= SAEFL)

**Project Funder(s)** Federal Office of Agriculture

**Publication** E.g. INTERNET Leitbild BUWAL (Philippe Roch); also Annual Report of the mentioned Federal Research Institute for Agricultural Ecology and Production (FAL; Reckenholz)

**Comments** The monitoring activity is planned to be pursued for a number of years

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## Switzerland

**Title** Persistent Organic Pollutants in Switzerland: Bio-monitoring with lichens.

**Objective(s)** Bio-monitoring of airborne POPs with lichens at different polluted sites.  
Geographical coverage: whole of Switzerland.  
Monitoring sites: urban, sub-urban, traffic, industrialized and rural.  
Substances covered: most of the UN-ECE POPs list.

**Timeframe** 1996 - 2000

**Responsible Organisation(s)** Swiss Agency for the Environment, Forests and Landscape. Air Pollution Control Division, 3003 Bern.

**Partner(s)** Arbeitsgemeinschaft für Bioindikation (AGB), Quartiergasse 12, CH 3013 Bern

**Project Funder(s)** Swiss Agency for the Environment, Forests and Landscape (SAEFL)

**Publication** Report and scientific publication in preparation.

**Comments** Ubiquitous occurrence of POPs demonstrated despite national prohibitions since more than ten years.

## Switzerland

**Title** Monitoring of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans in cow's milk from Switzerland.

**Objective(s)** Comparison of PCDD/F contamination in cow's milk from 1990/91 and 1999/2000.  
Geographical coverage: whole of Switzerland  
Monitoring sites: pooled milk from industrial dairies, milk from producer cooperatives in areas with PCDD/F emitting plants, milk from producer cooperatives in rural and/or alpine areas without industry.

**Timeframe** 1990 - 2001

**Responsible Organisation(s)** Swiss Agency for the Environment, Forests and Landscape. Substances, Soil and Biotechnology Division, 3003 Bern.

**Partner(s)** Swiss Federal Laboratories for Materials Testing and Research- Ueberlandstrasse 129- CH 8600 Dübendorf.

**Project Funder(s)** Swiss Agency for the Environment, Forests and Landscape (SAEFL)

**Publication** P. Schmid, Ch. Schlatter (1992). Polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) in cow's milk from Switzerland, Chemosphere, 24.8.1093-1030.

**Comments** The data from 1990/91 are already published.

## Switzerland

**Title** Elimination of PCB-containing material used in the past in window packings (Fugenkitt).  
Follow-up: Coplanar Polychlorinated Biphenyls (PCB) in Indoor Air.

<b>Objective(s)</b>	Originally: Monitoring of respective material in public buildings, especially schools, in view of subsequent replacement. Follow-up: Correlation with indoor air.
<b>Timeframe</b>	2000 - 2002
<b>Responsible Organisation(s)</b>	Reported earlier: Chemical laboratories of the respective cantons. Work cited here: Swiss Federal Laboratories for Materials Testing and Research (EMPA) and Swiss Federal Office of Public Health (BAG) - supported by SAEFL and representatives of cantons.
<b>Partner(s)</b>	BUWAL = SAEFL
<b>Project Funder(s)</b>	EMPA, BAG, SAEFL, Cantons
<b>Publication</b>	Publication in "Environmental Science and Technology" (2002 - Authors: Martin Koler, Markus Zennegg and Roger Waeber)
<b>Comments</b>	Presentation of correlation of PCB-contents in joint sealings and in corresponding indoor air. Consequent replacement programs under way.
<b>Contact</b>	Mr Georg Karlaganis BUWAL, CH-3003 Bern + 41 31 322 69 55 georg.karlaganis@buwal.ad min.ch

## **Thailand**

<b>Title</b>	Monitoring Programme for organochlorine pesticides and polychlorinated biphenyls (PCBs)
<b>Objective(s)</b>	<ul style="list-style-type: none"> <li>- to examine the significance of organochlorine pesticides and polychlorinated biphenyls contaminant in the environment</li> <li>- to apply measures to reduce and / or eliminate the environmental concentrations of organochlorine pesticides and polychlorinated biphenyls</li> <li>- to support the establishment of the national environmental standards and guidelines as a basic information for the protection of the environment</li> </ul>
<b>Responsible Organisation(s)</b>	<ul style="list-style-type: none"> <li>- Pollution Control Department (PCD), Ministry of Science, Technology and Environment (MOSTE)</li> <li>-Department of Agriculture, Ministry of Agriculture and Cooperatives</li> <li>-Department of Medical Sciences, Ministry of Public Health</li> <li>-Environmental Research and Training Center, MOSTE</li> </ul>
<b>Project Funder(s)</b>	<ul style="list-style-type: none"> <li>-Pollution Control Department (PCD), Ministry of Science, Technology and Environment (MOSTE)</li> <li>-Department of Agriculture, Ministry of Agriculture and Cooperatives</li> <li>-Department of Medical Sciences, Ministry of Public Health</li> <li>-Environmental Research and Training Center, MOSTE</li> </ul>

## **Thailand**

<b>Title</b>	National Inventory of Sources of Dioxins and Furans Emissions in Thailand
<b>Objective(s)</b>	<ul style="list-style-type: none"><li>- to establish a national inventory of dioxins and furans emission sources and releases</li><li>- to identify and estimate potential sources of dioxins and furans from national activities</li><li>- to gain a better understanding of the types of sources that form and emit dioxins and furans</li></ul>
<b>Timeframe</b>	1998 - 2000
<b>Responsible Organisation(s)</b>	Pollution Control Department (PCD), Ministry of Science, Technology and Environment (MOSTE)
<b>Partner(s)</b>	<ul style="list-style-type: none"><li>- Department of Industrial Works, Ministry of Industry</li><li>- Department of Science Service, Ministry of Science, Technology and Environment</li><li>- Department of Agriculture, Ministry of Agriculture and Cooperatives</li><li>- Department of Health, Ministry of Public Health</li><li>- Bangkok Metropolitan Administration</li><li>-The Industrial Estate Authority of Thailand, Ministry of Industry</li><li>-The Federation of Thai Industries</li></ul>
<b>Project Funder(s)</b>	<ul style="list-style-type: none"><li>- Pollution Control Department (PCD), Ministry of Science, Technology and Environment</li><li>- German Technical Cooperation (GTZ), GmbH</li><li>- UNEP Chemicals, UNEP</li></ul>

## **Turkey**

<b>Title</b>	Monitoring of organochlorinated pesticides and PCBs in maternal placenta
<b>Objective(s)</b>	Monitoring of chlorinated pesticides and PCBs in the environment by way of pregnant women working in agriculture
<b>Timeframe</b>	2002 - 2006
<b>Responsible Organisation(s)</b>	Ministry of health Refik saydam Hygiene Institute Poison Research Department
<b>Contact</b>	Mr. H. Eknet Olcay Refik saydam Hygiene Institute Poison Research Department Cemal Gursel Cad, No. 18, 06100 sihiye Ankara-TURKEY +90 (312) 433 70 01 zehir@saglig.gov.tr

## Turkey

**Title** Monitoring of organochlorine pesticides and PCBs in biological and environmental material.

**Objective(s)** Objective of the project is to assess human exposure to organochlorine pesticides and PCBs and compare the levels with previous studies. Population groups from different parts of the country are selected.

**Timeframe** 1998 - 2001

**Responsible Organisation(s)** Refik Saydam Hygiene Center  
Poisons Research Directorate

**Project Funder(s)** Refik Saydam Hygiene Center

## UK

**Title** Environment Agency Pesticide Monitoring Programme

**Objective(s)** Monitoring covers England and Wales. The monitoring programme is strongly governed by statutory requirements e.g. Dangerous Substances Directives; Surface Water Abstraction Directive; Groundwater Directive; North Sea Conference; Water Framework Directive. The Agency is also required to undertake non-statutory monitoring tailored to known or predicted local problems.

**Timeframe** ongoing

**Responsible Organisation(s)** Environment Agency

**Publication** Environment Agency

**Comments** Pesticides 2000 available from April 2002

**Contact** Mr Andy Croxford  
NCEHS Environment Agency  
Evenlode House  
Howbery Park; Wallingford  
Oxon; OX10 8BD; UK  
+ 44 1491 828534  
andy.croxford@environment-agency.gov.uk

## UK

**Title** Various surveys for dioxins and PCBs in foods and dietary exposure of UK consumers to these chemicals as part of programme of food chemical

surveillance. Also statutory monitoring of PCBs to meet requirements of EC Directives.

**Objective(s)** Food Standards Agency surveys primarily carried out to estimate the dietary exposure to dioxins and PCBs of UK consumers of various age groups and other critical groups. Current projects cover shellfish; infant formulae; fish oil dietary supplements and licensed medicines; cows' milk; fats and oils used in food manufacture; and fruit and vegetables. There is also current work on animal feeding stuffs. Planned surveys for dioxins and PCBs include meat; eggs; fish; milk products and baby foods. Survey for polycyclic aromatic hydrocarbons (PAHs) in samples representing the UK diet. Statutory monitoring for PCBs (and PAHs) covers shellfish.

**Timeframe** 1988 for dioxins; 1994 for PCB congeners. - ongoing

**Responsible Organisation(s)** Food Standards Agency (previously the Ministry of Agriculture Fisheries and Food).

**Partner(s)** None

**Project Funder(s)** Food Standards Agency (previously the Ministry of Agriculture Fisheries and Food).

**Publication** Website: <http://www.food.gov.uk/science/surveillance/All> Food Surveillance Information Sheets from 1993 are available in English at the above website. Those published after 1 April 2000 are also available from the Food Standards Agency's library and can be supplied in Welsh on request. Those published before 1 April 2000 are available in English only from the MAFF library. Prior to 1993 MAFF results were published as Food Surveillance Papers - these are available in English only from the MAFF library.

**Contact** Mr Martin Gem  
NCEHS, environment  
agency; evenlode house;  
howbery park; wallingford;  
oxon; ox10 8bd; uk  
+ 44 10 7276 8724  
martin.gem@foodstandards.g  
si.gov.uk

**UK**

**Title** UK soil and herbage pollutant survey

**Objective(s)** To carry out a widespread survey of dioxins, PCBs, PAHs and metals in surface soils and herbage in England, Wales, Northern Ireland. The survey may be extended to include Scotland. The survey will include rural background locations on the basis of a 50 km. Grid and will also include sampling in the vicinity of significant sources and urban areas. Levels of pollutants will be compared with the results of previous studies in order to establish trends. Data will be cross-referenced to the UK toxic organic micropollutants programme. Levels of pollutants will be evaluated in terms of

potential risk to humans

**Timeframe** November - ongoing  
2000

**Responsible Organisation(s)** Environment Agency

**Partner(s)** DETR  
MAFF  
Food Standards Agency  
Northern Ireland Environment and Heritage Service  
National Assembly of Wales

**Project Funder(s)** DETR  
MAFF  
Food Standards Agency  
Northern Ireland Environment and Heritage Service  
National Assembly of Wales

**Comments** 27 months commence November 2000

**UK**

**Title** Passive sampling of persistent organic pollutants

**Objective(s)** To establish the performances of semi-permeable membrane devices in the field based on sampling rates, exposure periods, equilibrium aspects particulare effects and spatial differences. Sampling at lancaster University field station

**Timeframe** Febuary 1999 - 2001

**Responsible Organisation(s)** Environment Agency

**Partner(s)** Lancaster University

**Comments** 18 months, commencing february 1999

Final report about to be issued

**UK**

**Title** Working Party on Pesticide Residues annual surveillance of pesticide residues in food on sale in the UK.

**Objective(s)** Purpose of monitoring is threefold:  
1) to back up statutory approvals process by checking no unexpected residues are occurring  
2) to check that residues do not exceed statutory maximum residue levels  
3) check human dietary intakes of residues are at acceptable levels

**Timeframe** ongoing

**Responsible Organisation(s)** Pesticides Safety Directorate, Agency of the Ministry of Agriculture, Fisheries and Food.

**Partner(s)** Health and Safety Executive, Department of Health

**Project Funder(s)** PSD, Industry levy

**Comments** Monitoring is an annual rolling programme. Results published on an annual basis, approximately 8 months after year-end.

## UK

**Title** The UK Atmospheric POPs Monitoring Programme

**Objective(s)** Programme to monitor POPs (and potential new POPs) in air in the UK, the chemicals include, alfa + beta HCH; Pentachloronitrobenzene; Endosulfan; polybrominated diphenyl ethers (PBDEs); Polychlorinated Alkanes; DDT; Heptachlor; Chlordane; Cyclodiene.

**Timeframe** 1997 - ongoing

**Responsible Organisation(s)** AEA Technology Ltd., Harwell UK

**Partner(s)** Lancaster University

**Project Funder(s)** Department of the Environment, Transport + Regions

**Comments** First report due soon.

## UK

**Title** Prevention and management of obsolete pesticides in developing countries.

**Objective(s)** To support activities which deal with the current problems of obsolete stocks of pesticides; to increase awareness of the problems in order to help prevent future stockpiles and to apply appropriate solutions to existing stocks. Focus on Africa.

**Timeframe** ongoing

**Responsible Organisation(s)** The Pesticides Trust, Eurolink Center, 49 Effra Road-, London SW 1BZ, Tel:+44 171 274 8895 / Fax: +41 171 274 9084 / Email: pestrust@gn.apc.org/pesticidestrust

**Partner(s)** We are part of the NGO networks, Pesticides Action Network and International POPs Elimination Network, and we work closely with FAO and other National and International organizations active in this area.



**Project Funder(s)** United Kingdom Foundations.

**Comments** There is an important role for NGOs in raising awareness and monitoring the quality of activities in this area to ensure clean up actions for existing POPs stocks meet appropriate international standards.

**Ukraine**

**Title** The Elaborating of National Strategy and Action Plan on POPs Management and of Program of Atmospheric Emissions Reduce.

**Objective(s)** 1. Identification of main POPs (to be included in the future POPs Convention ) emission's stationary and mobile sources in Ukraine.  
 2. Making the inventory of POPs (to be included in the future POPs Convention ) production, use and stockpiles in Ukraine.  
 3. Making the inventory of POPs emissions according to the EMEP/CORINAIR Atmospheric Emission Inventory Guidebook in Ukraine.  
 4. The Elaborating of National Strategy and Action Plan on POPs Management and of Program of Atmospheric Emissions Reduce.

**Timeframe** 2000 - 2001

**Responsible Organisation(s)** Ministry of Environment and Natural Resources of Ukraine

**Partner(s)** IMinistry of Health of Ukraine, Ministry of Fuel and Energy of Ukraine, Ministry of Agricultural Policy of Ukraine, State Committee of Statistics of Ukraine, Ministry of Defence of Ukraine, Ministry of Transport of Ukraine.

**Project Funder(s)** State Budget

**USA**

**Title** The Integrated Atmospheric Deposition Network (IADN) (binational project of Canada and U.S.)

**Objective(s)** The Integrated Atmospheric Deposition Network (IADN), established by Annex 15 of the Great Lakes Water Quality Agreement (GLWQA) and mandated by the Clean Air Act, began operation in 1990. The objectives of IADN are to determine spatial and temporal trends of concentrations of priority persistent bioaccumulative toxic (PBT) chemicals, calculate atmospheric loadings (amounts of these chemicals deposited to the lakes), and to supply this information to environmental managers so that appropriate control actions can be pursued and progress towards goals can be tracked.

**Timeframe** 1990 - ongoing

**Responsible Organisation(s)** U.S. EPA Great Lakes National Program Office and Environment Canada (Meteorological Service of Canada and Ecosystem Health Division)

**Project Funder(s)** U.S. EPA-GLNPO and Environment Canada

**Publication** [www.msc.ec.gc.ca/iadn/](http://www.msc.ec.gc.ca/iadn/)  
 Resource list on this site <http://www.epa.gov/glnpo/glindicators/air/airb.html>  
 General description of program and U.S. indicator information  
 Publications can also be obtained by U.S. and Canadian contacts

**Contact** Ms Melissa Hulting  
 1. U.S. EPA  
 77 W. Jackson Blvd., Mail  
 Code G-17J

2. Meteorological Service of  
 Canada,  
 ARQP  
 4905 Dufferin Street,  
 Downsview, Ontario M3H  
 5T4  
 Environment Canada  
 (312) 886-2265  
[hulting.melissa@epa.gov](mailto:hulting.melissa@epa.gov)

## USA

**Title** Great Lakes Fish Monitoring Program

**Objective(s)** Support decisions on potential human exposure to pollutants and to provide indicators of the health of the Great Lakes ecosystem

**Timeframe** 1978 - ongoing

**Responsible Organisation(s)** Great Lakes National Program Office, US Environmental Protection Agency (USEPA/GLNPO)

**Partner(s)** USGS/BRD, Great Lakes States

**Project Funder(s)** USEPA/GLNP

**Publication** [www.epa.gov/glnpo](http://www.epa.gov/glnpo), publications

**Contact** Ms. Sandy Hellman  
 US. EPA, Great Lakes  
 National Program Office, 77  
 W. Jackson, Chicago, IL  
 312-353-5006  
[hellman.sandra@epa.gov](mailto:hellman.sandra@epa.gov)

## 2.2 National Action Plans Aiming at the Reduction and/or Elimination of the Releases of POPs

Updated information included from the following countries:

- |                             |                         |
|-----------------------------|-------------------------|
| 1. Armenia                  | 31. Mauritius           |
| 2. Australia                | 32. Mexico              |
| 3. Belgium                  | 33. Moldova             |
| 4. Brazil                   | 34. Monaco              |
| 5. Brunei                   | 35. Nepal               |
| 6. Bulgaria                 | 36. Netherlands         |
| 7. Canada                   | 37. New Zealand         |
| 8. Central African Republic | 38. Niger               |
| 9. Chad                     | 39. Norway              |
| 10. Chile                   | 40. Panama              |
| 11. Colombia                | 41. Peru                |
| 12. Croatia                 | 42. Philippines         |
| 13. Denmark                 | 43. Poland              |
| 14. Djibouti                | 44. Portugal            |
| 15. Ecuador                 | 45. Romania             |
| 16. Egypt                   | 46. Russia              |
| 17. Estonia                 | 47. Saudi Arabia        |
| 18. European Commission     | 48. Singapore           |
| 19. Fiji                    | 49. Slovenia            |
| 20. Finland                 | 50. South Africa        |
| 21. Gambia, The             | 51. Sudan               |
| 22. Germany                 | 52. Sweden              |
| 23. Ghana                   | 53. Switzerland         |
| 24. Hungary                 | 54. Togo                |
| 25. Indonesia               | 55. Trinidad and Tobago |
| 26. Japan                   | 56. United Kingdom      |
| 27. Kuwait                  | 57. United States       |
| 28. Laos                    | 58. Uzbekistan          |
| 29. Latvia                  | 59. Yemen               |
| 30. Lithuania               |                         |



**Algeria**

**Comments**

The National Implementation Plan of the Stockholm Convention on Pops will suggest and will determine the activities to eliminate and/or reduce the releases of POPs.

Ministry of Land Planning and Environment

**Armenia**

**Title**

"Enabling activities to facilitate early action on the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in the Republic of Armenia"

**Objective(s)**

The objective of this Enabling Activities proposal is to develop and formulate a National Implementation Plan (NIP) and thereby strengthen national capacity and enhance knowledge and understanding amongst decision-makers, managers, the industry, and the public at large on POPs. By achieving this objective the Republic of Armenia will meet the obligations of the Stockholm Convention on POPs and will be enabled to manage the elimination of POPs.

**Timeframe**

June 2002-2004

**Status**

Concurrent

**Responsible organisation**

Ministry of Nature Protection Republic of Armenia, Hazardous Substances and Wastes Management Department

**Partner**

Research institutes, NGOs, experts and private companies working in the field of environmental protection:

- Center of Environment Monitoring Ministry of Nature Protection Republic of Armenia;
- Research Institute of Environmental Hygiene and Preventive Toxicology;
- Research Institute of General Hygiene and Occupational Diseases;
- Institute of Hydroecology and Ichthyology;
- Plant Protection Research Institute;
- Soil Sciences and Agrochemistry Institute;
- "Centre of control and prevention of diseases" CJSC Ministry of Health Republic of Armenia;

- "Pare" Scientific-Production and Design State Closed Joint-Stock Company of the Ministry of Agriculture Republic of Armenia.

**Project Funder(s)**

Global Environmental Facility (GEF)

**Comments**

Within the framework of Project implementation there had been performed:  
- Inception Phase concluded by the Inception Workshop held in Yerevan on 26 July 2002 at the Academy of Science Republic of Armenia;  
- Training on POPs Inventory Procedures (INPOPs I) held in Yerevan on August 21-23 2002, Hotel "Hrazdan" and the Study Tour with visit to Sovetashen landfill, burial place of hazardous wastes (DDT) in Kharberd; Hrazdan Thermal Power Plant, "Mikacement" Ltd cement plant), and  
- Started POPs preliminary inventories and monitoring with organising Workshop on POPs Preliminary Inventories and Monitoring (POPs - II) held on 15-16 February 2003, Tsakhkadzor, Armenia with presentation of collected preliminary data

**Australia**

**Title** Elimination of Organochlorines Termiticides: Alternative Strategies for Controlling Termites in Australia.

**Status** Concurrent

**Australia**

**Title** The Management and control of Mastotemes in Horticultural Situations

**Objective(s)** Protection of the environment, public and occupational health, and to facilitate the development of horticulture, particularly tree crops.  
To replace the use of Mirex to control Mastotermes colonies in the Top End of the Northern Territory and northern Western Australia  
To develop efficient control procedures against Mastotermes in horticulture crops. Studies of the biology of the pest so that the effectiveness of treatment can be assessed.  
Communication with horticulturist on control techniques

**Timeframe** A three year programme completed in 1998. The most effective bait is being further trialed by the DPIF in order to establish data and proceed to registration.

**Status** Finished

**Responsible organisation** Lead Agency: The CSIRO Division of Entomology  
Researcher: Mr. Leigh Miller

**Partner** The Northern Territory Department of Primary Industry and Fisheries (DPIF) and The Western Australia Department of Agriculture (WADA)

**Project Funder(s)** Funded under Rural Industry Research and Development Corporation (RIRDC) Project No. CSE-59A.

**Data source** RIRDC Report RIRDC Project No. CSE-59A

**Comments** A promising bait was trialed and since the completion of the RIRDC project testing is being continued by DPIF. The biology and relationship with other termite species is active and dynamic.  
A series of large scale, long term field trials were established to monitor termite activity in the undisturbed areas. After three years continuous observation some of the plots were used to assess the effect of treatment with varied bait formulations

**Belgium**

**Title** 1. plan d'élimination des appareils aux PCB et/ou contenant des PCB (responsables c1, c2, c3); (objectifs voir b.1, b.2, b.3)

**Objective(s)** b.1. décontaminer et/ou éliminer tous les appareils aux PCB en région Flamande au plus tard le 31 décembre 2005 (responsable c.1) (timeframe voir f1)  
b.2. décontaminer et/ou éliminer tous les appareils aux PCB en région Wallonne au plus tard le 31 décembre 2005 (responsable c.2) (timeframe voir f2)  
b.3. décontaminer et/ou éliminer tous les appareils aux PCB en région Bruxelles-Capitale au plus tard le 2 juin 2005 (responsable c.3) (timeframe voir f3)

**Timeframe** See comments

**Partner** d.1. AMINAL (division de l'inspection et division des permis d'environnement)  
d.2. DGRNE (division de la police de l'environnement + division des permis et autorisations)  
d.3. IBGE (division de l'inspectorat et logistique)

**Data source** D.S.1. arrêté du Gouvernement Flamand du 17 mars 2000 concernant

**Comments**

l'établissement de plans d'élimination d'appareils aux PCB et contenant des PCB.

D.S.2. arrêté du Gouvernement Wallon du 25 mars 1999 concernant l'établissement de plans d'élimination d'appareils aux PCB et contenant des PCB modifié le 13 avril 2000.

D.S.3. arrêté du Gouvernement du 20 décembre 1999 concernant l'établissement un plan régional d'élimination et de décontamination des PCB-PCT.

Responsable Org.: c.1. OVAM: région Flamande (partenaire voir d.1)

c.2. DGRNE: région Wallonne (partenaire voir d.2)

c.3. IBGE: région Bruxelles-Capitale (partenaire voir d.3)

Timeframe: f.1. les appareils aux PCB devant être inventoriés, doivent en fonction de leur année de fabrication être décontaminés et/ou éliminés pour: 31-12-2000 si l'année de fabrication est inconnue ou antérieure à 1971

31-12-2001 si l'année de fabrication est antérieure à 1972

31-12-2002 si l'année de fabrication est antérieure à 1973

31-12-2003 si l'année de fabrication est antérieure à 1974

31-12-2004 si l'année de fabrication est antérieure à 1975

31-12-2005 pour tous les autres appareils

f.2. les appareils aux PCB devant être inventoriés, doivent en fonction de leur année de fabrication être décontaminés et/ou éliminés pour:

31-12-2001 si l'année de fabrication est inconnue ou antérieure à 1972

31-12-2005 si l'année de fabrication est postérieure ou égale à 1972

f.3. les appareils aux PCB devant être inventoriés, doivent en fonction de leur année de fabrication être décontaminés et/ou éliminés pour

31-12-2000 si l'année de fabrication est inconnue ou antérieure à 1970

30-06-2001 si l'année de fabrication est antérieure à 1971

30-06-2002 si l'année de fabrication est antérieure à 1972

30-06-2003 si l'année de fabrication est antérieure à 1973

30-06-2004 si l'année de fabrication est antérieure à 1974

30-06-2005 si l'année de fabrication est antérieure à 1975

31-12-2005 si l'année de fabrication est postérieure à 1975

Comments:

1. Région Flamande OVAM

Personne de contact : Madame Gwen DONS Kan. De Deckerstraat, 22-26  
2800 MECHELEN BELGIE

2. Région Wallonne DGRNE

Personne de contact : Madame Christine Nemegeer Avenue Prince de Liège,  
15

5000 NAMUR BELGIQUE

3. Région Bruxelles-Capitale (IBGE)

Personne de contact : Madame Barbara Dewulf Gulledelle 100

1040 BRUXELLES BELGIQUE

**Belgium**

**Title**

Mise au point d'un programme prioritaire de substitution d'équipements électriques à Askarels par d'autres types de transformateurs.

**Objective(s)**

Objectifs:

1- Créer un centre de regroupement des déchets d'Askarels.

2- Engager une opération prioritaire de remplacement des équipements électriques à Askarel qui se rouvent dans des lieux recevant du public.

3- Eliminer définitivement les déchets de PCB, la seule solution réside dans l'incinération à haute température.

Rendre systématique l'identification des contenants de PCB et la nature de décontamination et/ou de la destruction des équipements contenant des PCB.

**Status**

No info

**Brazil**

**Title** Establishment of Information System on Obsolete Pesticides and other Dangerous Substances Stocks

**Objective(s)** To set up an interinstitutional system of information for control and management of the final destination (disposal) of obsolete toxic products

**Timeframe** 28/12/2001- 31/12/2003

**Status** Concurrent

**Responsible organisation** Brazilian Institute of the Environment and Renewable Natural Resources - IBAMA

**Partner** Fundacao Centro Tecnologico de minas Gerais - CETEC (Minas Gerais Technological Center Foundation)  
State Environmental Agencies  
State Health Agencies  
State Agriculture Agencies  
National Health Foundation - FUNASA

**Project Funder(s)** Ministry of Environment

**Data source** Ministry of Environment, Secretariat for Environmental Quality in Human Settlements

**Brazil**

**Title** Report on Remaining Pesticides

**Objective(s)** Identification of remaining stocks of banned pesticides in Parana

**Timeframe** Ends in 2002

**Responsible organisation** State Agriculture and Supply Secretariat and State Environment Secretariat

**Partner** Parana Water Resources Agency- Suderhsa and Parana Environmental Institute

**Project Funder(s)** State Agriculture and Supply Secretariat - Enforcement Department

**Data source** State Agriculture and Supply Secretariat Enforcement Department - Report: Remaining Pesticides- 2002

**Comments** 2002 Report- holding information on 138 tons of organochlorinated pesticides in stock in Parana under various conditions

**Brazil**

**Title** The use of DDT in Malaria Control Programs in Brazil.

**Status** No info

**Brunei**

**Status** No info

**Data source** Department of Agriculture

**Comments** Department of Agriculture, Ministry of Industry and Primary Resources, Brunei Darussalam had pursued during the last two years several programmes on the introduction of alternative/safer chemicals. The department also introduced the concept of integrated pest management. Integrated pest management programme was conducted especially on the introduction of biological control agents. The project was financed by the government although chemical/biological agents was the courtesy of the agro-chemical dealers.

**Bulgaria**

**Title** Development of National Implementation Plans for the Management of Persistent Organic Pollutants in Bulgaria - GF/2732-02-4454

**Objective(s)** Strengthening national capacity to manage persistent organic pollutants



**Timeframe**

(POPs) and to assist the government in meeting their obligations under the Stockholm POPs Convention

**Status**

2002 - 2004 (24 months)

**Responsible organisation**

Concurrent

**Partner**

Ministry of Environment and Water

UNEP Chemicals

BALKAN SCIENCE AND EDUCATION CENTRE OF ECOLOGY AND ENVIRONMENT

**Project Funder(s)**

GEF, Germany

**Canada**

**Title**

Canada POPs Fund

**Objective(s)**

The objective for the Canada POPs Fund is to significantly reduce and/or eliminate foreign sources of POPs that are impacting health and environment world-wide, and particularly in the Canadian Arctic. The POPs Fund is being used to assist developing countries and countries with economies in transition to build their own capacities to address POPs issues. The Fund is administered by the World Bank and is available for a variety of projects, tailored to the needs of specific countries, such as: developing POPs inventories; establishing the regulatory mechanisms and building the institutional framework needed to control POPs releases; and finding alternatives chemicals or strategies to the use of POPs.

**Timeframe**

March 2000- \$20 million allocated over five years (2000-2005)

**Responsible organisation**

World Bank

**Partner**

World Bank, Canadian International Development Agency (CIDA), UNEP, and other multilateral organizations

**Project Funder(s)**

Government of Canada

**Comments**

A variety of projects are under way or completed under the Canada POPs Fund. Inquiries and proposals should be directed to the World Bank (e-mail Steve Gorman at: [sgorman@worldbank.org](mailto:sgorman@worldbank.org)).

**Canada**

**Title**

Chlorinated Substances Action Plan (CSAP)

**Objective(s)**

The Chlorinated Substances Action Plan is part of an overall Canadian federal strategy to protect human health and the environment from the effects of toxic substances. This science-based action plan includes both regulatory and non-regulatory measures targeting chlorinated substances of concern. It is an important component of Canada's domestic and international efforts to address those substances that threaten our health and the environment.

The CSAP approach is based on the scientific community's conclusion that current evidence does not support a complete ban on all uses and releases of chlorine and chlorinated substances. However, there is scientific evidence that the use or release of certain toxic chlorinated substances should be virtually eliminated or significantly reduced.

Pollution prevention is at the core of the CSAP. The CSAP has five components:

1. Targeting critical uses and products
2. Improving scientific understanding
3. Studying public health and socio-economic effects
4. Better informing the Canadian public
5. Promoting and leading international efforts

**Timeframe**

on-going

**Responsible organisation** Environment Canada, Health Canada  
**Partner** Environment Canada, Health Canada, Industry  
**Project Funder(s)** Environment Canada  
**Data source** www.ec.gc.ca/csap/

CSAP 2000 Progress Report (September 2000), Sustainable Consumption Division

**Canada**

**Title** Great Lakes Binational Toxics Strategy (GLBTS)  
**Objective(s)** In keeping with the objective of the Revised Great Lakes Water Quality Agreement of 1978, as amended by the Protocol signed November 18, 1987 (1987 GLWQA) to restore and protect the Great Lakes, the purpose of this Binational Strategy (the Strategy) is to set forth a collaborative process by which Environment Canada (EC) and the United States Environmental Protection Agency (USEPA), in consultation with other federal departments and agencies, Great Lakes states, the Province of Ontario, Tribes, and First Nations will work in co-operation with their public and private partners toward the goal of virtual elimination of persistent toxic substances resulting from human activity, particularly those which bioaccumulate, from the Great Lakes Basin, so as to protect and ensure the health and integrity of the Great Lakes ecosystem. In cases where this Strategy addresses a naturally-occurring substance, it is the anthropogenic sources of pollution that, when warranted, will be targeted for reduction through a life-cycle management approach so as to achieve naturally-occurring levels. An underlying tenet of this Strategy is that the governments cannot by their actions alone achieve the goal of virtual elimination. This Strategy challenges all sectors of society to participate and co-operate to ensure success.

The goal of virtual elimination will be achieved through a variety of programs and actions, but the primary emphasis of this Strategy will be on pollution prevention. This Strategy reaffirms the two countries' commitment to the sound management of chemicals, as stated in Agenda 21: A Global Action Plan for the 21st Century and adopted at the 1992 United Nations Conference on Environment and Development. The Strategy will also be guided by the principles articulated by the International Joint Commission's (IJC) Virtual Elimination Task Force (VETF) in the Seventh Biennial Report on Great Lakes Quality.

This Strategy has been developed under the auspices of the Binational Executive Committee (BEC), which is charged with co-ordinating the implementation of the binational aspects of the 1987 GLWQA. The BEC is co-chaired by EC and USEPA, and includes members of the Great Lakes states, the Province of Ontario, and other federal departments and agencies in Canada and the United States.

The Strategy establishes specific reduction challenges for an initial list of Persistent Toxic Substances targeted for virtual elimination. The majority of the POPs included in the Stockholm Convention (aldrin, dieldrin, chlordane, DDT, hexachlorobenzene, mirex, PCBs, dioxins/furans and toxaphene) are Level 1 substances around which governments will concentrate actions and efforts. The remaining two POPs included in the Stockholm Convention (endrin and heptachlor) are Level 2 substances which are identified by one or both countries as having the potential to significantly impact the Great Lakes ecosystem through their use and/or release.

**Timeframe** Challenge milestones to be met between 1997 and 2006 with ongoing options

<b>Status</b>	for assessment and renewal.
<b>Responsible organisation</b>	Concurrent
<b>Partner</b>	Canada and the United States
<b>Data source</b>	This is a collaborative process between Environment Canada, the United States Environmental Protection Agency in consultation with other federal departments and agencies, Great Lakes States, the province of Ontario, Tribes and First Nations as well as public and private partners.
<b>Comments</b>	www.binational.net <p>The Great Lakes Binational Toxics Strategy's 2002 Annual Progress Report will be issued in February 2003. An electronic version of the report can be found at <a href="http://www.binational.net">www.binational.net</a> - The Binational Toxics Strategy has substance-specific work-groups, and they are key to the success of the GLBTS. Each workgroup is following a "four-step analytical process" for organizing its activities related to meeting the GLBTS Challenge goals. The four steps include gathering information; analyzing current regulations, initiatives, and programs; identifying cost-effective options to achieve further reductions beyond those required by regulations; and implementing actions to work toward the goal of virtual elimination of the targeted substances. All of the workgroups are implementing actions and working towards the goal of virtual elimination of the targeted substance. Various workgroup highlights are presented in the Binational Toxics Strategy's 2002 Annual Progress Report. OUTLOOK 2003 This next year, 2003, presents a crucial opportunity for stakeholders to define the long-term future of the GLBTS. As current Level I substances continue to decline and current challenge goals are met and/or surpassed, stakeholders must consider next steps to move closer toward the ultimate goal of virtual elimination of persistent toxic substances in the Great Lakes basin. This will require careful consideration of additional activities to effect reductions of active Level I substances (e.g., mercury, PCBs, dioxins/furans, HCB/B(a)Ps), especially where some of the "low hanging fruit" projects have already been accomplished. It may also mean acknowledging that there are Level I substances for which there are no further significant voluntary reduction opportunities within the GLBTS. This is because the issues at stake are being addressed in another fora (e.g., alkyl lead in aviation fuel by national PBT programs) or because reservoir sources are being addressed over long time periods by other programs (e.g., pesticide stockpiles by State / Provincial agricultural clean sweep programs). Of course the GLBTS will continue to monitor and report on the progress of these other efforts, as they proceed. To ensure continuing progress, the GLBTS must continue to work closely with the national programs of each country, as well as larger multi-stakeholder geographic fora such as the Commission for Environmental Cooperation's Sound Management of Chemicals (CEC SMOC) and the United Nations Environment Program's Persistent Organic Pollutants (UNEP POPs) programs. Out-basin sources of persistent toxic substances and their relative contributions to the Lakes must be reasonably well understood in order to set-forth realistic in-basin reduction goals and to maintain realistic expectations of the attendant impacts to levels in the ecosystem. To this end, the GLBTS will be sponsoring a long-range transport of toxic substances Workshop in the summer 2003, in Chicago that is designed to help answer these questions. The GLBTS intends to co-host its May 2003 Stakeholder Forum and Integration Workgroup Meetings with the CEC SMOC, in an effort to work more closely with this organization. Stakeholders should also take consideration of new or emerging chemicals of concern in the basin. With respect to chemicals of emerging concern, the GLBTS states that, "EC and USEPA in cooperation with their partners will periodically examine the substances addressed by the Strategy to determine whether any Level II substances should be elevated to the Level I list, whether new substances which present threats to the Great Lakes</p>

ecosystem should be considered for inclusion on the Level I or II lists, and whether any other changes should be made". It also states, "Existing processes for nominating or elevating substances will be used, e.g., Bioaccumulative Chemicals of Concern (BCCs) in the U.S., the Canadian Environmental Protection Act (CEPA) in Canada, or LaMP Critical Pollutants." To this end, the GLBTS Integration Workgroup intends to design a decision protocol for considering new substances through the GLBTS, which integrates the existing processes above, with some important basin specific questions regarding the appropriate vehicles for seeking reductions of particular substances.

## **Canada**

### ***Title***

Monitoring under the Accelerated Reduction/Elimination of Toxics (ARET)

### ***Objective(s)***

The Accelerated Reduction and Elimination of Toxics (ARET) program was Canada's first major voluntary effort to secure a safe and healthy environment while contributing to a prosperous economy. ARET sought, through voluntary actions, the virtual elimination of 30 persistent, bioaccumulative and toxic (PBT) substances, as well as significant reductions in emissions of another 87 toxic substances. Participants from eight major industrial sectors and government used the ARET program to prioritize emission reductions and determine appropriate reduction and elimination methods.

The ARET Program ran from 1995 to 2000, with the goals of achieving a 90-per-cent reduction of PBT substance emissions and a 50-per-cent emission reduction of 85 toxic substances by the year 2000, measured against declared base-year levels.

The final report of the current ARET program will be in early 2003. It will demonstrate that releases of all ARET substances in 2000 were 27,800 t lower than in base year levels; PBT substances were reduced by 61%, while all others were reduced by 72%. In all, 318 separate facilities representing 171 corporations participated in the Program.

There were four substances included on the global UNEP POPs Agreement which were reported on the A-1 list of ARET. These include: hexachlorobenzene, 2,3,7,8-tetrachlorodibenzofuran, 2,3,7,8-tetrachlorodibenzo-p-dioxin and PCBs.

ARET participants reported some impressive reductions for the POPs listed on ARET. From base year levels participants succeeded in reducing releases by: 99.6% for 2,3,7,8-tetrachlorodibenzo-p-dioxin, 99.5% for 2,3,7,8-tetrachlorodibenzofuran, 100% for Hexachlorobenzene and 84% for PCBs.

### ***Timeframe***

1994-2000

### ***Status***

Finished

### ***Responsible organisation***

Environment Canada was the key supporter of ARET, although the program was designed, implemented and overseen by an external multi-stakeholder committee. Environment Canada provided the ARET Secretariat.

### ***Partner***

The ARET Stakeholders Committee is made of representatives from industry (Canadian Chemical Producers' Association, Canadian Electricity Association, The Alliance of Manufacturers and Exporters of Canada, Canadian Manufacturers of Chemical Specialties, Canadian Petroleum Products Institute, Canadian Pulp & Paper Association, Canadian Steel Producers Association, Mining Association of Canada, Aluminium Industry Association), health and professional associations (Chemical Institute of Canada, Comité de santé environnementale du Québec), provincial governments (Ontario, British Columbia, Nova Scotia), and the federal government (Environment Canada,

Industry Canada, Health Canada).

**Project Funder(s)** Environment Canada for Secretariat, individual participants for release reduction actions

**Data source** All sources are in English. Available documents can be accessed on the ARET website, as follows: <http://www.ec.gc.ca/aret/>

**Comments** The short-term goals of the ARET program were established to the year 2000; a renewal process for ARET has been initiated. The new program will be called ARET 2 and it is expected to be officially launched in mid-2003. The new program has a substantially expanded target substance list which includes the following POPs: mirex, hexachlorobenzene, PCBs, and 17 dioxins and furans.

Monitoring of data in the initial ARET program was the responsibility of the individual participant. Monitoring of data in the ARET 2 program, while still a responsibility of the individual participant, will receive enhanced credibility through a 3rd party verification component.

**Canada**

**Title** Pest Control Products Act (PCPA)

**Objective(s)** In December, 2002, the new PCPA received Royal Assent and is expected to come into force some time in 2004 pending the development of supporting regulations. This new PCPA replaces the existing PCPA, which was passed in 1969. The new PCPA includes several provisions which put into legislation the current practices of the PMRA which are linked to Canada's commitment to the Stockholm Convention. These include, briefly:

- The need for Canada to fulfill its international obligations in relation to pest management is acknowledged
- Applicable policies of the Government of Canada that are consistent with the objectives of the new PCPA must be duly reflected in the decisions regarding the regulation of pesticides (e.g., TSMP)
- Contaminants are included in the definition of pest control products, which are therefore considered in the assessment of pest control products
- The minimization of risks associated with the use of pesticides is required
- The pre-market assessment of pesticides required by the new PCPA is inherently precautionary. In addition, the precautionary approach is included in the new PCPA as it applies to pesticides already registered, and is consistent with the definitions in the 1992 Rio Declaration and the 1999 Canadian Environmental Protection Act
- Applicants and registrants are obliged to report any new information regarding adverse effects of the product.
- With regard to the re-evaluation or special review of registered pesticides, the new PCPA:
  - (1) requires, as a minimum, that re-evaluation of pesticides be initiated within a year after 15 years had elapsed since the most recent approval;
  - (2) requires that a special review would have to be initiated if a member country of the Organization for Economic Cooperation and Development (OECD) has prohibited all uses of an active ingredient for health or environmental reasons, or if information provided by another federal or provincial / territorial department, or through the reporting of adverse effects, reveals that risks or value may be unacceptable

(3) allows any person to make a request for a special review by the Minister.

-Registrants are required to disclose information on the sales of their registered pest control products as a means to estimate pesticide use

-Export of pesticides is subject to the Export Control Regulations of CEPA 1999

-Provisions for post-registration controls include increased powers of inspection and higher maximum penalties, up to \$1million for the most serious offences

**Timeframe**

Ongoing; PCPA updated in 2002

**Status**

Concurrent

**Responsible organisation**

Health Canada

**Data source**

for more information visit [www.hc-sc.gc.ca/pmra-arla](http://www.hc-sc.gc.ca/pmra-arla)

**Canada**

**Title**

The Canada-Wide Standards for Dioxins and Furans (CWS)

**Objective(s)**

Canada-wide Standards (CWSs) are national standards developed under the Canadian Council of Ministers of the Environment (CCME) Canada-wide Environmental Standards Sub-Agreement. CWSs flow from a political commitment by federal, provincial and territorial Ministers to address key environmental protection and health risk issues that require concerted action across Canada. The standards are developed jointly by all jurisdictions that signed onto the Harmonization accord with the coordination of CCME.

The Canada-wide Standards process for dioxins and furans has focussed on anthropogenic sources that are releasing dioxins and furans to the atmosphere .

In January 1999, the Federal/Provincial Task Force on Dioxins and Furans released the first Dioxins and Furans and Hexachlorobenzene Inventory of Releases, followed by a draft Update issued by Environment Canada in October 2000 and a revised Update published in February 2001. The latest Update documented the current understanding of anthropogenic sources in Canada releasing dioxins and furans. The Inventory of Releases and the Updates list emissions from over 20 sectors by province and territory, and provides national summaries for each sector.

Six priority sectors, varying from regional to national in scope, accounting for about 80% of national emissions in the 1999 inventory have been identified as priorities for early action. These are waste incineration (municipal solid waste, hazardous waste, sewage sludge and medical waste); burning salt laden wood in coastal pulp and paper boilers in British Columbia; residential wood combustion; iron sintering; electric arc furnace steel manufacturing; and conical municipal waste combustion in Newfoundland.

To date, CWSs have been endorsed for the coastal pulp and paper boiler, and waste incineration sectors, and proposed for the iron sintering and steel-making electric arc furnace sectors. The CWS for conical municipal waste combustion in Newfoundland and Labrador has been drafted. A CWS for dioxins./furans will not be developed for residential wood combustion since a recent Canadian study showed that the dioxin/furan contribution from this sector is lower than originally estimated. However, this sector is being addressed under the CWS process for PM/Ozone. Other sectors that are potentially a significant source of dioxin/furan release, such as open burning, are being reviewed by CCME.

<b>Timeframe</b>	The information in the dioxins and furans inventory will be refined and updated on a regular basis through a variety of sources including the National Pollutants Release Inventory as a means of tracking progress and as a means of identifying any future sources of releases that must be addressed. 2001-2006
<b>Status</b>	Concurrent
<b>Responsible organisation</b>	Canadian Council of Ministers of the Environment (CCME)
<b>Partner</b>	Stakeholders including industry, environmental groups and First Nations
<b>Project Funder(s)</b>	All Canadian jurisdictions through the CCME. The federal government has provided additional funding. Stakeholders also contribute their time and resources.
<b>Comments</b>	for more information visit <a href="http://www.ccme.ca/">www.ccme.ca/</a>

Note: Hexachlorobenzene is not on the list for the development of Canada-wide Standards, but because it is released from the same sources as dioxins/furans, any action that will be taken for the reduction of dioxins/furans will also affect the reduction of hexachlorobenzene.

## Canada

<b>Title</b>	The Sound Management of Chemicals (SMOC) initiative under the North American Agreement on Environmental Cooperation (NAAEC) - North American Regional Action Plans (NARAPs)
<b>Objective(s)</b>	<p>Council Resolution #95-5, Sound Management of Chemicals commits the Governments of Canada, Mexico and the United States to cooperate on improving the sound management of chemicals in North America. The Resolution gives priority to the management and control of substances of mutual concern that are persistent, bioaccumulative and toxic, but also allows for cooperation on a broader scale for the sound management of chemicals in the three countries. Council Resolution #95-5 was developed under the authority of the North American Agreement on Environmental Cooperation (NAAEC) and advances many of the commitments and obligations set out in the NAAEC. The Council (of Ministers) is the governing body of the Commission for Environmental Cooperation (CEC), which was established as part of the NAAEC.</p> <p>Council Resolution #95-5 required that three substances, in addition to PCBs, be selected for development of North American Regional Action Plans (NARAPs) from among 12 persistent organic pollutants identified in the United Nations Environment Programme (UNEP) Governing Council Decision 18/32 of May 1995. In 1997, mercury, DDT and chlordane were selected after consultations with stakeholders from each of the respective countries. The selected substances are also the subject of discussion in other international forums primarily because they are persistent, bioaccumulative and toxic and are transported across national boundaries through air and watersheds and traded products.</p> <p>All the substances listed in the UNEP Governing Council Decision were considered by the Working Group when developing this initial group of NARAPs. Several were not chosen for NARAPs because the Parties had already banned their manufacture and use (i.e., toxaphene, aldrin, dieldrin, endrin, mirex, and heptachlor). The Parties agreed however to work together to promote action on these substances in other international forums.</p> <p>There are existing NARAPs for chlordane, DDT, mercury and PCBs. Other action plans are under development or being considered for action for lead, dioxin/furans/hexachlorobenzene and lindane.</p>

<b>Timeframe</b>	A substance selection task force has developed a protocol outlining criteria for the selection of future substances under this initiative. The NAAEC was signed in 1994; the Sound Management of Chemicals Working Group was established in 1995.
<b>Status</b>	Concurrent
<b>Responsible organisation</b>	Canada, The United States, Mexico, led by their respective Ministers of the Environment. Chairmanship rotates on an annual basis with Canada hosting the next meeting in Ottawa, June 2002
<b>Partner</b>	Canada, The United States, Mexico with a Secretariat of the North American Commission for Environmental Co-operation managing the operations and projects from their permanent headquarters in Montreal, Canada and a branch office in Mexico City.
<b>Project Funder(s)</b>	The three Parties each contribute \$3,000,000 US annually to the program.
<b>Data source</b>	www.cec.org
<b>Comments</b>	Existing NARAPs- Chlordane, DDT PCBs, and Mercury New NARAP - Dioxins/Furans and Hexachlorobenzene Nominated NARAP – Lindane

## Canada

<b>Title</b>	The Sound Management of Chemicals (SMOC) initiative under the North American Agreement on Environmental Cooperation (NAAEC) - North American Regional Action Plans (NARAPs)
<b>Objective(s)</b>	<p>Council Resolution #95-5, Sound Management of Chemicals commits the Governments of Canada, Mexico and the United States to cooperate on improving the sound management of chemicals in North America. The Resolution gives priority to the management and control of substances of mutual concern that are persistent, bioaccumulative and toxic, but also allows for cooperation on a broader scale for the sound management of chemicals in the three countries. Council Resolution #95-5 was developed under the authority of the North American Agreement on Environmental Cooperation (NAAEC) and advances many of the commitments and obligations set out in the NAAEC. The Council (of Ministers) is the governing body of the Commission for Environmental Cooperation (CEC), which was established as part of the NAAEC.</p> <p>Council Resolution #95-5 required that three substances, in addition to PCBs, be selected for development of North American Regional Action Plans (NARAPs) from among 12 persistent organic pollutants identified in the United Nations Environment Programme (UNEP) Governing Council Decision 18/32 of May 1995. In 1997, mercury, DDT and chlordane were selected after consultations with stakeholders from each of the respective countries. The selected substances are also the subject of discussion in other international forums primarily because they are persistent, bioaccumulative and toxic and are transported across national boundaries through air and watersheds and traded products.</p> <p>All the substances listed in the UNEP Governing Council Decision were considered by the Working Group when developing this initial group of NARAPs. Several were not chosen for NARAPs because the Parties had already banned their manufacture and use (i.e., toxaphene, aldrin, dieldrin, endrin, mirex, and heptachlor). The Parties agreed however to work together to promote action on these substances in other international forums.</p> <p>The chlordane NARAP is essentially complete and was successful in that chlordane is no longer manufactured or registered for use in Canada, the U.S.</p>



and Mexico. It is anticipated that work on the development and testing of alternatives along with information sharing, training and technical assistance will continue. A report describing how the recommended actions were implemented is in preparation after which the Chlordane Implementation Task Force, having completed its work, will be disbanded.

The DDT Implementation Task Force in cooperation with the CEC has successfully negotiated external funding to support capacity building projects to assist Mexico in developing safe and effective measures to control malaria while at the same time reducing/eliminating the use of DDT. Since 1997, the amount of DDT used on an annual basis has declined by approximately 50%.

In June 1999, the Council approved the development of two new NARAPs - one for Dioxins/Furans and Hexachlorobenzene and one on environmental monitoring and assessment. Consideration is being given to two additional candidates, one of which is Lindane. A decision on whether to proceed with a NARAP on Lindane will be made at the September 2000 SMOC meeting.

**Timeframe**

**Partner**

**Project Funder(s)**

**Comments**

ongoing  
Canada, the United States of America and Mexico

Canada, the United States of America and Mexico

Responsible Orgs:Canada, the United States of America and Mexico: The NARAPs website is: [www.cec.org](http://www.cec.org)

**Central African Republic**

**Title**

**Objective(s)**

**Timeframe**

**Responsible organisation**

**Partner**

**Project Funder(s)**

**Comments**

Projet POPs R.C.A.

Elimination ou réduction de l'accumulation des Polluants organiques persistants (POPs)

Le Projet à une durée de deux (2) ans et va démarrer s'il y a Financement

Ministère des Eaux et Forets Chasses Pêches et de l'Environnement

- Ministère de la Santé Publique

- Ministère de l'Agriculture et de l'Elevage

-Ministère de Commerce

-Ministère des finances (Douanes)

-Financement de Missions de Sensibilisation, des ateliers de formation et d'Information

-Achat de Matériels Informatiques et autres

-Connection sur Internet

La R.C.A a signé et ratifié la convention sur les POPs condition exigée pour bénéficier d'une Subvention pouvant permettre de réaliser les activités d'Elimination des pesticides absoutes.

**Chad**

**Title**

**Objective(s)**

**Timeframe**

**Partner**

**Project Funder(s)**

**Data source**

Projet pilote d'appui à la recherche - Développement sur la Lutte Intégrée (IPM) dans le bassin du Lac-Tchad

Réduire les pertes dues au fléau grâce à la mise en oeuvre des techniques de Lutte Intégrée (IPM).

Bassin du Lac-Tchad (Cameroun, Niger, Nigéria et Tchad)

Deux (2) ans à partir de Juillet 2000

CBLT/FAT/BAD

(Banque Africaine de Développement)

FAT/BAD

Département de la Planification et de l'exécution des projets

CBLT B.P. 727

N'Djaména

Tchad

**Comments**

Responsible Organization(s):  
 Commission de Bassin de Lac-Tchad (CRLT)  
 Le projet permettra de limiter l'utilisation superflue et inappropriée des pesticides.

**Chile****Status**

Concurrent

**Data source**

Comisión Nacional del Medio Ambiente (CONAMA).  
 Servicio Agrícola y Ganadero (SAG), Ministerio de Agricultura.  
 Asociación Nacional de Fabricantes e Importadores de Productos Fitosanitarios Agrícolas A.G. (AFIPA A.G.)  
 Asociación Gremial de Industriales Químicos de Chile (ASIQUM)

**Comments**

La Asociación Gremial de Industriales Químicos de Chile /ASIQUM) ha programado iniciar, en coordinación con las autoridades pertinentes, algunas actividades, algunas actividades relacionadas con la evaluación y el monitoreo de Dioxinass, Furanos y Bifenilos Policlorados, durante el segundo semestre del presente año.  
 No hay actividades enfocadas al reemplazo o reducción de las liberaciones de Contaminantes Orgánicos Persistentes (CONAMA)

**Chile****Title**

"Transferencia de Tecnología canadiense para mejorar el uso y manejo de plaguicidas en la agricultura chilena".

**Objective(s)**

Gobierno de Chile y Agencia Canadiense para el Desarrollo Internacional (ACDI)

**Timeframe**

Tres años de duración, iniciados en 1998. (1998-1991)

**Status**

Finished

**Responsible organisation**

Ministerio de Agricultura de Chile

**Partner**

Participantes principales del proyecto:  
 -Ministerio de Agricultura, representado por el Servicio Agrícola y Ganadero (SAG) y la Oficina de Estudios y Políticas Agrarias (ODEPA).  
 -Consejo de Investigación y Productividad de Nueva Brunswick (RPC).

Participantes de Chile, activos y depositarios del proyecto:  
 -Organizaciones del sector público a nivel regional y central:  
 Ministerio de Salud; Instituto Nacional de Investigación Agropecuaria (INIA); Dirección del Trabajo; Ministerio de Educación; Servicio Nacional de la Mujer.  
 -Proveedores de salud: Asociación Chilena de Seguridad (ACHS); Mutual de Seguridad; Instituto de Seguridad del Trabajo (IST).  
 - Industria de plaguicidas: Asociación Nacional de Fabricantes e Importadores de Productos Fitosanitarios Agrícolas A.G. (AFIPA); Importadores y Productores de Productos Fitosanitarios para la Agricultura A.G.  
 -Agricultores: Mesa Mujer Rural; Cooperativa Campesina Intercomunal Peumo Ltda.; Cooperativa Valle Central Ltda.; Cooperativa Campesina Valle Convento Viejo; Movimiento Unitario Campesino y Etnias de Chile; Asociación Nacional de Mujeres Rurales e Indígenas  
 -Industria privada: Bioforest S.A.; SOBITEC; COAGRA.

Participantes de Canadá:  
 -Agricultura y Agroalimentos Canadá; Ministerio de Agricultura y Alimentos de British Columbia; Agencia de Inspección de Alimentos Canadienses; Servicio para la Vida Silvestre Canadiense; Medi Ambiente Canadá; Protección Forestal Ltda.; Departamento del Medio Ambiente de New Brunswick y Gobierno local; Ministerio de Agricultura y Asuntos Rurales de Ontario; Sistemas de información Atlantic; Ag Nav, Consultores de Pulverización REMSPC

**Project Funder(s)** -Dr. Donald J. Ecobichon, Toxicólogo; John Onderdonk, Especialista regulatorio; Cam Davreux, Consultor y Vicepresidente del Instituto Canadiense de Protección a los Cultivos; Ron Kobylnyk, especialista regulatorio; Peter Perrin, Especialista regulatorio.

**Data source** Gobierno de Chile y Agencia Canadiense para el Desarrollo Internacional (ACDI)

**Comments** Servicio Agrícola y Ganadero (SAG)  
El proyecto es importante en el tema de los COPs, puesto que se trataron materias sobre el buen uso de plaguicidas, incluyendo los plaguicidas que ya prohibidos por el SAG, entre los que se encuentran los COPs, e informando a la gente sobre los peligros a la salud y al medio ambiente. Esto, directa e indirectamente permite reducir las emisiones y liberaciones al medio ambiente de estos plaguicidas

## Colombia

**Title** Guidelines and strategies for the implementation of an Evaluation and Risk Communication Program related to Chemical Substances, primarily oriented at those substances subject to the regulations of international environmental conventions signed by Colombia

**Objective(s)** - Design of a national program for the strengthening of chemical substance management within the National Environmental System (SINA, according to its initials in Spanish), that includes a training and public awareness component related to risk assessment in chemical substance handling

- Formulate the conceptual theoretical framework for the establishment of a legislative scheme to control and follow-up chemical substances, based upon the risk assessment

**Timeframe** December 2001- June 2002; Final Report

**Status** Finished

**Responsible organisation** Technical Department of the Ministry of the Environment

**Partner** Ministry of the Environment, Autonomous Regional Corporations (environmental authorities at the regional level within Colombia)

**Project Funder(s)** Ministry of the Environment

**Data source** Contact person: Eng. Leydy Maria Suárez  
Email: lsuarez@minambiente.gov.co

**Comments** This pilot project is part of a program that the Ministry of the Environment is beginning to carry out, oriented towards the rational management of chemical substances, especially those substances subject to the regulations of International Conventions, for example POPs

## Colombia

**Title** Pilot Test for the Disposal of Plastic containers for pesticides and greenhouse sheets, from flower growing industry in the cement furnace

**Objective(s)** Provide an alternative for the adequate management and disposal of plastic containers of pesticides and greenhouse sheets, through the definition of actions and strategies, coordinated by the public and private sectors and the community in general, that offer a viable solution contextualized in view of the country's reality

**Timeframe** January 2001-December 2001; final report in implementation

**Status** Finished

**Responsible organisation** Technical Department of the Ministry of the Environment

**Partner** Industrial sector (Chamber for the Protection of Crops - ANDI and the cement company Cementos Boyacá)

**Project Funder(s)** A total of USD \$ 520.000 have been invested

**Data source**

Contact person: Eng. Mr. Jairo Homez  
Email: jhomez@minambiente.gov.co

**Comments**

This project is part of a program that the Ministry of the Environment is initiating, oriented towards defining technical criteria, procedures and measuring methodologies for the implementation of pilot tests for the disposal of hazardous wastes in order to advance in their minimization and support the development of the Integral Program of Regulation, Prevention and Management of Atmospheric Contamination, especially in relation to dioxine and furane emissions .

**Colombia**

**Title**

Technical assistance for the elimination of obsolete pesticides

**Objective(s)**

Support the government of Colombia in its efforts to solve the problems caused by existing obsolete pesticides in the country, through the transfer of know-how and technology available and the coordination of action carried out by national entities and bilateral and international organizations. The project will also take part in the repackaging and transportation to safe sites of the obsolete pesticides that currently represent an emergency problem in the town of Caracolicito.

**Timeframe**

Start: January 22nd 2001- Completion: July 22nd 2002

**Responsible organisation**

Technical Department of the Ministry of the Environment, in coordination with the specialized divisions of the Agriculture and Health Ministries.

**Partner**

FAO's Plant Protection Service, through the Superior Officer of Plant Protection of FAO's regional office for Latin America and the Caribbean.

**Project Funder(s)**

In total, the project has a cost of USD \$ 1.387.000, of which FAO has financed USD \$ 292.000, the national Government has invested as counterpart US \$ 133.000 and the private sector USD \$ 270.000 currently, additional resources are searched to cover the remaining activities.

**Data source**

Contact Person:  
Engineer Jairo Homez  
Email:jhomez@minambiente.gov.co

**Croatia**

**Title**

Action plan for exporting PCB condensers and PCB transformers.

**Status**

No info

**Data source**

Renata Sinovcevic, B.Sc. State Directorate for the Protection of Nature and the Environment- Ilica 44- HR 10000 Zagreb- Croatia.

**Denmark**

**Title**

Danish Action Plan on dioxins

**Objective(s)**

Obtain more knowledge about Danish emissions and to implement measures to minimise emissions.

**Timeframe**

1999 - Not specified

**Responsible organisation**

Danish Ministry of the Environment and Danish Ministry of Food, Agriculture and Fisheries

**Project Funder(s)**

Danish Ministry of the Environment and Danish Ministry of Food, Agriculture and Fisheries

**Djibouti**

**Status**

No info

**Data source**

Health Ministry.

**Comments**

Only a substitution product has replaced DDT.

**Ecuador**

**Title** Development of National implementation Plans for POPs Management in Ecuador

**Objective(s)** -To facilitate the implementation of the POPs Convention for its other parties through peer-reviewed generic guidelines for developing a NIP for POPs management

-The elaboration of detailed specific action plans that will identify effective rational responses, process and measures that would reduce releases of POPs

**Timeframe** August 5, 2002- July 2004

**Status** Concurrent

**Responsible organisation** Ministry of Environment (Ecuador)

**Project Funder(s)** Global Environmental Facility (GEF)

**Data source** Papers project of Development of National Implementation Plans for POPs Management in Ecuador

### **Ecuador**

**Title** No existe proyecto peo en forma general se esta utilizando otro dieléctrico en lugar de los PCBs en transformadorees (no se conoce la cobertura)

**Status** No info

**Responsible organisation** Fue el organismo rector en la coordinación de generación y distribución de energía eléctrica.

### **Egypt**

**Title** Hazardous waste management project in Alex.

**Objective(s)** To get rid of PCBs transformer oil

**Timeframe** 2001-2003

**Status** Concurrent

**Responsible organisation** Alexandria Governorate

**Partner** - Alexandria Electricity Distribution company

**Project Funder(s)** FinnIDA - Finland

**Data source** Alexandria Electricity Distribution Co.

### **Estonia**

**Title** Procedure of Managing Wastes containing Polychlorinated biphenyls and Polychlorinated terphenyls

**Objective(s)** Owners of equipment containing PCBs must remove them from use of clear from pollution and eliminate PCBs from equipment as soon as possible but not later than December 31, 2010. Estonian Republic

**Timeframe** July 1, 2000 - ...

**Partner** Environmental Information Centre

**Project Funder(s)** Ministry of the Environment

**Data source** Regulation of Minister of Environment No. 71, July 19, 1999

**Comments** Responsible Organization(s):  
Ministry of the Environment of Estonia

### **Estonia**

**Title** Procedure of Managing Wastes containing polychlorinated biphenyls and polychlorinated terphenyls

**Objective(s)** Owners of equipment containing PCBs must remove them from use or clear from pollution and eliminate PCBs from equipment as soon as possible but not later than December 31, 2010. Estonian Republic

**Timeframe** July 1, 2000

**Partner** Environmental Information Centre  
**Project Funder(s)** Ministry of the Environment  
**Data source** Regulation of Minister of Environment No. 71, July 19 ,1999.  
**Comments** Responsible Organization(s):  
 Ministry of the Environment of Estonia

**European Commission**

**Title** Community Strategy for Dioxins, Furans and Polychlorinated Biphenyls (COM(2001)593)  
**Objective(s)** To assess the current state of the environment, to reduce human exposure to dioxins and PCBs in the short-term and to maintain human exposure at safe levels in the medium to long term and to reduce environmental effects from dioxins and PCBs.  
**Timeframe** 2001-2010  
**Status** Concurrent  
**Responsible organisation** European Commission, Directorate-General Environment and Directorate-General Health and Consumer Protection  
**Project Funder(s)** European Commission  
**Data source** The Commission Communication on the Community Strategy and additional information is available at:  
<http://europa.eu.int/comm/environment/dioxin/index.htm>

**Fiji**

**Title** Development of alternative quarantine desinfestation treatment (using hot temperature forced air).  
 Use of Oxygen in place of chlorine as bleaching agent.  
**Objective(s)** Control the use of pesticides and application machinery in order to safeguard human, livestock and plant health and the environment.  
 Provide safe quarantine desinfestation treatment without chemical use.  
**Timeframe** On-going. 10 years (1994-2004). 10 years (1995-2005)  
**Status** Concurrent  
**Responsible organisation** MAFF; Ministry of Labour  
**Partner** MAFF; FAO/AUSAID. Private sector.  
**Data source** Project papers submitted to various donor agencies.  
 Pesticide Act N° 41 of 1971., OHS Act, Public Health Act, Mining Act and the Factories Act.  
**Comments** MAFF together with other governmental departments and with international organizations and agencies is initiating. Other projects look at controlling insect pests and acquiring equipment not containing toxic chemicals.

**Finland**

**Title** Recommendation for action and guidelines for  
 - management and disposal of PCB-containing materials during renovation of buildings (2000), and  
 - risk management and clean up of PCB contaminated yards (2002)  
**Responsible organisation** Ministry of the Environment

**Gambia, The**

**Title** Roll back Malaria Program  
**Objective(s)** To reduce cases of malaria through the use of bed nets dipped in permethrin, or other pyrethroids  
**Status** No info

**Responsible organisation** Department of State for Health  
**Partner** The Medical Research Council, World Health Organisation  
**Data source** National Environment Agency, 5 Fitzgerald St., PMB. 48, Banjul  
 Tel: (220) 228056/224867/224868. Fax: (220) 229701. E-mail: nea@gamtel.gm  
**Comments** DDT was banned for both agricultural and health use in 1994. The Ministry of Health had to resort to other forms of alternatives to combat malaria.

**Germany**

**Title** Combustion of printed circuit boards and analysis of thermal degradation products  
**Objective(s)** Evaluation of printed circuit boards from different suppliers concerning formation and emission of POPs during use and under increased temperature. Thermal degradation experiments, POPs analysis and comparable risk assessment. Special focus on use of halogen free materials.  
**Timeframe** 1999-2000  
**Responsible organisation** Oekometric GmbH - The Bayreuth Institute of Environmental Research  
**Project Funder(s)** Motorola Advanced Technology Europe GmbH, Germany.  
**Data source** - Combustion of Printed Circuit Boards and Analysis of Thermal Degradation Products. Final Report No. 646/99. Oekometric, Bayreuth, 2000.  
 - Hosseinpour J., Waechter G., Rottler H. (2001): Testing Concept for Comparable Evaluation of Emissions of Brominated Flame Retardants and Thermal Degradation Products: Comparison of Halogenated and Halogen-free Flame Retarded Printed Wiring Boards. In: Abstracts of The Second International Workshop on Brominated Flame Retardants, BFR 2001, May 14-16, Stockholm, Sweden, 207-211.  
 - Stutz M., Riess M., Tungare A.V., Hosseinpour J., Waechter G. and Rottler H. (2000): Combustion of Halogen-free Printed Wiring Boards and Analysis of Thermal Degradation Products. Proceedings Electronic Goes Green 2000, 127 - 132.  
 Publication available from: Oekometric GmbH (pdf file)  
 Project report under property of Motorola Advanced Technology Europe GmbH

**Germany**

**Title** Programme to find out the consequences of the reassessment of PCDD/F dioxin-like PCBs for the requirements for reduction from industrial plants  
**Objective(s)** Determination of emissions of dioxin-like PCBs from industrial plants (with programmes for measurements) and review of requirements for their limitations, if needed.  
**Timeframe** 2002-2004  
**Responsible organisation** German Federal States together with the Federal Environmental Agency (Umweltbundesamt), Germany(LAI - Bund-Länder Arbeitskreis Immissionsschutz)  
**Partner** Industry (relevant associations)  
**Comments** The activity aims to find out, which consequences have to be drawn for the legislation with requirements for emission reduction of PCDD/F and dioxin-like PCBs from industrial plants.  
 -The first step was a review of data from measurements for dioxin-like PCBs, already existed.  
 -The second step should be to initiate measurements at prior industrial installations and plants.  
 The project is performed together of experts of the Federal States and the

Experts from the Federal Environmental Agency. A review of the existing legislation is envisaged, if needed.  
 Additionally should also be found out, if further emission sources of PCDD/F and dioxin-like PCBs could be found out as relevant to reduce.

**Germany**

**Title** Recycling and replacement of electrical equipment contaminated with PCBs  
**Objective(s)** Safe disposal and replacement of electrical equipment (transformers, capacitors) filled or contaminated with PCBs  
**Timeframe** 1992 - on-going, target for completion 2025 compliant with goals of the POPs Convention  
**Status** Concurrent  
**Responsible organisation** lead organisation: ABB Environmental Services  
 various customers  
 - public service  
 - utilities  
 - industrial companies  
**Partner** various ABB offices and factories, or external partners (logistics, field services etc.)  
**Project Funder(s)** Funding provided by respective owners of PCB equipment  
**Data source** <http://www.abb.com/pcb>

**Germany**

**Title** Replacement of POP pesticides  
**Objective(s)** Provide users with appropriate alternatives to pesticide POPs  
**Timeframe** Ongoing activity  
**Status** Concurrent  
**Responsible organisation** Bundesamt für Verbraucherschutz und Lebensmittelsicherheit (BVL), Braunschweig Germany  
**Partner** Industry association for Industry association for agriculture (Industrieverband Agrar, IVA)  
**Comments**  
 1. chemical alternatives  
 None of the active ingredients presently included in the annexes of the POP Convention are used in Germany. Substances such as organophosphates have been employed as chemical alternatives. Their persistence in the environment is comparatively short with half lives typically being in the order of hours to days and they do not bioaccumulate.  
 2. biological alternatives  
 Various natural predators or pathogens, such as fungi, viruses and bacteria are used for pest management. E.g. the insect pathogen *Bacillus thuringiensis*, a naturally-occurring bacteria, has been formulated into environmentally sound insecticides for control of many lepidopteran pests.  
 3. integrated pest management (IPM)  
 Main focus is laid on strategies like IPM for pest management. IPM is generally accepted as an effective approach to protection from insects, mites, disease, weeds and other pests. The aim of IPM is to prevent economic losses resulting from pests as well as to avoid harm to people, non-target organisms (plants and animals) and the environment. IPM does not aim at 100 per cent control of pest populations but on economically acceptable containment, helping also in avoidance of resistant strains. Pest control programs generally include appropriate combinations of biological, agricultural, and chemical measures



## **Germany**

<b>Title</b>	Report: "Substitutes for polychlorinated biphenyls used in capacitors, transformers and as hydraulic fluids in underground mining"
<b>Objective(s)</b>	Provide users with information about appropriate and environmentally acceptable substitutes for PCB
<b>Timeframe</b>	ongoing project
<b>Partner</b>	German Federal Institute for Health Protection of consumers and Veterinary Medicine (BgVV)
<b>Project Funder(s)</b>	German Federal Environmental Ministry (BMU)
<b>Data source</b>	UBA-Texte 57/93
<b>Comments</b>	Responsible Org.: German Federal Environmental Agency (UBA)

## **Ghana**

<b>Title</b>	Disposal of transformer oil.
<b>Objective(s)</b>	To protect human health and the environment.
<b>Timeframe</b>	5-10 years.
<b>Status</b>	No info
<b>Responsible organisation</b>	Electricity Company of Ghana.
<b>Partner</b>	Environmental Protection Agency (Ghana).
<b>Comments</b>	Expensive undertaking that requires external assistance.

## **Hungary**

<b>Title</b>	PIC procedure. All pesticides have been replaced. No further activity is required.
<b>Objective(s)</b>	Replacement of Pesticides. Chlorinated hydrocarbons (ban), Replacement: organophosphorus esters, carbamates (insecticides), pyrethroids were permitted.
<b>Status</b>	No info
<b>Responsible organisation</b>	Ministry of Health, Ministry of Agriculture and Regional Development.
<b>Partner</b>	National Institutes and regional organizations of Public Health and Environmental Protection. NGOs
<b>Data source</b>	Recommendations of the PIC Committee, Permission documents of the Ministry of Agriculture and regional Development.
<b>Comments</b>	Hungary has been dealing with the replacement of POPs since 1996 (see measures in Annex 3). Reason: Health protection, environmental protection.

## **Indonesia**

<b>Title</b>	Enabling activities to facilitate early action on the implementation of the Stockholm Convention on Persistent Organic (POPs) Pollutants in Indonesia
<b>Objective(s)</b>	1. To strengthen national capacity and to enhance knowledge and understanding amongst decision makers, managers, industry, and the public at large on POPs to develop and formulate a National Implementation Plan 2. To be able to meet the obligations of the Stockholm Convention and manage the elimination of POPs
<b>Timeframe</b>	June 2002- June 2004
<b>Status</b>	Concurrent
<b>Responsible organisation</b>	Ministry of the Environment of the Republic of Indonesia
<b>Partner</b>	United Nation on Industrial Development (UNIDO)
<b>Project Funder(s)</b>	Global Environment Facility (GEF)
<b>Data source</b>	not available yet
<b>Comments</b>	The government of Indonesia still needs financial support for the activity of the replacement or reduction of release POPs chemical to the environment,

which is not covered much at the above project

### Japan

**Title** Basic guidelines of Japan for the Promotion of Measures against Dioxins  
**Objective(s)** To show concrete guidelines for comprehensive and systematic measures of the national government to tackle issues related to dioxins.  
**Status** No info  
**Partner** Ministries and Agencies that are members of the Ministerial Council on Dioxin Policy

### Japan

**Title** Conference of comprehensive examination on POPs  
**Objective(s)** Proceeding the measures to eliminate the POPs comprehensively such as measures against the production and use, reducing the total releases derived from anthropogenic sources from unintentional production and management of stockpiles and wastes. Developing the national implementation plan and screening criteria of POPs.  
**Timeframe** Year the activity started or is planned to start  
**Responsible organisation** The first conference is going to be held in February 2002.  
Environmental Health and Safety Division, Environmental Health Department, Integrated Environmental Policy Bureau, Japanese Ministry of the Environment.  
**Project Funder(s)** Japanese Ministry of the Environment  
**Data source** The information will be described on the web site of MoE on occasion.  
(Japanese Only)  
<http://www.env.go.jp/>  
**Comments** This conference is held to discuss the technical issues on elimination of POPs.

### Japan

**Title** Development of environmentally sound disposal technologies of unused Agricultural Chemicals  
**Objective(s)** To develop environmentally sound and cost effective disposal technology, mainly focusing on stockpiles and wastes of Agricultural Chemicals containing POPs, in order to put forward the safe disposal of them  
**Timeframe** 2000-2004  
**Status** Concurrent  
**Responsible organisation** Agricultural Chemicals Control Office, Water Environment Agricultural Chemicals Control Office, Water Environment Department, Environmental Management Bureau, Ministry of the Environment. Agricultural Chemicals Administration Office, Agricultural Materials Division, Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries.  
**Project Funder(s)** Ministry of the Environment  
Ministry of Agriculture, Forestry and Fisheries of Japan  
**Data source** The information will be described on the web site of MoE on occasion.  
(Japanese Only)  
<http://www.env.go.jp/>  
**Comments** This conference is held to discuss the technical issues on elimination of POPs.

### Japan

**Title** The development of the action plan concerning to unintentional production  
**Objective(s)** To reduce the total releases derived from anthropogenic sources.  
**Timeframe** Year the activity started or is planned to start

The investigation for existing sources started in 2001.

<b>Responsible organisation</b>	Air Quality Management Division, Environmental Management Bureau, Japanese Ministry of the Environment
<b>Project Funder(s)</b>	Japanese Ministry of the Environment
<b>Kuwait</b>	
<b>Title</b>	There is no specific project, but some actions have been taken to reduce or eliminate the emissions of POPs.
<b>Data source</b>	Environmental Protection Authority (EPA)
<b>Comments</b>	All POPs chemicals have been banned in Kuwait (except dioxins and furans) which release from hospitals' incinerators. PCBs have been replaced in Ministry of electricity.
<b>Laos</b>	
<b>Title</b>	- Based on the POPs Action Plan, develop National Standards and Guidelines for import, storage, handing, disposal, correct utilization and elimination/audience of common POPs. - Awareness Workshop on Persistent Organic Pollutants for Government Staff and Private Sectors.
<b>Objective(s)</b>	- To minimize the hazards stemming from POPs. - To identify ways to safety and cost-efficiently, quantities of POPs, which prevail in our country. - To encourage Lao People to understand the danger and risk of Persistent Organic Pollutants.
<b>Timeframe</b>	After completion of POPs Action Plan/Strategy Possible duration: 1 year
<b>Partner</b>	- Ministry of Agriculture and Forestry. - Ministry of Industry and Handicraft. - Ministry of Trade. - Ministry of Health and other concern organization.
<b>Project Funder(s)</b>	Not identified yet
<b>Comments</b>	- It is necessary to have the legal instruments in implementing of POPs National Action Plan. - To encourage the Government staff at the policy making levels to understand the danger and risk of POPs Responsible Organization(s): Science Technology and Environment Agency-STE A
<b>Laos</b>	
<b>Title</b>	Awareness Workshop on Persistent Organic Pollutants for Government Staffs and Private Sectors
<b>Objective(s)</b>	To encourage Lao People to understand the danger and risk of Persistent Organic Pollutants.
<b>Timeframe</b>	Middle September of 2000
<b>Status</b>	Planned
<b>Responsible organisation</b>	Science Technology and Environment Agency
<b>Partner</b>	Ministry of Agriculture and Forestry, Ministry of Industry and Handicraft and other line Ministries concerned.
<b>Project Funder(s)</b>	Will be asking from UNEP chemicals
<b>Data source</b>	Ministry of Agriculture and Forestry, Ministry of Industry and Handicraft, Ministry of Trade, Ministry of Health.
<b>Comments</b>	It is necessary to encourage the Government staff at the policy making levels to understand the danger and risk of POPs
<b>Latvia</b>	

**Title** Preparation of the POPs National Implementation Plan under the Stockholm Convention

**Objective(s)** To create sustainable capacity and ownership in Latvia to meet the country's obligations under the Stockholm Convention, including preparation of a Persistent Organic Pollutants- POPs National Implementation Plan.

**Timeframe** 2002-2004

**Status** Concurrent

**Responsible organisation** Ministry of Environment

**Partner** "Vides projekti" Ltd;  
Latvian Environmental Agency;  
Environment State Inspectorate

**Project Funder(s)** UNDP/ GEF

**Data source** www.varam.gov.lv ( English/ Latvian)  
www.lva.gov.lv (English/ Latvian)  
www.vvi.gov.lv (English/ Latvian)

### **Lithuania**

**Title** Project Title: Persistent Organic Pollutants and obsolete pesticides containing Mercury, Arsenic and Phosphorus, in the Republic of Lithuania

**Objective(s)** To obtain a clear overview of the quantities and qualities of amounts of POPs and mercury-, arsenic- and phosphorus containing pesticides in central stores in the Republic of Lithuania

**Timeframe** 2000 - ongoing

**Status** Concurrent

**Responsible organisation** Ministry of Environment of the Republic of Lithuania, Contaminated Areas and Waste Division

**Partner** Tauw bv

**Project Funder(s)** Dutch Ministry of Environment

**Comments** In total 34 tons of the target obsolete pesticides have been confirmed to be present in 26 out of the 29 visited storage sites within the Republic of Lithuania. The largest amount of target obsolete pesticide concerns Granosan (a Mercury containing obsolete pesticide) with a recorded approximate 16 tons, the second largest quantity concerns DDT (a chlorinated, persistent obsolete pesticide) with approximate 11 tons

### **Lithuania**

**Title** Project to Assist the Republic of Lithuania to Transpose EU Requirements in the Water Sector (Standards project) project ref. No. 124/025-0115

**Objective(s)** The project is jointly established between the Danish and Lithuanian governments. The main responsible institutions of the project thus are the Lithuanian Ministry of Environment and DANCEE (Danish Co-operation for the Environment of Eastern Europe) of the Danish Ministry of Environment and Energy. The project is designed to assist the Ministry of Environment of Lithuania in transposing requirements of the following EU water sector directives:

- Urban Waste Water Treatment Directive (UWWTD) (91/271/EEC)
- Dangerous Substances Directives (76/464/EEC and daughter directives)
- Water for Freshwater Fish Directive (78/659/EEC)
- Sewage Sludge Directive (86/278/EEC)
- Groundwater Directive (80/68/EEC)
- Surface Water for the Abstraction of Drinking Water Directive (79/869/EEC)

Objectives of the project:  
-classification scheme for surface waters

- review of dangerous substances
- standards for discharges to sewer and surface waters
- reduction programmes
- Urban waste water treatment
- guidelines and
- cost for implementation

As regards Dangerous substances directive 76/464/EEC and daughter directives, Standards project focuses on the following issue:

- Identification of dangerous substances, Lithuanian list of DS,
- Methods for regulation
- Programmes for reduction

Standards project outputs related to dangerous substances:

- identified relevant Lithuanian substances
- derived quality standards and limit values (legal acts MO No. 623, 624, 643, 495 of 2001, MO No. 267 of 2002)
- monitoring requirements
- reduction programme: (a) individual discharges, (b) national programme

2001 - 2003-04-30

**Timeframe**

**Status**

**Responsible organisation**

**Partner**

**Project Funder(s)**

**Data source**

Finished

Ministry of Environment, Water Division & Environmental Protection Agency

Project partners:

DHI Water & Environment (Denmark) in co-operation with Carl Bro as (Denmark) and Centre for Environmental Policy (AAPC)

Danish EPA

Project TOR, interim, progress reports, and technical notes of the project, legal acts (Ministerial orders adopted), workshop material on the project results

## **Mauritius**

**Title**

**Objective(s)**

**Timeframe**

**Status**

**Responsible organisation**

**Partner**

**Project Funder(s)**

**Data source**

**Comments**

Enabling Activities for POPs -National Implementation Plan for Mauritius

1. Prepare the ground for implementation of the Stockholm Convention in Mauritius.
2. Assist Mauritius in meeting its reporting and other obligation under the Convention.
3. Strengthen national capacity to manage POPs.
4. Making informed decision on ratification

Plan to start 2003

Planned

Ministry of Environment

Ministry of Health

UNDP

UNDP - GEF

Ministry of Environment

Ministry of Environment

Funding has been approved by GEF. Project is due to start early 2003.

## **Mexico**

**Title**

**Objective(s)**

**Timeframe**

Action plan management to eliminate Polychlorinated Biphenyls (PCBs)

Eliminate the uses of PCBs

The project began on 2/2001 with the publication of the Mexican Official Norm NOM-133-ECOL-2000 "Proteccion ambiental- Bifenilos policlorados (BPC's)- Especificaciones de manejo" and the elimination of this chemical will be

completed in the year 2008

**Status** Concurrent

**Responsible organisation** Secretaria de Medio Ambiente y Recursos Naturales

**Partner** 1. Generators and destroyers of PCBs  
2. Commission for Environmental Cooperation

The project is part of the Regional Action Plan on PCB's Management (Canada-Mexico-US) and the National plan of implementation of the Stockholm agreement

**Project Funder(s)** Secretaria de Medio Ambiente y Recursos Naturales

**Data source** The following-up of the program will be published in the web site of Secretaria de Medio Ambiente y Recursos Naturales (www.semarnat.gob.mx) and through reports of the project

**Comments** All the equipment will be decontaminated and the PCB's will be destroyed completely up to December 2008 and it will not be used anymore.

In the year 200 the project has the targets documented in the file annexed Plan de Accion Gestion para BPCs- semarnat - Enero 03 (Action Plan for BPCs Management)

SEMARNAT will publish information referring to BPC's. This will give tools to the generators of these chemicals in order to fulfill the requirements established in the norm

### **Mexico**

**Title** Comprehensive Action Program to Phase out the use of DDT and reduce the long-term effects of exposure in Mexico and Central America.

**Objective(s)** To establish national action programs in all participating countries to mandate comprehensive management practices and to implement specific measure to phase out the use of DT in the public health sector in conjunction with a phase-in of effective, affordable and acceptable alternatives for the control of malaria.

**Timeframe** 30% completed

**Responsible organisation** Ministry of Health (SSA)

**Partner** Governments of Mexico and Central America

**Project Funder(s)** CEC, FAO and UNEP –GEF (Global Environmental Facility)

**Comments** The program is still in the stage of being authorized.

### **Mexico**

**Title** Experience in reducing use of DDT

**Status** No info

### **Mexico**

**Title** Identification and evaluation of chemical and biological substitutes of chlordane.

**Objective(s)** To identify, evaluate and select possible chemical and biological substitutes to control termites.

**Timeframe** 100% completed

**Responsible organisation** Environment and Natural Resources (SEMARNAT)

**Partner** Government, Academia and Pest Controllers

**Project Funder(s)** Commission for Environmental Cooperation (CEC)

**Comments** A forum in the United States was developed, as well as brochures on alternative to termites control. Currently clorpirifos, the bacteria Bacillus thuringiensis and the fungus

Metarhizium anisopliae are used as substitutes for chlordane.

**Mexico**

**Title** Pilot Regional Training Course of the Environmental Management Program for toxic substances of highest priority. (First Course)

**Objective(s)** To develop and evaluate the relevance of the strategy and the support material used to sustain the cooperation among different sectors of society participating in activities to reduce risks and to achieve rational handling of chemical substances.

**Timeframe** 100% completed

**Responsible organisation** Ministry of Environment and Natural Resources (SEMARNAT)

**Partner** Government, Industry, Academia and Pest Controllers

**Project Funder(s)** Commission for Environmental Cooperation (CEC)

**Comments** The first course was imparted using the ZOOP methodology and programs for each Mexican state were developed; however, they have not yet been implemented.

**Mexico**

**Title** Pilot Regional Training Course of the Environmental Management Program for toxic substances of highest priority. (First Course)

**Objective(s)** To develop and evaluate the relevance of the strategy and the support material used to sustain the cooperation among different sectors of society participating in activities to reduce risks and to achieve rational handling of chemical substances.

**Timeframe** 100% completed

**Responsible organisation** Ministry of Environment and Natural Resources (SEMARNAT)

**Partner** Government, Industry, Academia and Pest Controllers

**Project Funder(s)** Commission for Environmental Cooperation (CEC)

**Comments** The first course was imparted using the ZOOP methodology and programs for each Mexican state were developed; however, they have not yet been implemented.

**Mexico**

**Title** Pilot Regional Training Course of the Environmental Management Program for toxic substances of highest priority. (Second Course)

**Objective(s)** To develop and evaluate the relevance of the strategy and the support material used to sustain the cooperation among different sectors of society participating in activities to reduce risks and to achieve rational handling of chemical substances.

**Timeframe** 100% completed

**Responsible organisation** Ministry of Environment and Natural Resources (SEMARNAT)

**Partner** Government, Industry, Academia and Pest Controllers

**Project Funder(s)** Commission for Environmental Cooperation (CEC)

**Comments** The second course was imparted using the ZOOP methodology and programs for each Mexican state were developed; however, they have not yet been implemented

**Mexico**

**Title** Plan Nacional de Monitoreo de Compuestos Organicos

**Objective(s)** Diseñar e instrumenta un programa de monitoreo que provea datos reales que permitan conocer y dimensionar las zonas con problemas de compuestos orgánicos persistentes y los efectos producidos

**Timeframe** 2003 - No especificado

**Status** Planned

**Responsible organisation** Comisión Nacional del Agua  
Gerencia de Saneamiento y Calidad del Agua  
Subgerencia de Laboratorios y Monitoreo  
Red Nacional de Monitoreo

**Partner** Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT)  
Subsecretaria de Gestión para la Protección Ambiental  
Comision Nacional del Agua (CAN)  
Instituto Nacional de Ecología (INE)  
Instituto Mexicano de Tecnología del Agua (IMTA)

**Project Funder(s)** Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT)

**Data source** <http://www.acs.org/>; <http://nvl.nist.gov/>; <http://www.epa.gov/>;  
<http://jchemed.chem/>; <http://state.nj.us/>; <http://oehha.org/>;  
<http://ehp.niehs.nih.gov> (all english)

Determination of Polychlorinated Biphenyls (PCBs) inRiver and Bay Sediments; An undergradaute Laboratory Experiment inEnvironmental Chemistry Using Capillary Gas Chromatography with Electron Capture Detection. Kegley, Susan E., Hansen, Kristen J., Cunningham, Kevin L., J. Chem. Educ. 1996 (73) 558

In Proceedings of 1997 TAPPI Environmental Conference and Exhibit, Minneapolis. Fenner-Crisp, R. A.; Fisher R. P. Endocrine Disruptors: Risk Assesment, Regulatory Issues and Research, MN, May5-7, 1997; TAPPI Press: Atlanta, GA, 1997; p. 699

Barsona, C. P. and J. Thomas. Endocrine Disorders of Occupational and Environmental Orgin. Occupational Medicine. 7:3 479-502. 1992

Birbaum, L. S. Developmental Effects of Dioxins and Related Endocrine Disrupting Chemicals. Toxicology Letters. 82/83: 743-750. 1995

US Environmental Protection Agency Risk Assesment Forum. Special Report on Environmental Endocrine Distrupction: An Effects Assessment and Analysis. 1997

**Comments** Actualmente se esta elaborando el plan de monitoreo para cubrir los principales cuerpos de agua nacionales

**Mexico**

**Title** The DDT Dilemma: In search of alternatives that attend to community-based priorities.

**Objective(s)** To create georeferenced maps of areas with malaria and of the impacts on wildlife and water bodies.

To document effective and affordable disease vector control strategies that reduce reliance on DDT and other pesticides and to facilitate a process in which community-based organizations in Mexico learn and make recommendations about safe vector control in their respective regions.

**Timeframe** 100% completed

**Responsible organisation** World Wildlife Fund (WWF)

**Partner** Action Net on Pesticides and Alternatives in Mexico (RAPAM, Red de Acción sobre Plaguicidas y Alternativas en México)

**Project Funder(s)** Commission for Environmental Cooperation (CEC)

**Comments** WWF and CEC hold the finished maps.

**Mexico**

**Title** Workshop on termites and the use of biological and chemical methods against them.

**Objective(s)** To prepare a diagnosis on chlordane as a chemical substance against termites



**Responsible organisation** Ministry of Environment and Natural Resources (SEMARNAT)  
**Partner** Government, Industry, Academia and Pest Controllers  
**Project Funder(s)** Commission for Environmental Cooperation (CEC)  
**Comments** During the workshop a diagnosis on Chlordane as a termite controller in Mexico was made.

**Moldova**

**Title** Draft National Strategy on Reducing and Eliminating of POPs releases.  
**Objective(s)** Development of state policy and strategic directions of activities in goals to reduce and/or eliminate POPs releases in conformity with provisions of the following international agreements: Stockholm, Basel and Rotterdam Conventions, UN ECE Aarhus Protocol on POPs.  
**Timeframe** Started in 2000 - Planned to be completed, adopted and published in 2003  
**Status** Concurrent  
**Responsible organisation** Ministry of Ecology Construction and Territorial Development of the Republic of Moldova  
**Partner** Ministry of Health, Ministry of Agriculture and Food Industry, Ministry of Energy and other ministries, departments, institutions and organisations of the Republic of Moldova  
**Project Funder(s)** National budget

**Moldova**

**Title** Enabling activities related to the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in the Republic of Moldova  
**Objective(s)** Develop a National Implementation Plan and other specific plans, provide supporting capacity strengthening such that the Republic of Moldova can effectively protect human health and the environment from POPs and can fully comply with its obligations under the Stockholm Convention on POPs.  
**Timeframe** Started in 2002 - Planned to be completed on 2004  
**Status** Concurrent  
**Responsible organisation** Ministry of Ecology Construction and Territorial Development of the Republic of Moldova  
**Partner** Institutions and organisations of the Republic of Moldova  
**Project Funder(s)** Global Environment Facility (GEF)

**Moldova**

**Title** National Plan of Activities for Health in Relation to Environment  
**Objective(s)** Determination priority measures on environment hygiene, pollution prevention and improvement of the environment from harmful chemicals, including POPs; establishment of the of environment quality standards, monitoring and control system for harmful chemicals, including POPs etc.  
**Timeframe** 2001 - Timing framework for realization of principal measures of this Plan are 2001-2005.  
**Status** Concurrent  
**Responsible organisation** Ministry of Health and Ministry of Ecology, Construction and Territorial Development of the Republic of Moldova  
**Partner** Ministry of Agriculture and Food Industry, Ministry of Energy, Ministry of Industry, Ministry of Transport and Communications, Ministry of Economy, Department of Standardisation and Metrology, Ministry of Finance, Science Institutes, NGOs and other organisations.  
**Comments** This Plan has been approved by the Government's Decision Nr. 487 (19.06.2001) and published (by Romanian and Russian) in the official edition "Monitorul Oficial" No. 75-77 from 6.07.2001. Some extracts (unofficial English translation) from this Plan concerning list of measures, responsible

organisations and timing frameworks were included in the report of Mr. G. Victor Buxton, POPs Expert and Consultant to the World Bank, visited the Republic of Moldova from 10 to 14 September 2001 for a POPs evaluation mission.

### **Moldova**

**Title** Plan of measures on Centralizing Storage and Disposal of Obsolete Unused and Prohibited Pesticides

**Objective(s)** Effectuation of measures on centralizing storage and disposal of obsolete unused and prohibited pesticides, establishment of responsible organizations for the implementation of several measures and timing framework.

**Timeframe** 2001-2003

**Responsible organisation** Government of the Republic of Moldova

**Partner** Ministry of Agriculture and Food Industry, Ministry of Health, Ministry of Ecology, Construction and Territorial Development, Ministry of Finance, Department of Emergency, Department of Standardisation and Metrology and other ministries, departments and organisations.

**Project Funder(s)** National budget and National Ecological Fund.  
Also, decided to apply to EU organisations and effectuate negotiations in goals of receiving of financial assistance for pesticides disposal.

**Comments** This Plan has been approved by the Government's Decision No. 1543 from 29 November 2002) and published (by Romanian and Russian) in the national official edition "Monitorul Oficial" of the Republic of Moldova, 2002

### **Monaco**

**Title** Elimination of electric equipments containing PCBs or PCTs

**Objective(s)** Stepwise replacement of all electric transformers and condensers containing PCBs or PCTs in Monaco by new equipments which do not contain these POPs.

**Timeframe** 1988 - 2005

**Status** Concurrent

**Responsible organisation** Département des Travaux publics et des Affaires sociales  
Direction du Contrôle des Concessions et des Télécommunications  
23, avenue Prince Héritaire Albert  
MC 98000 MONACO

**Partner** Transformers and condensers containing PCBs are removed and replaced by :  
Société Monégasque de l'Electricité et du Gaz (S.M.E.G.)  
10, avenue de Fontvieille  
MC 98013 Monaco Cedex

**Project Funder(s)** The cost of replacement is supported by the operator of the transformer or the condenser

**Data source** No publication available

**Comments** None

### **Monaco**

**Title** L'ensemble des établissements industriels et des activités artisanales de la Principauté est visité annuellement par la Commission Technique pour la lutte contre la pollution et pour la sauvegarde de la sécurité, de l'hygiène, de la salubrité et de la tranquillité publique.  
Lors de cette visite le contrôleur de la Direction de l'Environnement, de l'Urbanisme et de la Construction enquête sur l'éventuelle utilisation de POPs et sur les mesures envisagées pour réduire leur utilisation. Il assure le suivi de l'application de ces mesures.

### **Nepal**

**Title** Management of PCBs in waste and in other forms in Nepal.

**Objective(s)** 1. Identify PCBs in waste inventories  
2. To collect information on PCBs and PCB containing equipment.  
3. To assess the knowledge and practices of the PCBs use, storage, disposal and destruction.  
4. To create awareness among stakeholders/ users.

**Timeframe** November 1999 to March 2000

**Status** Finished

**Responsible organisation** Nepal Bureau of Standards and Metrology

**Partner** Pesticide Registration Office  
Department of Plant Protection  
Ministry of Agriculture

**Data source** NBSM's Survey Report.

**Comments** Awareness Programme has to be launched throughout Nepal among the stakeholders.

### **Netherlands**

**Title** The Dioxins Step Plan

**Status** No info

### **New Zealand**

**Title** - Reporting on Persistent Organochlorines in New Zealand, September 1998  
- Phasing out Small PCB Holdings, 1995  
- A Strategy for Managing PCBs, 1998

**Status** No info

### **Niger**

**Title** Coordination technique interministérielle chargée des POPs au Niger.

**Objective(s)** Service de Législation et de Règlementation Phytosanitaire.  
Direction de la Protection des Végétaux.  
Prise de décisions sur la réglementation des produits chimiques et des POPs (remplacement des POPs, destruction, re-exportation, interdiction)  
Former et informer les utilisateurs des produits chimiques

**Timeframe** 5 ans

**Status** Concurrent

**Responsible organisation** DPV Direction de la Protection de l'Environnement, Direction de la Santé Publique, Direction Hygiène et Assainissement, Université A.M., Distributeurs Agréés de Pesticides, Direction du commerce (I et E), Direction du Plan.

**Partner** - Santé publique (populations rurales et citadines)  
- Environnement (Forêts, faune, Eau et Sol)  
- Agriculture (cultures)  
- Distributeurs agréés et utilisateurs de produits chimiques

**Data source** Niamey, le 19/10/1999.

**Comments** Instituer et organiser la coordination, mener des activités programmées et assister aux réunions et conférences.

### **Norway**

**Title** Comprehensive Atmospheric Monitoring Programme

**Objective(s)** Assess airborne inputs to the maritime area of the Oskar-Convention

**Timeframe** Long term monitoring - Annual report

**Partner** Norwegian Institute for Air Research

**Responsible Organization(s):** Norwegian Pollution Control Authority (SFT)

**Project Funder(s)** Norwegian Authorities (SFT)

**Norway**

**Title** Documentation of methodology and data for estimating air emissions of dioxines in Norway.

**Objective(s)** Make an inventory of air emissions of dioxines in Norway for the years 1990 to 2000.

**Timeframe** 2001-2002

**Responsible organisation** Statistics Norway

**Project Funder(s)** Norwegian Pollution Control Authority

**Data source** Different national inventories and literature.

**Comments** Inventory of air emissions of dioxines in Norway for the years 1990 to 2000. Report in Norwegian only.

**Norway**

**Title** Multilateral co-operative project for phase-out of Polychlorinated biphenyls (PCB) in the Russian Federation

**Objective(s)** Phasing out of PCB, handling of PCB-containing waste and alternatives to PCB in the Russian Federation.  
Phase 1: Inventory concerning use of PCB, management of PCB-contaminated waste and proposals for priority of Remedial Actions concerning PCB in the Russian Federation. Report will be available in October 2000.  
Phase 2: Evaluation of actions concerning regulations, collecting, storing and destruction of PCB-containing liquids and equipment, alternatives to PCB for electricity production and PCB-contaminated land. Focus on 5 regions near the Arctic.

**Timeframe** Phase 1 from spring 1998 to September 2000.  
Phase 2 from October 2000.

**Partner** -Centre for International Projects, Moscow, Russia  
-Authorities and experts from USA, Norway, Denmark and Finland  
-NEFCO

**Project Funder(s)** USA, Canada, Norway, Denmark, Sweden, Finland and the Netherlands.

**Comments** Responsible organisation:  
Arctic Monitoring and Assessment Programme (AMAP)

**Norway**

**Title** Norwegian Action Plan for PCB- Summary and Conclusions

**Status** No info

**Norway**

**Title** PCB in plaster and paint on facades

**Objective(s)** Develop criteria for identifying buildings where PCB-containing facades can be expected.

**Timeframe** February 2002- December 2002

**Responsible organisation** The Municipality of Bergen and the Norwegian Pollution Control Authority

**Partner** The Municipality of Bergen and the Norwegian Pollution Control Authority

**Project Funder(s)** The Municipality of Bergen and the Norwegian Pollution Control Authority

**Panama**

**Title** Creación de un Grupo Técnico de Trabajo sobre Plaguicidas que ha elaborado un manual de procedimiento de fiscalización de los aditivos, fertilizantes, plaguicidas y material técnico de uso en la agricultura y sobre el inventario de los COPs, que realiza un intercambio de información para fortalecer la vigilancia de la importación, fabricación, almacenamiento, transporte, maquila, reenvase, envases, comercialización, uso, inventario y disposición de

desechos de plaguicidas fitosanitarios.  
 Elaboración de un proyecto de reglamentación de la Ley n°36 de 17 de Mayo de 1996, contiene información con relación a los hidrocarburos clorinados en los compartiminetos ambientales /agua, suclo y aire)

**Objective(s)** Disminuir el riesgo de esposición a los COPs  
 Determinar el grado de avance en el so denuevos insecticidas menos contaminantes  
 Determinar el grado de avance en la sustitución de las tecnologías tradicionales de utilización de COPs y de las fuentes de COPs.

**Timeframe** 3 años

**Status** Concurrent

**Responsible organisation** Grupo técnico de Trabajo sobre Plaguicidas conformado por Representantes del Departamento de Agriquímicos: Miniterio de Desarrollo Agropecuario y de las secciones de Sustancias y desechos Peligrosos, centro de Estudios en Salud y Ambiente, Control de Vectores y Zoonosis, Departamento de Farmacia y Drogas, Departamento de Calidad Sanitarias del Ambiente, departamento de Protección de Alimentos, sección de Ambientes de Trabajo, Departamento de Calidad de agua del Ministerio de Salud.  
 Sección de Sustancias y Desechos Peligrosos.

**Partner** MIDA/ANAM/CLICAC/MICI/Empresas Hidroeléctricas privadas/ONGs ambientalistas.

**Peru**

**Title** Activities to replace the POPs (no projects)

**Objective(s)** Protect human health from exposure to the POPs, prevention and control of the effects from environmental contamination by the use of these substances.

**Timeframe** Permanent

**Status** Concurrent

**Responsible organisation** DIGESA

**Data source** DIGESA

**Comments** These actions are within the normal functions of the Health Ministry.

**Peru**

**Title** SENASA No project

**Objective(s)** Replacement of PCB

**Status** No info

**Responsible organisation** SENASA - National authority on pesticides for agricultural use.  
 DIGESA - National authority on pesticides for domestic use.

**Project Funder(s)** SENASA.

**Data source** SENASA.

**Comments** All activities must be development in order to protect public health, occupational health of environment and consumer.

**Philippines**

**Title** The management of chemicals and toxic substances (RA 6969); Pre-manufacturing and Pre-importation Notification (PMPIN) of chemicals and substances.

**Objective(s)** To ensure that new chemicals that would pose an unreasonable risk to human health and the environment either be denied to be manufactured or imported into the country, or be placed under the control and restrictions to limit potential releases.

**Timeframe** Ongoing

**Status** Concurrent

**Responsible organisation** Environmental Management Bureau (EMB), Department of Environment and Natural Resources.  
Environmental Division (EnD)-ITDI- Department of Science and Technology, Philippines Nuclear Research Institute (PNRI)- DOST  
Occupational Safety and health Authority (OSMA)- Department of Labour and Employment (DOLE)

**Partner** Inter-Agency Committee that include DOST and DOLE

**Data source** Orientation manual, DENR Administrative Order N°29. RA.6969, 1995, Environmental Management Bureau.

**Comments** All chemicals and substances other than food drugs, cosmetics and all types of agricultural chemicals that are regulated by other laws, unless the uses of such chemicals fall within the mandate of RA 6969 such as new uses of agricultural chemicals for industrial purposes.

**Poland**

**Title** Construction of the installation for recovery of hydrogen chloride from waste containing chlorinated organic compounds

**Objective(s)** An installation for recovery of hydrogen chloride from waste containing chlorinated organic compounds was designated and commissioned in the chemicals works "ANWIL S.A." in Wloclawek. The recovered HCL is returned to the processes run in the chemicals works. This installation can be used also for destruction of wastes containing PCBs. The range of temperatures used for that purposes prevent from generation of dioxins. The installation is compliant with the standards of EU concerning waste generation and emissions to water bodies and to the atmosphere. The capacity of the installation is sufficient to treat the organic waste containing chlorinated organic compounds from other economic entities from Poland and from abroad, if necessary.

**Timeframe** 1999 year - completion of the installation construction

**Partner** VICHEM (France)

**Project Funder(s)** ANWIL S.A., financially assisted by the National Fund for Environmental Protection and Water Management

**Data source** unpublished information provided by ANWIL S.A.

**Comments** Responsible Organization(s):  
ANWIL S.A.  
87 805 Wloclawek  
222 Torunska St.  
Poland

**Poland**

**Title** Construction of the installation for recovery of hydrogen chloride from waste containing chlorinated organic compounds.

**Objective(s)** An installation for recovery of hydrogen chloride from waste containing chlorinated organic compounds was designed and commissioned in the chemical works " ANWIL S.A" in Wloclawek. The recovered HCl is returned to the processes run in he chemical works. This installation can be used also for destruction of wastes containing PCBs. The range of temperatures used for that purposes prevent from generation of dioxins. The installation is compliant with the standards of EU concerning waste generation and emissions to water bodies and to the atmosphere. The capacity of the installation is sufficient to treat the organic waste containing chlorinated organic compounds from other economic entities from Poland and from abroad, if necessary. An installation for recovery of hydrogen chloride from waste containing chlorinated organic compounds was designed and commissioned in the chemical works " ANWIL S.A" in Wloclawek. The recovered HCl is

returned to the processes run in the chemical works. This installation can be used also for destruction of wastes containing PCBs. The range of temperatures used for that purposes prevent from generation of dioxins. The installation is compliant with the standards of EU concerning waste generation and emissions to water bodies and to the atmosphere. The capacity of the installation is sufficient to treat the organic waste containing chlorinated organic compounds from other economic entities from Poland and from abroad, if necessary.

**Timeframe** 1999 year - completion of the installation construction.

**Partner** VICHEM (France)

**Project Funder(s)** ANWIL S.A. ,  
financially assisted by the National Fund for Environmental Protection and Water Management.

**Data source** unpublished information provided by ANWIL S.A.

**Comments** Responsible Org: ANWIL S.A.  
87 805 Wloclawek  
222 Torunska St.  
Poland.

### **Poland**

**Title** Development of underlying assumptions for a project to limit inflow, to water bodies, of dangerous substances produced or in use in the economy sector (second stage).

**Objective(s)** In the second stage of project a plan of actions was designed to decrease the pollution of water bodies, by dangerous substances, to the level compliant with the requirements of the UE regulations. The plan also includes propositions of actions for elimination of use and replacements for some dangerous substances.

**Timeframe** 2000 year

**Project Funder(s)** PHARE, Project Nr. 9608.01.03

**Data source** Reports available at the Ministry of Environment

**Comments** Responsible Organization(s):  
Ministry of Environment, Department for the Environmental Protection  
Warsaw, 52/54 Wawelska St.  
Poland

### **Poland**

**Title** PCB-Stop Programme

**Objective(s)** This programme was of information and educational character, and its goal was to contribute to the liquidation of equipment and waste containing PCBs/PCTs.

**Timeframe** 2001 - 2002

**Status** Finished

**Responsible organisation** Lower-Silesian Foundation for Sustainable Development  
ul. Bialoskornicza 26, PL 50-134 Wroclaw,  
tel/fax: (+48 71)3430849, 3445948  
biuro@eko.wroc.pl, www.eko.wroc.pl

**Partner** none

**Project Funder(s)** Own financial resources

**Data source** Information of the programme is available on the website [www.pcb.pl](http://www.pcb.pl)

### **Poland**

**Title** The project of the national strategy for the reduction of persistent organic pollutants emission

**Objective(s)** The analysis of the emissions of POPs from different sources (industrial, mobile) and proposals for directions of activities focused on emissions reduction and control (changes in legal regulations, economic mechanism etc.)

**Timeframe** 1999-2000

**Partner** none

**Project Funder(s)** National Fund for Environmental Protection and Water Management

**Comments** Responsible Organization(s):  
Institute of Environment Protection on request of the Ministry of Environment

### **Portugal**

**Title** Emission Inventory of Dioxins and Furans in the region of Porto

**Objective(s)** Identify major atmospheric sources of dioxins and furans  
Quantification of emissions

**Timeframe** 1998-2000

**Partner** LIPOR

**Comments** Responsible Org.:  
IDAD – Instituto do Ambiente e Desenvolvimento

### **Romania**

**Title** Enabling Activities to Facilitate Early Action in the Implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs) in Romania

**Objective(s)** To assist Romania to fulfil its obligation of the Stockholm Convention

**Timeframe** 1st of August 2003 - July 2004

**Status** Planned

**Responsible organisation** Ministry of Water and Environmental Protection Research-Development  
Institute for Environmental Protection

**Partner** Polytechnical University of Bucharest

**Project Funder(s)** United Nation for Industrial Development Organization  
UNIDO

### **Russia**

**Title** Agency of the Volga River Ecological Information (AVS-info): collection and distribution eco-information. POPS is a constant theme. Means: regular bulletins (twice a month). Structure: a network of correspondents and consumers out of NGOs, mass media, and governmental organs.

**Objective(s)** Public monitoring of the state of the environment (chemical safety). Objective: raising awareness of public (via mass media), NGOs, governmental structures.

**Timeframe** 1996 - March 2000 (funded by Heinrich Böll Stiftung).  
April - December 2000 (made applications for grants to European Commission and ROLL)

**Status** Concurrent

**Responsible organisation** Ecocenter Dront: works for 10 years. Initiator of many public ecological projects on regional national and international levels.

**Partner** "Union for Chemical Safety", Greenpeace (Russian), independent experts (Sergey Yufit, Veniamin Khudoley, Valentina Cherkasova, Alexey Yablokov), network of interested NGOs.

**Project Funder(s)** German Ministry of International Economical cooperation (via Heinrich Böll Stiftung).

**Data source** 30.11.99 Natalya Pchelina AVS-info office 145 Kostina street 2



Hizhniy Novgorod Russia 603134  
Phone: 8312-343142. Fax: 8312-302890  
Email: pchelina@aveinfo.sci-nnov.ru

**Comments**

We'd like to use our capacities (network) for deepening the work on POPs, look for sources of financial support.

**Russia**

**Title**

Draft National Strategy and Action Plan for Reducing and Eliminating POPs releases.

**Status**

No info

**Russia**

**Title**

Federal Target Programme for "Protection of the Environment and Population from Dioxins and Dioxin-like toxic substances".

**Status**

No info

**Russia**

**Title**

Multilateral Cooperative Project on Phase-out of PCB use, and management of PCB-contaminated wastes in the Russian Federation.

**Objective(s)**

To assist Russia to develop and implement a special Federal Programme to introduce alternatives to PCB, environmental sound decommissioning of PCB stocks and contaminated equipment and containers, and to rehabilitate PCB contaminated territories. This multilateral project has 3 phases.

**Timeframe**

1999-2000 Phase1, 2000 Phase 2, 2000+ Phase 3.

**Partner**

The eight Arctic countries: Canada, Denmark/Greenland, Iceland, Finland, Norway, Russia, Sweden and USA.

**Data source**

Existing information from Russia and AMAP assessment.

**Comments**

Responsible Org.:AMAP and State and Committee of the Russian Federation for Environmental Protection. Field: Source identification, Environmental Protection, Public Health. Phase 1: evaluation of the current status of the problem with respect to environmental impact and development of proposals for priority remedial action. Phase 2: Feasibility study. Phase 3: Implementation of demonstration projects, eg: non PCB alternatives, destruction of PCB and PCB contaminated equipment, rehabilitation of contaminated areas.

**Saudi Arabia**

**Title**

Introduction of new pesticides to replace the banned ones

**Objective(s)**

To replace the banned pesticides with safe and environmentally friendly products.

**Timeframe**

Continuous

**Status**

Concurrent

**Responsible organisation**

Ministry of Agriculture and Water, Agri. Research Department

**Partner**

Ministry of Commerce

**Singapore**

**Title**

(a) Programme to phase out the import and use of PC  
(b) Programme to phase out PCB-contaminated transformers

**Objective(s)**

Transformers which contain PCBs have already been banned from use in Singapore since 1980.

**Timeframe**

Programme (a) completed in 1980  
Programme (b) completed by Apr 2001

**Status**

Finnished

**Responsible organisation** Ministry of the Environment, Singapore  
**Data source** Pollution Control Department, National Environment Agency.  
**Comments** Current relevant legislations :  
 (a) Environmental Pollution Control Act  
 (b) Environmental Pollution Control (Hazardous Substances) Regulations

**Slovenia**

**Title** No extensive action at the moment. There are some additional activities focusing on the reduction of the releases of POPs Chemicals as awareness raising workshops, training of experts in the risk assessment of PTS (Persistent Toxic Chemicals), preparation of environmental/health studies, Phare Twinning Project on Chemicals Safety, restricted use of certain hazardous chemicals and other activities.

**South Africa**

**Data source** 1-Department of Environmental Affairs and Tourism  
 2-Department of Trade and Industry  
 3-Chemical Allied Industries Association  
**Comments** Industry through Responsible Care initiatives are involved in reduction programmes.

**Sudan**

**Title** Disposal of obsolete pesticide Stocks  
**Objective(s)** - Safe disposal of the obsolete stocks, by incineration  
 - Irrigated schemes in Central Sudan & PPD Seasonal Camps all over the Sudan  
**Timeframe** Twelve months  
**Status** No info  
**Responsible organisation** Federal Ministry of Agriculture & Forestry- Khartoum  
 National Council for pesticides (NPC) - Khartoum North PO Box 14  
 Federal Plant Protection Directorate- Khartoum North PO Box 14  
**Partner** Agricultural Research Corporation (ARC)- Wad/Medani PO Box 126  
 Sudanese Agrochemicals Association (SAGA)  
**Project Funder(s)** Not determined yet  
**Data source** Pesticides Registrations of Sudan- ARC

**Sweden**

**Title** Swedish Environmental Quality Objectives. A Summary of the Government Bill 1997/1998:145.  
**Objective(s)** The overall goal is that, one generation from now, the major environmental problems currently facing us will have been solved. This means that all the key measures required in Sweden need to be implemented by 2020 (2050 in the case of the climate objective). However, nature takes time to recover, and in some cases a time-frame extending beyond 2020 will be necessary. To achieve the 'generation goal', commitment across the whole of society is required, both in Sweden and in other countries.  
**Timeframe** Environmental Objectives Council was established in 2002 - 2020 or 2050 or not specified  
**Status** Concurrent  
**Responsible organisation** Ministry for the Environment is the lead ministry and  
 Swedish Environmental Protection Agency hosts the Environmental Objectives Council and

National Chemicals Inspectorate has the main response for the Environmental objective:

A non-toxic environment. Other Authorities responsible for the environmental objectives are:

Swedish Radiation Protection Authority

Geological Survey of Sweden National Board of Forestry

Swedish Board of Agriculture National Board of Housing, Building and Planning National Heritage Board

National Board of Health and Welfare County administrative boards

Governmental

**Project Funder(s)**

**Switzerland**

**Title**

Elimination of PCB-containing material used in the past in window packings (Fugenkitt)

**Objective(s)**

Replacement of respective material in public buildings, especially schools

**Timeframe**

Year the activity started or is planned to start  
2000, Planned to be completed within about the next 2 - 3 years

**Responsible organisation**

Coordination: BUWAL (SAEFL). Direct responsibility: Chemical laboratory of the respective canton.

**Partner**

BUWAL = SAEFL

**Project Funder(s)**

Cantons

**Data source**

E.g. INTERNET Leitbild BUWAL (Philippe Roch), also INTERNET: PCB + name of the cantons

**Togo**

**Title**

Impregnated Bednet

**Objective(s)**

Restrict the use of indoor chemical pesticides  
Avoid the exposure to Mosquito bites.

**Status**

No info

**Responsible organisation**

Service National de Lutte contre le Paludisme (National Service of Preservation against Malaria)

**Partner**

Togolese Government and WHO.

**Comments**

A review of the strategies ever implemented in Togo for preservation against malaria is being prepared with the collaboration of Dr. Gayibor, who is the manager of the National Service of Preservation against Malaria.

**Togo**

**Title**

Screening of Botanical Pesticides as Alternatives to POPs Pesticides in Small Scale Grain Storage

**Objective(s)**

To promote the use of aromatic plants as a source of botanical pesticides for crop protection against insect pests in post harvest management.

**Timeframe**

The research has begun in early 1997.

**Status**

No info

**Responsible organisation**

University of Togo

**Data source**

Komla SANDA, University of Benin, TOGO. <http://www.ub.tg>

**Comments**

Laboratory trials are under way. Financial and technical assistance will undoubtedly help meet the UNIDO's policy promoting Clean Technologies.

**Trinidad and Tobago**

**Title**

The twelve POPs controlled under the Stockholm Convention were used in the past by Trinidad and Tobago but presently the country does not use these Chemicals. The 12 POPs are not registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of these chemicals are not allowed in Trinidad and Tobago.

Since these chemicals are no longer in use in Trinidad and Tobago, the country has taken the initiative to implement a range of activities to provided alternatives for the use of these chemicals which include:

Use of alternative chemicals:

The promotion of the use of alternative chemicals in the agriculture, public health and construction sectors is being actively pursued. Some examples are as follows:

- Public Health: POPs have been replaced by the use of organophosphorus based pesticides (e.g. malathion, temephos)
- Agriculture: A wide range of alternative chemicals have replaced the use of POPs, these include organophosphates, pyrethroids, cabamates, biopesticides and many more.
- Construction : The widespread use of organophosphates (e.g. chloropyrifos), pyrethroids (e.g. cypermethrin), and some fumigants has replaced the use of POPs chemicals.

Integrated Pest Management / Integrated Vector Management Programs:

Efforts are being made to develop and implement use of biopesticides to address the problems of pests in the agricultural sector. To date, three such programs have been implemented:

- Hibiscus Mealybug
- Citrus Blackfly
- Sugarcane Froghopper

The University of the West Indies is also currently conducting research into the use of plant extracts as natural pesticides and insecticides.

Education and Awareness:

Significant progress has also been made through the use of public education and awareness programmes to reduce sources of breeding for mosquitoes and other vectors, termites and other pests thereby reducing use of chemicals.

**United Kingdom**

**Title**

**Status**

Action Plan for the Phasing out and Destruction of PCBs and PCB substitutes.

No info

**United Kingdom**

**Title** Agriculture, trade and food security.

**Objective(s)** To create awareness of the benefits of sustainable alternatives to POPs and other pesticides which cause problems to health and the environment, and in particular to promote Integrated Pest Management (IPM) strategies which are based on participatory approaches with farmers and which reduce use and dependence on pesticides.

**Timeframe** Part of our current programme and on-going while the problem exists.

**Status** Concurrent

**Responsible organisation** The Pesticides Trust, Eurolink Centre, 49 Effra Road- London SW 1BZ  
Tel:+44 171 274 8895 / Fax:+ 41 171 274 9084 / Email: pestrust@gn.apc.org/pesticidestrust

**Partner** NGOs and the Pesticides Action Network.

**Comments** There is important role for NGOs in participating in the analysis of problems which arise from POPs, potential POPs and potential replacement pesticides which may cause additional, but different problems.

### **United States**

**Title** Asian Dioxin Toolkit Project: Identification and Characterization of By-product Releases in Asia

**Objective(s)** To conduct release inventories of dioxins/furans in select countries in the Asia-Pacific region using the UNEP Toolkit. Key dioxin/furan experts and key officials of participating governments learned the steps of the inventory process and set timelines for these various activities. Dioxin inventory experts assisted countries in the fulfillment of their task. Countries reported out on findings, difficulties encountered, and drew conclusions related to National Action Plans (NAPs). UNEP will publish the final inventory reports and carefully evaluate needs for further actions.

**Timeframe** Winter 2000 - Planned completion summer 2003.

**Status** Concurrent

**Responsible organisation** UNEP Chemicals, U.S. Environmental Protection Agency

**Project Funder(s)** U.S. Department of State, U.S.EPA (note: Toolkit is being developed and implemented in this and other regions by many other donor agencies and partner organizations as well)

### **United States**

**Title** Canada- United States Strategy for the Virtual Elimination of Persistent Toxic Substances in the Great Lakes, 1996 (The Great Lakes Binational Toxics Strategy)

**Status** No info

### **United States**

**Title** Chemicals Information Exchange Network (CIEN) Project

**Objective(s)** Project objectives are to:  
-Eliminate barriers to the exchange of information.  
-Facilitate access and sharing of technical information about chemicals on the Internet.  
-Create greater involvement and communication among the national and regional agencies responsible for the management of chemicals.  
-Strengthen national capacity for participation in activities and international agreements involving sound management of chemicals.  
-Protect human health and the environment and improve the sound management of chemicals in the participating countries.

**Timeframe** 2000 - Not specified -- ongoing

**Status** Concurrent  
**Responsible organisation** UNEP Chemicals, U.S.EPA  
**Partner** U.S. Agency for International Development, CEGESTI (Center for Technology Management or Centro de Gestion Tecnologia e Informatica Industrial), IFCS, UNITAR  
**Project Funder(s)** UNEP Chemicals, USEPA, USAID, U.S. Department of State, Swiss Confederation, Canada, CEGESTI  
**Data source** CIEN web site to be available later in 2003 at [www.epa.gov/cien](http://www.epa.gov/cien)

**United States**

**Title** Cleaner Production Initiative in the Russian Federation  
**Objective(s)** To promote cleaner production, eco-auditing, recycling, and energy efficiency programs.  
 The overarching objective is to minimize the toxic/hazardous waste shipped to existing disposal sites from routine industrial operations.  
**Timeframe** 2002 - 2005  
**Responsible organisation** U.S. EPA  
**Partner** UNEP Chemicals, NEFCO, Russian-Norwegian Cleaner Production Center  
**Project Funder(s)** U.S. EPA; Norwegian Pollution Authority

**United States**

**Title** Commission on Environmental Cooperation Sound Management of Chemicals: North American Regional Action Plans  
**Objective(s)** EPA is working with the Canadian and Mexican governments to implement the North American Regional Action Plans for Mercury, DDT, Chlordane and PCBs. Also, two North American Action Plans (NARAPs) are under development, one for Dioxins and Furans and hexachlorobenzene, and one for monitoring and assessment.  
**Timeframe** 1996 - ongoing  
**Responsible organisation** Environment Canada, U.S.EPA, Mexican Ministry of Environment  
**Partner** CEC  
**Project Funder(s)** U.S.EPA, Environment Canada  
**Data source** [http://www.cec.org/programs\\_projects/pollutants\\_health/project/index.cfm?projectID=25&varlan=english](http://www.cec.org/programs_projects/pollutants_health/project/index.cfm?projectID=25&varlan=english)

**United States**

**Title** Environmentally Safe Management of Obsolete Pesticides Stockpiles in the Russian Federation  
**Objective(s)** The project consists of three phases: Phase 1- developing the inventory of obsolete pesticide stockpiles in the nineteen priority Russian regions impacting the Arctic; Phase 2 - developing a strategy for safe interim storage and stabilization of stockpiles; this will include performing risk assessments for highest contaminated areas, evaluating destruction technologies, and designing a prototype storage facility that can be used throughout Russia; and Phase 3- implementing a prototype demonstration for environmentally safe destruction of those pesticides stocks of greatest risk to the Arctic, including Alaska, and construction of a prototype storage facility.  
 This project is part of an integrated program to assist Russia to meet the requirements of both the Stockholm Convention and the Long Range Transboundary Air Pollution (LRTAP) POPs Protocol, and is being implemented under the Arctic Council Action Plan (ACAP).  
**Timeframe** 2001 - 2005

**Responsible organisation  
Partner**

U.S. EPA and UNEP Chemicals as Secretariat  
Arctic Council, Canada, Denmark, Finland, Norway, Russian Federation,  
Sweden, and UNEP Chemicals.

**Project Funder(s)**

Canada, Finland, Denmark, Norway, Sweden, and United States

### **United States**

**Title**

Multilateral Cooperative Project on Phase-out of PCB Use, and Management of  
PCB-contaminated Wastes in the Russian Federation

**Objective(s)**

The project consists of three phases. The first phase, development of a PCB  
Inventory for the Russian Federation, was completed in October 2000. The  
second phase was a Feasibility Study to evaluate alternatives to PCBs, as  
well as PCB decontamination and destruction technologies. This phase was  
completed in October 2002. Currently, work has started on Phase 3 to  
develop a prototype demonstration for destruction of up to 200 tonnes of PCB  
liquids from electrical capacitors in Russia.

This project is part of an integrated program to assist Russia to meet the  
requirements of both the Stockholm Convention and the Long Range  
Transboundary Air Pollution (LRTAP) POPs Protocol, and is being implemented  
under the Arctic Council Action Plan (ACAP).

**Timeframe**

1999 - 2006

**Status**

Concurrent

**Responsible organisation**

There is no lead country/ministry. Project is managed by Steering Group

**Partner**

Arctic Council, Canada, Denmark/Greenland, Finland, Iceland, Netherlands,  
Norway, Russian Federation, Sweden, United States, UNEP Chemicals, and  
NEFCO

**Project Funder(s)**

Canada, Denmark/Greenland, Finland, Iceland, Netherlands, Norway,  
Sweden, United States, and NEFCO

### **United States**

**Title**

PCB Inventories in the Philippines

**Objective(s)**

To conduct a training workshop on inventory procedures and support  
completion of an inventory

**Timeframe**

2000 - 2003

**Responsible organisation**

Philippine Environmental Ministry

**Partner**

USAID, UNEP Chemicals, UNIDO

**Project Funder(s)**

USAID, USEPA

**Comments**

Project contact:  
Carolyn Barley  
202-564-6438. Barley.Carolyn@epa.gov

### **United States**

**Title**

PCB Management in the Caribbean: Regional Pilot in the Bahamas

**Objective(s)**

To inventory PCB-containing equipment in the Bahamas and develop a  
management strategy for their sound management.

**Timeframe**

2002-2005

**Status**

Concurrent

**Responsible organisation**

Bahamas Environment Science and Technology Commission

**Partner**

College of the Bahamas, U.S.EPA Region 4

**Project Funder(s)**

U.S.EPA

### **United States**

**Title** Phase out of PCBs in Cuba  
**Objective(s)** To quantify the inventory of PCBs and PCB-containing equipment with a longer-term goal of destruction/elimination of a significant PCB inventory.

This project is part of an integrated program to assist Cuba to meet the requirements of the Stockholm Convention.

**Timeframe** 2003 - 2006  
**Status** Concurrent  
**Responsible organisation** UNEP Chemicals  
**Partner** Cuba, Russian Federation, United States, and UNEP Chemicals  
**Project Funder(s)** United States and UNEP Chemicals

**United States**

**Title** Preventing the Accumulation of Unwanted Stockpiles of Pesticides in Africa and the Near East  
**Objective(s)** Prevention is a critical component of solving the world's obsolete pesticide stockpile dilemma. This is because stockpile disposal assistance will always be considered a one-time only operation, and thus will not solve the problem of subsequent accumulation of obsolete pesticide stockpiles. In addition, when compared to the management and disposal of stockpiles, prevention is cost-effective, environmentally sound, and permanent.

This project provides support to the Food and Agriculture Organization of the United Nations (FAO) for prevention activities in conjunction with current or planned clean up operations.

**Timeframe** 2001- Not specified  
**Responsible organisation** FAO  
**Partner** World Wildlife Federation, World Bank  
**Project Funder(s)** U.S.EPA, World Bank, Canada POPs Trust Fund  
**Comments** project contact:  
 Janice Jensen  
 703-305-7706. Jensen.Janice@epa.gov

**United States**

**Title** PROARCA - PASA (Programa Ambiental Regional de Centro America (Regional Environmental Program for Central America) Participating Agency Service Agreement)  
**Objective(s)** Promote compatible national systems of environmental regulation, such as for controlling POPs, that provide high levels of protection for public health and especially sensitive ecosystems.

**Timeframe** 1996 - ongoing  
**Status** Concurrent  
**Responsible organisation** Central American Commission on Environment and Development (CCAD)  
**Partner** USAID  
**Project Funder(s)** USAID, USEPA  
**Data source** <http://www.usaid.gov/country/lac/cap/>  
<http://ccad.sgsica.org/>  
**Comments** Project contact:  
 Pam Teel  
 202-564-6424  
 teel.pam@epa.gov

**United States**



**Title** Reduction of Dioxins and Furans Releases in the Russian Federation  
**Objective(s)** The primary objective is the reduction of dioxins/furans releases to the Arctic from key industrial sectors with particular focus on the pulp and paper industry and landfill incinerators.

This project is part of an integrated program to assist Russia to meet the requirements of both the Stockholm Convention and the Long Range Transboundary Air Pollution (LRTAP) POPs Protocol, and is being implemented under the Arctic Council Action Plan (ACAP).

**Timeframe** 2001 - 2006

**Responsible organisation** Sweden

**Partner** Arctic Council, Russian Federation, United States, and UNEP Chemicals

**Project Funder(s)** Sweden and the United States

### **United States**

**Title** UNEP POPs Capacity Assistance Projects

**Objective(s)** UNEP-led POPs projects with an emphasis on major developing country producers and users of POPs

**Timeframe** 2002 - 2005

**Status** Concurrent

**Project Funder(s)** Department of State, other donors as determined by UNEP Chemicals

**Comments** This constitutes a U.S contribution to the UNEP POPs Trust fund for capacity assistance projects.

### **Uzbekistan**

**Title** National Action Plan for the Reduction of Production and Use of POPs and the Introduction of Alternatives to POPs in 1999-2000.

**Status** No info

### **Yemen**

**Objective(s)** This project is aiming to incinerate about 300 tones of (Obsolete Pesticides : Soils & Various Packaging Materials Contaminated with Pesticides) among them POPs such as DDT and Endrin. The incineration process will be carried out in the UK.

**Timeframe** 31.05.2002 - 30.05.2003

**Status** Concurrent

**Responsible organisation** General Directorate of Plant Protection  
Ministry of Agriculture and Irrigation  
Sana'a, P.O.Box 26  
Tel.: +9671 250956/228036  
Fax.: +9671 228064

**Partner** Food and Agriculture Organization, United nations

**Data source** 1. General Directorate of Plant Protection  
Ministry of Agriculture and Irrigation  
Sana'a, P.O.Box 26, Yemen  
Tel.: +9671 250 956/228 036  
Fax.: +9671 228 064

2. Mr. Salem Baquhaizel  
Environment Protection Authority  
Sana'a, P.O.Box 19719, Yemen  
Tel.: +9671 207 816  
Fax.: +9671207 327  
Email: EPA@y.net.ye

3. Dr. Gamal Allozy  
Environment Protection Authority  
Aden Branch  
P.O.Box 603, Crater Aden  
Tel.: +9672 240 607  
Fax.:+9672 240 616  
Email: gallzy@y.net.ye

## 2.3 Regulatory Status of POPs on bans, restrictions, legally permitted use or no actions

Updated information included from the following countries:

2.	Algeria	37.	European Commission	74.	Netherlands
3.	Argentina	38.	Fiji	75.	New Zealand
4.	Armenia	39.	Finland	76.	Nicaragua
5.	Austria	40.	France	77.	Niger
6.	Bahamas	41.	FS Micronesia	78.	Norway
7.	Barbados	42.	Gambia, The	79.	Panama
8.	Belarus	43.	Germany	80.	Paraguay
9.	Belgium	44.	Ghana	81.	Peru
10.	Benin	45.	Greece	82.	Philippines
11.	Brazil	46.	Guinea	83.	Poland
12.	Brunei	47.	Hungary	84.	Portugal
13.	Bulgaria	48.	Iceland	85.	Romania
14.	Burkina Faso	49.	Indonesia	86.	Rwanda
15.	Burundi	50.	Iran	87.	Saudi Arabia
16.	Canada	51.	Ireland	88.	Singapore
17.	Central African Republic	52.	Italy	89.	Slovakia
18.	Chad	53.	Jamaica	90.	Slovenia
19.	Chile	54.	Japan	91.	South Africa
20.	China	55.	Jordan	92.	South Korea
21.	Colombia	56.	Kazakhstan	93.	Sri Lanka
22.	Congo	57.	Kuwait	94.	St. Kitts and Nevis
23.	Costa Rica	58.	Kyrgyzstan	95.	Sudan
24.	Croatia	59.	Lao PDR	96.	Sweden
25.	Cuba	60.	Latvia	97.	Syria
26.	Cyprus	61.	Lebanon	98.	Thailand
27.	Czech Republic	62.	Lithuania	99.	Togo
28.	D.R.Congo	63.	Macedonia	100.	Trinidad and Tobago
29.	Denmark	64.	Madagascar	101.	Turkey
30.	Djibouti	65.	Malaysia	102.	Ukraine
31.	Dominican Republic	66.	Mauritius	103.	United Kingdom
32.	Ecuador	67.	Mexico	104.	United States
33.	Egypt	68.	Moldova	105.	Uruguay
34.	El Salvador	69.	Monaco	106.	Uzbekistan
35.	Estonia	70.	Mongolia	107.	Venezuela
36.	Ethiopia	71.	Morocco	108.	Vietnam
		72.	Myanmar	109.	Yemen
		73.	Nepal	110.	Yugoslavia
				111.	Zambia



	Banned	Restricted	Allowed	Year	Comments
<b>Albania</b>					
Aldrin			X		
Chlordane			X		
DDT			X		
Dieldrin			X		
Endrin			X		
Heptachlor			X		
Hexachlorobenzene			X		
PCB			X		
Toxaphene			X		
<b>Algeria</b>					
Aldrin	X			1994	Currently not used. Banned in 1994. Small quantities identified under commercial name of Aldrex.  Quantity of contained Aldrine is 345 kg
Chlordane	X			1969	Not used  Import and use of Chlordane are prohibited by the decision no. 3028 of 16 September 1969
DDT		X			Severely restricted. Large stocks from agriculture well identified under commercial names of Spectrum, Magirol, and S'clodet-  Quantity of contaminated DDT is 188,925 kg

	Banned	Restricted	Allowed	Year	Comments
<b>Algeria</b>					
Dieldrin	X			1994	Not used  Import and use of Dieldrin are prohibited by the decision no 3032 of 16 September 1969
Dioxin_Furan			X		In the first week of April 2003, an expert will present different measures of the Dioxin and Furan and this in the framework on the National Implementation plan of the Stockholm Convention on POPs
Endrin			X		Currently not used. Small quantities identified under brand name Endrine 20EC.  Quantity of contaminated Endrine is 6,000 kg
Heptachlor	X			1994	Import and Use of Heptachlor are prohibited by the decision no 3032 of 16 September 1969
Hexachlorobenzene	X				Banned as a pesticide. Not imported
Mirex			X		Not registered
PCB		X			Although severely restricted since 1985, used principally in electrical equipment (transformers-condensers) well located in National Oil Company, National Power Generation Company, and some public installations (6770 electrical equipment, 2994 tons of PCBs in oil)  Production use and import of PCBs are prohibited by the Decree no 87-182 August 1987
Toxaphene	X				Not Used.  Importation and use of products which contains Toxaphene are prohibited by decision no 3032 of 16 September 1969

	Banned	Restricted	Allowed	Year	Comments
<b>Argentina</b>					
<b>Aldrin</b>	X			1990	Prohibición total para uso agrícola- Decreto PEN N°2121/90 Boletín Oficial 16/10/1990. Autoridad Aplicación: SS A, G y P (Sanidad Vegetal) Prohibición de uso en bovinos y porcinos- Decreto 2143/68: publicado Boletín Oficial 30/04/68. Autoridad Aplicación: SA y G (Sanidad Animal)
<b>Chlordane</b>	X			1998	Prohibición de importación, comercialización y uso como fitosanitario de los principios activos clordano y lindano, y los productos formulados con base en estos. Resolución SAGPyA n°513-1998. Boletín Oficial 13/08/1998 Prohibición de uso en bovinos y porcinos- Decreto PEN No. 2143/68: publicado Boletín Oficial 30/04/68. Autoridad Aplicación: SA y G (Sanidad Animal)
<b>DDT</b>	X			1990	Prohibición total para uso agrícola- Decreto PEN N°2121/90 Boletín Oficial 16/10/1990. Autoridad Aplicación: SS A, G y P (Sanidad Vegetal) Prohibición en medicina humana_ Resolución MsvAS n°133/91. Auto.Aplic: Ministerio de Salud y Acción Social- 1991. Prohibición de uso en bovinos y porcinos- Decreto 2143/68: publicado Boletín Oficial 30/04/68. Autoridad Aplicación: SA y G (Sanidad Animal)
<b>Dieldrin</b>	X			1980	Prohibición de fabricación, importación, formulación, comercialización y Uso. Ley Nacional n°22289- 1980. Boletín Oficial 02/10/1980. Auto.Applic. SA,G y P.
<b>Dioxin_Furan</b>		X			Considerados residuos peligrosos (Categ.Control Y43 e Y44). Ley Nacional 24051- Decreto Regla.n°831/93. Boletín Oficial:LRP 1992-Decreto Regl.:03/05/1993. Autoridad de aplicación SRNyDS. Ley Nacional de residuos peligrosos (24.051). Boletín Oficial de 1992.Aut.Aplic.: Secretaría de Recursos Naturales y desarrollo Sostenible.
<b>Endrin</b>	X			1990	Prohibición total para uso agrícola- Decreto PEN N°2121/90 Boletín Oficial 16/10/1990. Autoridad Aplicación:SS A, G y P (Sanidad Vegetal) Prohibición de uso en bovinos y porcinos- Decreto 2143/68: publicado Boletín Oficial 30/04/68. Autoridad Aplicación: SA y G (Sanidad Animal)

	Banned	Restricted	Allowed	Year	Comments
<b>Argentina</b>					
Heptachlor		X		1993	Prohibición total- Resolución 27/93. Boletín Oficial de 1993. Auto.Aplic: SSA G yP Prohibición en sanidad animal- Decreto PEN n°647/68. Boletín Oficial de 1968. Auto. Aplic S A yG.
Hexachlorobenzene			X		(1)Prohibición de uso en bovinos y porcinos- Decreto PEN2143/68- Boletín Oficial 30/04/68. Auto.Aplic. SA y G (Sanidad Animal) (2)Prohibición como gorgoricida. Disposición n°47/72- Sanidad Vegetal. Boletín Oficial 01/06/72. Auto.Aplic. SA yG. Prohibición como terapéutico de semillas- resolución n°10/91. Autoridad de Aplicación SSAG yP. Régimen de expropiación de fungicidas formulados con HCB.-Ley.Nacional 20316 de1973. Boletín Oficial 11/05/1973. Auto.Aplic. S,A yG.
Mirex		X		1999	Prohibición de importación, comercialización y uso de la sustancia activa DODECACLORO y los productos formulados en base a la misma. Resolución SAGPyA No. 627/99, publicada en Boletín Oficial 29/10/1999. Autoridad de aplicación SAGPyA.
PCB			X		Normas para el uso, manipulación y disposición segura de PCB y sus desechos. Resolución n°369/91. MT y SS. Boletín Oficial 02/05/1991. Aut.Aplic.Ministerio de Trabajo. Registro de empresas que utilicen PCBs- Disposición n°02/95. Boletín Oficial 1995. Aut.Aplic.:Ministerio de Trabajo y seguridad Social (MTySS). Considerados Residuos Peligrosos (Cat.Control Y10). Ley Nacional n°24051 (LRP) de 1992- Decreto regl. N°831/93. Boletín Oficial:03/05/1993. Autoridad de aplicación SRNyDS
Toxaphene			X		Same (1) &(2) as HCB. (3) Prohibición de uso en ciclo vegetativo de cereales y oleaginosas. Disposición n°79/72. Boletín Oficial 1972. Aut.Aplic. SA yG (Sanidad Vegetal)
<b>Armenia</b>					
Aldrin		X		1970	Chemical use is banned by order of Ministry of Health of former USSR in 1970.



	Banned	Restricted	Allowed	Year	Comments
<b>Armenia</b>					
Chlordane		X			<p>Chemical isn't included in the "List of plant protection chemical and biological substances allowed for use in Republic of Armenia" approved by Governmental Decision No 608 30.09.2000;</p> <p>Chemical is included in the "List of chemicals, biological substances, heavy metals or their compounds and other substances, which have negative impact on the ecosystem of Lake Sevan", approved by Governmental Decision No57 24.01.2002.</p>
DDT		X		1970	Chemical use is banned by order of Ministry of Health of former USSR in 1970;
Dieldrin		X		1985	<p>Chemical use is banned by order of Ministry of Health of former USSR in 1985;</p> <p>Chemical isn't included in the "List of plant protection chemical and biological substances allowed for use in Republic of Armenia" approved by Governmental Decision No 608 30.09.2000;</p> <p>Chemical is included in the "List of chemicals, biological substances, heavy metals or their compounds and other substances, which have negative impact on the ecosystem of Lake Sevan", approved by Governmental Decision No57 24.01.2002.</p>
Dioxin_Furan			X		No Action
Endrin		X			<p>Chemical isn't included in the "List of plant protection chemical and biological substances allowed for use in Republic of Armenia" approved by Governmental Decision No 608 30.09.2000;</p> <p>Chemical is included in the "List of chemicals, biological substances, heavy metals or their compounds and other substances, which have negative impact on the ecosystem of Lake Sevan", approved by Governmental Decision No57 24.01.2002.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Armenia</b>					
Heptachlor	X			1986	<p>Chemical use is banned by order of Ministry of Health of former USSR in 1986;</p> <p>Chemical isn't included in the "List of plant protection chemical and biological substances allowed for use in Republic of Armenia" approved by Governmental Decision No 608 30.09.2000;</p> <p>Chemical is included in the "List of chemicals, biological substances, heavy metals or their compounds and other substances, which have negative impact on the ecosystem of Lake Sevan", approved by Governmental Decision No57 24.01.2002.</p>
Hexachlorobenzene	X				<p>Chemical isn't included in the "List of plant protection chemical and biological substances allowed for use in Republic of Armenia" approved by Governmental Decision No 608 30.09.2000;</p>
Mirex	X				<p>Chemical isn't included in the "List of plant protection chemical and biological substances allowed for use in Republic of Armenia" approved by Governmental Decision No 608 30.09.2000;</p>
PCB			X		No actions are taken
Toxaphene	X				<p>Chemical isn't included in the "List of plant protection chemical and biological substances allowed for use in Republic of Armenia" approved by Governmental Decision No 608 30.09.2000;</p> <p>Chemical is included in the "List of chemicals, biological substances, heavy metals or their compounds and other substances, which have negative impact on the ecosystem of Lake Sevan", approved by Governmental Decision No57 24.01.2002.</p>
<b>Austria</b>					
Aldrin	X			1992	<p>Federal Law Gazette N°97/1992 ordinance concerning the Ban of Certain Dangerous Substances in Plant Protection products: these substances shall not be produced or marketed.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Austria</b>					
Chlordane		X		1992	Federal Law Gazette N°97/1992 ordinance concerning the Ban of Certain Dangerous Substances in Plant Protection products: these substances shall not be produced or marketed. Federal law Gazette N°502/1991, Ordinance concerning threshold values for groundwater: threshold value for ?PCB=0,06?g/l. If an area is not just temporarily affected, the head of the provincial government has to declare it to be a groundwater re-mediation area. Due actions have to follow.
DDT		X		1992	Federal Law Gazette N°97/1992 ordinance concerning the Ban of Certain Dangerous Substances in Plant Protection products: these substances shall not be produced or marketed. Federal law Gazette N°502/1991, Ordinance concerning threshold values for groundwater: threshold value for ?PCB=0,06?g/l. If an area is not just temporarily affected, the head of the provincial government has to declare it to be a groundwater re-mediation area. Due actions have to follow.
Dieldrin		X		1992	Federal Law Gazette N°97/1992 ordinance concerning the Ban of Certain Dangerous Substances in Plant Protection products: these substances shall not be produced or marketed. Federal law Gazette N°502/1991, Ordinance concerning threshold values for groundwater: threshold value for ?PCB=0,06?g/l. If an area is not just temporarily affected, the head of the provincial government has to declare it to be a groundwater re-mediation area. Due actions have to follow.
Dioxin_Furan			X		General ELV for Dioxin/Furan emissions of waste combustion facilities: <0,1ng I-TEQ /m3. LRV-K (Air Ordinance for steam boilers). Sinter plant: ELV=0,4ng I-TEQ/m3, enter into force for new plants in 2004. 163: Ordinance "Reduction of Emissions from sinter plants". Production of iron and steel: ELV=0,4ng I-TEQ/m3 (until 2006), ELV=0,1ng I-TEQ/m3 (from 2006). 160: Ordinance "Reduction of emissions from sinterplants". Copper production: ELV=0,9ng I-TEQ/m3

	Banned	Restricted	Allowed	Year	Comments
<b>Austria</b>					
<b>Endrin</b>		X		1992	Federal Law Gazette N°97/1992 ordinance concerning the Ban of Certain Dangerous Substances in Plant Protection products: these substances shall not be produced or marketed. Federal law Gazette N°502/1991, Ordinance concerning threshold values for groundwater: threshold value for ?PCB=0,06?g/l. If an area is not just temporarily affected, the head of the provincial government has to declare it to be a groundwater re-mediation area. Due actions have to follow.
<b>Heptachlor</b>		X		1992	Federal Law Gazette N°97/1992 ordinance concerning the Ban of Certain Dangerous Substances in Plant Protection products: these substances shall not be produced or marketed. Federal law Gazette N°502/1991, Ordinance concerning threshold values for groundwater: threshold value for ?PCB=0,06?g/l. If an area is not just temporarily affected, the head of the provincial government has to declare it to be a groundwater re-mediation area. Due actions have to follow.
<b>Hexachlorobenzene</b>		X		1992	Federal Law Gazette N°97/1992 ordinance concerning the Ban of Certain Dangerous Substances in Plant Protection products: these substances shall not be produced or marketed. Federal law Gazette N°502/1991, Ordinance concerning threshold values for groundwater: threshold value for ?PCB=0,06?g/l. If an area is not just temporarily affected, the head of the provincial government has to declare it to be a groundwater re-mediation area. Due actions have to follow.
<b>Mirex</b>		X		1992	Federal Law Gazette N°97/1992 ordinance concerning the Ban of Certain Dangerous Substances in Plant Protection products: these substances shall not be produced or marketed. Federal law Gazette N°502/1991, Ordinance concerning threshold values for groundwater: threshold value for ?PCB=0,06?g/l. If an area is not just temporarily affected, the head of the provincial government has to declare it to be a groundwater re-mediation area. Due actions have to follow.

	Banned	Restricted	Allowed	Year	Comments
<b>Austria</b>					
PCB		X			Ordinance N°210/1993 (Federal Law Gazette) concerning the ban of halogenated biphenyl's, terphenyl's, naphtalines and diphenylmethanes. Federal law Gazette N°502/1991, Ordinance concerning threshold values for groundwater: threshold value for ?PCB=0,06?g/l. If an area is not just temporarily affected, the head of the provincial government has to declare it to be a groundwater re-mediation area. Due actions have to follow. Federal Law Gazette N°502/1991, ordinance concerning the Examination of Water Quality: the content of PCB in ground water is to be measured periodically. A number of Ordinances concerning waste management and treatment regulates the declaration of PCB-containing wastes as dangerous, duty of notification and number codes for different kinds of PCB-containing wastes. Lower Austrian Law Gazette 6160/2-0 (1994) and 6160/2-1 (1994) and Upper Austrian Law Gazette 217/1993, Ordinance concerning Sewage Sludge: Maximum Values for each of the Ballschmitter-congeners=0,2mg/kg dry substance.
Toxaphene		X		1992	Federal Law Gazette N°97/1992 ordinance concerning the Ban of Certain Dangerous Substances in Plant Protection products: these substances shall not be produced or marketed. Federal law Gazette N°502/1991, Ordinance concerning threshold values for groundwater: threshold value for ?PCB=0,06?g/l. If an area is not just temporarily affected, the head of the provincial government has to declare it to be a groundwater re-mediation area. Due actions have to follow.
<b>Bahamas</b>					
Aldrin			X		
Chlordane			X		
DDT			X		
Dieldrin			X		
Dioxin_Furan			X		

	Banned	Restricted	Allowed	Year	Comments
<b>Bahamas</b>					
Endrin			X		
Heptachlor			X		
Hexachlorobenzene			X		
Mirex			X		
PCB			X		
Toxaphene			X		
<b>Barbados</b>					
Aldrin	X			1987	
Chlordane	X			1986	
DDT	X			1967	
Dieldrin	X			1986	
Endrin	X			1986	
Heptachlor	X			1986	
Hexachlorobenzene	X			1985	
Mirex	X			1985	

	Banned	Restricted	Allowed	Year	Comments
<b>Barbados</b>					
PCB			X		Barbados Light and Power, the island's largest distributor of electrical transformers, has only ever used 2 PCB transformers. They have always used mineral oil transformers. There has been no inventory done, however on the island's largest industrial plants, who bring in their own transformers.
Toxaphene	X			1985	
<b>Belarus</b>					
Aldrin			X		
Chlordane			X		
DDT			X		
Dieldrin			X		
Endrin			X		
Heptachlor			X		
Hexachlorobenzene			X		
Mirex			X		
PCB			X		
Toxaphene			X		
<b>Belgium</b>					
Aldrin	X			1976	
Chlordane	X			1988	

	Banned	Restricted	Allowed	Year	Comments
<b>Belgium</b>					
DDT	X			1976	
Dieldrin	X			1976	
Dioxin_Furan		X			Emissions standards for dioxins are set for several sectors: waste incineration: 0,1 Ng TEQ/Nm3 wood incineration: idem refineries: new installations: 0,5 Ng/Nm3 and existing:2,5 Ng TEQ/Nm3 (from 01/01/2002) combustion plants: 0,1 Ng EQ/Nm3 non ferro sector: new: 0,5 Ng TEQ/Nm3 and existing 2,5 Ng TEQ/Nm3 (from 01/01/2002) crematoria: 0,1 Ng EQ/Nm3 / from 01/01/2003) Emission standards from VLAREM (Flemish environmental regulation)
Endrin	X			1962	
Heptachlor	X			1976	
Hexachlorobenzene	X			1974	
Mirex	X			1900	
PCB		X			regulatory action that limits the use of PCB-PCT and that makes an inventory of PCB equipment
PCB		X			Pour tous les appareils aux PCB ou contenant des PCB et faisant l'objet d'un inventaire conformément aux arrêtés cités dans la rubrique «data source » il est prévu des plans d'élimination et/ou de décontamination par région : région Flamande, région Wallonne et la région Bruxelles-Capitale (voir coordonnées dans la rubrique « comments » ci-après. Dans les 3 régions, les plans prévoient l'élimination et/ou la décontamination au plus tard le 31 décembre 2005 avec possibilité de dérogations. Pour ces cas et suivant les modalités prévues dans les arrêtés cités en « data source » la date ultime d'élimination et/ou de dérogation est le 31 décembre 2010



	Banned	Restricted	Allowed	Year	Comments
<b>Belgium</b>					
Toxaphene	X			1974	
<b>Benin</b>					
Aldrin	X			1993	Arrêté interministeriel N°0255/MDR portant interdiction d'emploi en Agriculture de matières actives entrant dans la composition de produits phytopharmaceutiques dontles POP visés dans le document d'ensemble.
Chlordane	X			1993	Arrêté interministeriel N°0255/MDR portant interdiction d'emploi en Agriculture de matières actives entrant dans la composition de produits phytopharmaceutiques dontles POP visés dans le document d'ensemble.
DDT	X			1993	Arrêté interministeriel N°0255/MDR portant interdiction d'emploi en Agriculture de matières actives entrant dans la composition de produits phytopharmaceutiques dontles POP visés dans le document d'ensemble.
Dieldrin	X			1993	Arrêté interministeriel N°0255/MDR portant interdiction d'emploi en Agriculture de matières actives entrant dans la composition de produits phytopharmaceutiques dontles POP visés dans le document d'ensemble.
Endrin	X			1993	Arrêté interministeriel N°0255/MDR portant interdiction d'emploi en Agriculture de matières actives entrant dans la composition de produits phytopharmaceutiques dontles POP visés dans le document d'ensemble.
Heptachlor	X			1993	Arrêté interministeriel N°0255/MDR portant interdiction d'emploi en Agriculture de matières actives entrant dans la composition de produits phytopharmaceutiques dontles POP visés dans le document d'ensemble.
Mirex	X			1993	Arrêté interministeriel N°0255/MDR portant interdiction d'emploi en Agriculture de matières actives entrant dans la composition de produits phytopharmaceutiques dontles POP visés dans le document d'ensemble.

	Banned	Restricted	Allowed	Year	Comments
<b>Brazil</b>					
Aldrin		X		1993	<p>CONAMA resolution 20/1986: maximum level in water is from .0003 ug/L to .03 ug/L, according to the use given to the water.</p> <p>Directive no 63 from June 15,1992- Ministry of Agriculture - Prohibits the production, import, export, trade and use of active ingredient ALDRIN, for application in livestock and agriculture</p> <p>CONAMA Resolution 23/1996- Ministry of the Environment- Sets restrictions waste importing, based on the Basel convention</p> <p>Directive 204/1997- Ministry of Transportation- Sets instructions for road and rail domestic transportation of dangerous products</p> <p>Directive no 11, from January 8, 1998- Ministry of Health, National Surveillance- It takes Aldrin out the list of substances which can be authorized as pesticides</p> <p>Directive 1469, from December 29, 2000- Ministry of Health- maximum allowed concentration in drinking water = 0.03ug/L</p> <p>Directive no 329, from September 02, 1985 - Ministry of Agriculture- Prohibits the trade, use, and distribution of Aldrin-based pesticides for application in livestock and agriculture, except for the use of aldrin-based baits and termiticide for use in foresting and reforesting There is no production of Aldrin in this country. Not registered as pesticide for any purpose</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Brazil</b>					
Chlordane		X		1980	<p>Directive no 40 from December 26, 1980- Ministry of Agriculture- Prohibits the registration of Chlordane-based pesticides for application in livestock and agriculture</p> <p>CONAMA Resolution 20/1986: maximum level of Chlordane in water is from 0.004 ug/L to 0.03ug/L according to the given use of the water</p> <p>CONAMA Resolution 23/1996 - Ministry of the Environment - Sets restrictions for waste importing, based on the Base Convention</p> <p>Directive 204/1997- Ministry of Transportation- sets instruction for road and rail domestic transportation of dangerous products</p> <p>Directive 1469, from December 29, 2000- Ministry of Health - maximum allowed concentration in drinking water = 0.2 ug/L (total of isomers) There is no production of Chlordane in this country. Not registered pesticide for any purpose.</p>
DDT		X		1985	<p>CONAMA Resolution 23/1996- Ministry of the Environment - Sets restrictions for waste importing, based on the Basel Convention</p> <p>Directive 204/1997 - Ministry of transportation - Sets instructions for road and rail transportation of dangerous products</p> <p>Directive no 11, from January 8, 1998 - Ministry of Health, National Surveillance- It takes DDT out of the list of substances which can be authorized as pesticides</p> <p>Directive 1469, from December 29, 2000 - Ministry of Health - maximum allowed concentration in drinking water = 2 ug/L (total of isomers)</p> <p>Directive no 329, from September 02, 1985 - Ministry of Agriculture- Prohibits the trade, use, and distribution of DDT-based pesticides for application in livestock and agriculture, except for the use of public health campaigns There is no production of DDT in the country. Not registered pesticide for any purpose.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Brazil</b>					
Dieldrin		X		1996	<p>CONAMA Resolution 23/1996- Ministry of the Environment - Sets restrictions for waste importing, based on the Basel Convention</p> <p>Directive 1469, from December 29, 2000 - Ministry of Health - maximum allowed concentration in drinking water = 0.03 ug/L (total of isomers) There is no production of Dieldrin in the country. Not registered pesticide for any purpose.</p>
Dioxin_Furan			X		<p>CONAMA Resolution no 316 from October 29, 2002- Sets procedures and criteria for waste thermal treatment systems operation, including maximum emission limit for dioxins and furans = 0.50 ng/Nm3</p> <p>Normative Instructions 008, 009, 010 from May 18, 1999 - Ministry of Agriculture - Regulates production and trade of citric pulp bran, sets monitoring program on the incidence of dioxins and furans in the bran produced and exported. Sets monitoring programme of lime used in production of animal feed. Maximum allowed standard= 500 pg/KG I-TEQ</p>
Endrin		X		1985	<p>There is no production of Endrin in the country.</p> <p>NDirective no 329, from September 02, 1985- Ministry of Agriculture- Prohibits the trade, use and distribution of Endrin-based pesticides for application in livestock and agriculture.</p> <p>CONAMA Resolution 20/1986: Maximum level of Chlordane in water is from 0.004 ug/L to 0.2 ug/L, according to use of the water</p> <p>CONAMA Resolution 23/1996- Ministry of the Environment . It sets restrictions for waste importing, based on the Basel Convention</p> <p>Directive 204/1997- Ministry of Transportation, It sets instruction for road and rail domestic transportation for dangerous products.</p> <p>Directive no 11. From January 8, 1998- Ministry of Health, National Surveillance- It takes Endrin out the list of substances which can be authorized as pesticides</p> <p>Directive 1469, from December 29, 2000- Ministry of Health- Maximum allowed concentration in drinking water = 1 ug/L Not registered pesticide for any purpose.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Brazil</b>					
Heptachlor		X			<p>Law no 4,797 from October 20, 1965 and Interministerial Directive no. 292 from April 28, 1989 - Control Production, import and use of pesticides as wood preservatives</p> <p>CONAMA Resolution 20/1986: Maximum level in water is from 0.001 to 0.1 ug/L, according to the use given to the water</p> <p>CONAMA Resolution 23/1996- Ministry of the Environment - Sets restrictions for importing, based on the Basel Convention</p> <p>Directive 204/1997- Ministry of Transportation' It sets instructions for road and rail domestic transportation of dangerous products.</p> <p>Directive 1469, from December 29, 2000- Ministry of Health- Maximum allowed concentration water = 0.03 ug/L</p> <p>Directive no 329, from September 02, 1985 - Ministry of Agriculture- prohibits the trade, use and distribution of Heptachlor-based pesticides for application in livestock and agriculture Heptachlor is permitted for use as wood preservative. For its production, import, trade and use as wood preservative it is necessary a previous registration by the Federal Environment body, following an assessment of both toxicological and ecotoxicological aspects undertaken by the health and environmental sectors, respectively.</p> <p>At present a phasing out period for this chemical is being discussed.</p>
Hexachlorobenzene		X			<p>CONAMA Resolution 20/1986: Maximum level in water is 0.01ug/L</p> <p>Directive 204/1997- Ministry of Transportation, It sets instruction for road and rail domestic transportation for dangerous products.</p> <p>Directive 1469, from December 29, 2000- Ministry of Health- Maximum allowed concentration in drinking water = 1 ug/L There is no production of Hexachlorobenzene in the country. Not registered pesticide for any purpose.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Brazil</b>					
Mirex		X		1985	<p>Directive no 329, from September 02, 1985 - Ministry of Agriculture- Prohibits the trade, use, and distribution of Mirex--based pesticides for application in livestock and agriculture, except for the use of baits containing mirex</p> <p>CONAMA Resolution 20/1986: Maximum level in water is from 0.001 ug/L (dodecachlor + nonachlor)</p> <p>Directive no 91 from November 30, 1992- Ministry of Agriculture - Prohibits the import of hexachlorocyclopentadiene, to be used in producing mirex, and the production, import, trade and use of baits containing mirex.</p> <p>Directive 204/1997 - Ministry of Transportation - Sets instructions for road and rail domestic transportation of dangerous products There is no production of Mirex in the country. Not registered pesticide for any purpose.</p>
PCB			X		<p>Instruction SEMA/STC/CRS no 1, from June 10, 1983 - Set out the conditions for handling, storage and transport of PCBs and /or wastes contaminated by PCBs</p> <p>CONAMA Resolution 20/1986; Maximum level in water is 0.001 ug/L</p> <p>Resolution CONAMA no 06/1988- Ministry of the Environment, requires that electrical power companies which withhold material and/or equipment contaminated by PCBs, as well as stocks or out-of-use equipment containing askarel, must present related inventory to the environmental body.</p> <p>CONAMA Resolution 23/1996- Ministry of the Environment - Sets restrictions for waste importing, based on the Basel Convention</p> <p>Intrainisterial Directive no 019, from January 29, 1981, Ministries of the Interior, of Industry and Trade and of Mining and Energy- Prohibit the implementation of processes which aim at producing PCBs and the trade of PCBs</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Brazil</b>					
Toxaphene	X			1985	<p>CONAMA Resolution 20/1986: Maximum level in water is from 0.005ug/L to 5.0 ug/L, according to the use of the water</p> <p>CONAMA Resolution 23/1996- Ministry of the Environment . It sets restrictions for waste importing, based on the Basel Convention</p> <p>Directive 204/1997- Ministry of Transportation, It sets instruction for road and rail domestic transportation for dangerous products.</p> <p>Directive no 329, from September 02, 1985- Ministry of Agriculture- Prohibits the trade, use and distribution of Toxaphene-based pesticides for application in livestock and agriculture.</p> <p>There is no production of Toxaphene in the country. Not registered pesticide for any purpose.</p>
<b>Brunei</b>					
Aldrin	X			1980	
Chlordane	X			1980	
DDT	X			1980	
Dieldrin	X			1980	
Dioxin_Furan		X			Control used for furans, e.g., carbamate compound used for rice pests control. No dioxins
Endrin	X			1980	
Heptachlor	X			1980	
Hexachlorobenzene	X			1980	
Toxaphene	X			1980	

	Banned	Restricted	Allowed	Year	Comments
<b>Bulgaria</b>					
Aldrin	X				
Chlordane	X				
DDT	X				
Dieldrin	X				
Dioxin_Furan		X			FOR A NUMBER OF THEM LIMITS ARE INTRODUCED / WASTES GASES AND WASTES/  REGULATIONS ALREADY IN FORCE
Endrin	X				
Heptachlor	X				
Hexachlorobenzene	X				
Mirex	X				
PCB		X			TO BE OUT OF USE FROM THE YEAR 2025, ACCORDING THE EXEMPTIONS UNDER THE STOCKHOLM CONVENTION
Toxaphene	X				
<b>Burkina Faso</b>					
Aldrin	X				
Chlordane	X				
DDT	X				



	Banned	Restricted	Allowed	Year	Comments
<b>Burkina Faso</b>					
Dieldrin	X				
Endrin			X		
Heptachlor	X				
Hexachlorobenzene			X		
Mirex			X		
PCB			X		
Toxaphene			X		
<b>Burundi</b>					
Aldrin	X			1996	Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique
Chlordane	X			1996	Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique
DDT	X			1996	Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique
Dieldrin	X			1996	Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique
Dioxin_Furan			X		No action. Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique
Endrin	X				Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique

	Banned	Restricted	Allowed	Year	Comments
<b>Burundi</b>					
Heptachlor		X		1996	Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique
Hexachlorobenzene		X		1996	Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique
Mirex		X		1996	Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique
PCB			X		
Toxaphene		X		1996	Ministère de l'Agriculture et de l'élevage; Ministère de la Santé Publique
<b>Canada</b>					
Aldrin		X		1995	The use against termites was voluntarily discontinued by the registrant in December 1990 with the understanding that existing stocks would be sold, used or disposed-of by the end of 1995. After this date, the sale or use of aldrin in Canada represents a violation of the Pest Control Products Act. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of aldrin from the environment. PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9.

	Banned	Restricted	Allowed	Year	Comments
<b>Canada</b>					
<b>Chlordane</b>		X		1995	<p>Chlordane was widely used in Canada to control insect pests in crops and forests, and for domestic and industrial applications. In response to environmental and safety concerns, most uses of chlordane were phased-out in the 1970s. The persistent nature of this insecticide and human health concerns prompted periodic re-evaluations of its registration.</p> <p>On December 31, 1985, uses of chlordane were no longer registered with the exception of control of subterranean termites by licensed pesticide applicators. The uses against termites were voluntarily discontinued by the registrants on December 31, 1990, with the understanding that existing stocks would be sold, used or disposed of by the end of 1995. After this date, the sale of chlordane in Canada represents a violation of the Pest Control Products Act. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of chlordane from the environment.</p> <p>PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9.</p>
<b>DDT</b>		X		1990	<p>DDT was widely used in Canada to control insect pests in crops, and for domestic and industrial applications. Registration of all uses of DDT was discontinued in 1985 with the understanding that existing stocks would be sold, used or disposed of by the next registration renewal date of December 31, 1990. After this date, any sale or use of DDT in Canada represents a violation of the Pest Control Products Act. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of DDT from the environment.</p> <p>PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9</p>
<b>Dieldrin</b>		X		1995	<p>The use against termites was discontinued by the registrant on December 31, 1990 with the understanding that existing stocks would be sold, used or disposed-of by the end of 1995. After this date, the sale or use of dieldrin in Canada represents a violation of the Pest Control Products Act. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of dieldrin from the environment.</p> <p>PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9</p>

**Canada**

Dioxin\_Furan

X

In Canada, dioxins and furans have been regulated in pulp and paper effluents since 1992. The implementation of these regulations resulted in a reduction of dioxins releases in the effluents of more than 99%.

Currently, and as a result of adopting the Toxic Substances Management Policy (TSMP), dioxins and furans are managed with the view of achieving the long term objective of virtual elimination.

In January 1999, the Federal/Provincial Task Force on Dioxins and Furans released the first Dioxins and Furans and Hexachlorobenzene Inventory of Releases, followed by a draft Update issued by Environment Canada in October 2000 and a revised Update published in February 2001. The latest Update documented the current understanding of anthropogenic sources in Canada releasing dioxins and furans. The Inventory of Releases and the Updates list emissions from over 20 sectors by province and territory, and provides national summaries for each sector.

Initial efforts have focused on atmospheric releases, the most complete component of the Inventory. Six priority sectors, varying from regional to national in scope, accounting for about 80% of national emissions in the 1999 inventory have been identified as priorities for early action. These are waste incineration (municipal solid waste, hazardous waste, sewage sludge and medical waste); burning salt laden wood in coastal pulp and paper boilers in British Columbia; residential wood combustion; iron sintering; electric arc furnace steel manufacturing; and conical municipal waste combustion in Newfoundland.

Limits and timelines have been endorsed for two priority sectors identified for the development of CWS: boilers burning salt-laden wood, and incinerators. Further, limits and timelines for iron sintering have been developed and accepted in principle. Proposed limits and timelines for steel manufacturing electric arc furnaces (EAFs) have been developed and received for consideration. A summary of the limits and timelines developed to date follows:

A. Source B. Limit for new facilities/year for application  
C. Limit for existing facilities/year of application

1. A. Boilers burning salt laden wood at signature (AS) B. 100 pg/m3/2006  
C. 500 pg/m3/2006

Banned	Restricted	Allowed	Year	Comments
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Incineration:

2. A. Municipal B. 80 pg/m3/ AS C. 80 pg/m3/ 2006

3. A. Medical B. 80 pg/m3 / AS C. 80 pg/m3/ 2006

4. A. Hazardous B. 80 pg/m3 / AS C. 80 pg/m3/ 2006

5. A. Sewage sludge B. 80 pg/m3 / AS C. 100 pg/m3/ 2005

6. A. Iron Sintering B. 200 pg/m3 / AS C. 1350 pg/m3 / 2002 C. 500 pg/m3 / 2005 C.200 pg/m3 / 2010

7. A. Steel EAFs B. 100 pg/m3 / AS C. 150 pg/m3 / 2006 C. 100 pg/m3 / 2010

The CWS for conical municipal waste combustion in Newfoundland and Labrador has been drafted. A CWS for dioxins./furans will not be developed for residential wood combustion since a recent Canadian study showed that the dioxin/furan contribution from this sector is lower than originally estimated. However, this sector is being addressed under the CWS process for PM/Ozone. Other sectors that are potentially a significant source of dioxin/furan release, such as open burning, are being reviewed by CCME.

Development of CWSs for dioxins and furans has taken into consideration environmental benefits, available technologies, socio-economic impacts, opportunities for pollution prevention and collateral benefits from reductions in other pollutants.

In recognition of the ultimate goal of virtual elimination, pollution prevention is being encouraged as the preferred method for avoiding the creation of dioxins or reducing releases to the environment.

	Banned	Restricted	Allowed	Year	Comments
<b>Canada</b>					
Endrin		X		1994	<p>Endrin was widely used in Canada to control insect pests in crops and as a rodenticide. In response to concerns regarding environmental persistence, most Canadian uses of endrin were phased-out in the early 1970s. The persistent nature of this insecticide prompted periodic re-evaluations of its registration.</p> <p>In 1989, the last registrant, indicated that there would be no further manufacture of the pesticide. Existing stocks would be sold, used or disposed of by the end of 1994. After this date, the sale or use of endrin in Canada represents a violation of the Pest Control Products Act. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of endrin from the environment.</p> <p>PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9.</p>
Heptachlor		X		1990	<p>Heptachlor was widely used in Canada to control insect pests in crops, and for domestic applications. In response to environmental concerns, most Canadian uses of heptachlor were phased-out in the 1970s. The persistent nature of this insecticide prompted periodic re-evaluations of its registration.</p> <p>With the exception of a use on narcissus bulbs, all uses of heptachlor were ended effective December 31, 1976. The last use of heptachlor on narcissus was voluntarily discontinued by the registrant as of December 31, 1985 with the understanding that existing stocks would be sold, used or disposed of by the end of 1990. After this date, the sale or use of heptachlor in Canada represents a violation of the Pest Control Products Act. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of heptachlor from the environment.</p> <p>PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Canada</b>					
Hexachlorobenzene		X		1981	<p>Hexachlorobenzene was registered for use in Canada as a fungicidal seed treatment. Registration was discontinued in 1976 due to environmental concerns with the understanding that existing stocks would be sold, used or disposed of by the end of 1981. After this date, the sale or use of hexachlorobenzene in Canada represents a violation of the Pest Control Products Act.</p> <p>Currently, the principal sources of hexachlorobenzene to the Canadian environment are estimated to be by-products from the manufacture and use of chlorinated solvents, application of HCB-contaminated pesticides, incineration of HCB-containing wastes, and long-range transport from other countries. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of hexachlorobenzene from the environment. PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9.</p>
Mirex		X			<p>Mirex was never registered for use as a pesticide in Canada. It has been used in Canada as a fire retardant in a variety of commercial products. Mirex has been used worldwide as an insecticide for control of fire ants, termites and other insect pests. The sale or use of mirex in Canada represents a violation of the Pest Control Products Act. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of mirex from the environment. PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9.</p>

**Banned Restricted Allowed Year Comments**

**Canada**

Banned	Restricted	Allowed	Year	Comments
	X		1977	<p>PCBs were never manufactured in Canada but were imported for use and have been used in a wide range of products including dielectric fluids, heat transfer agents, lubricants, flame retardants, plasticizers and water proofing agents.</p> <p>PCBs are regulated under a series of regulations promulgated under the Canadian Environmental Protection Act. The Chlorobiphenyl regulations were first issued in 1977 and prohibited the use of PCBs except for specified existing electrical equipment. These regulations also prohibit the manufacture, process, sale and import of any PCB filled equipment and prohibit the use of PCBs as a new filling or make-up fluid in any equipment.</p> <p>With respect to import, the federal Chlorobiphenyls Regulations allow import for destruction purposes only. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of PCBs from the environment. Polychlorinated Biphenyl's: Biological Criteria for an assessment of their effects on environmental quality, NRCC No. 16077, 1978. Chlorobiphenyl's Regulations, SOR 91-152, made by order in Council P.C. 1991-300 of February 21, 1991.</p>

	X		1985	<p>All uses of toxaphene, except for veterinarian use on hogs, were ended on 31 October, 1980. On December 31, 1982, the registration of products containing toxaphene for veterinary use was voluntarily inactivated by the registrant with the understanding that existing stocks would be sold, used or disposed of by December 31, 1985. After this date, the sale or use of Toxaphene in Canada represents a violation of the Pest Control Products Act. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of toxaphene from the environment. PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9.</p>
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**Central African Republic**

	X			<p>Décision Finale d'importation publiée en Janvier 1988 Utilisé en R.C.A: contre les termites en raison 0,1000 l à 1 L suivant la taille des termitières</p>
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	Banned	Restricted	Allowed	Year	Comments
<b>Central African Republic</b>					
Chlordane		X		1999	Circulaire intention publiée en Juin 1999 Utilisé en RCA contre les fourmis en caféiculture en raison de 20 à 25 kg du produit dense à 5% Rapport Campagne 1972 de l'IFCC (Institut Français Cacao- Café)
Chlordane		X			Aucune Loi relative existe encore Les fumés produisant ces produits provoquent souvent des maladies respiratoires chez l'Homme, mais aucune mesure n'est mise en place pour réglementer cela
DDT			X		Décision finale d'importation publiée en Juillet 1993. Le DDT est beaucoup plus Utilisé pour lutter lesavageurs sur le cotonniers en raison de 5 à 6 applications à intervalle de 14 jours à partir du 60e jours après semis, aussi en caféiculture contre les punaises et chenilles  Rapport Campagne 1970 et 1972 de l'IFCC RCA
Dieldrin	X				Circulaire interntion publiée en Juin 1989 Ce produit est utilisé en R.C.A. en contre les acrydiens en palmerais, le scolytes de rameaux et Boris de tronc en Caféiculture, les acridiens et termites en zone Cotonnière
Endrin	X				Décision finale d'importation publiée en Juillet 1989 Utilisé en R.C.A: les scolytes des cerises: 600 mg/Passage (2 Passages tous les 20 Jours). Syrale rouleuse des feuilles: 2,5 L/ ha à 20% de matière active
Heptachlor			X		Produit non identifié
Hexachlorobenzene	X				Décision finale d'importation publiée en Juin 1989 Ce produit est utilise pour la conservation des Semences contre les Characons
Mirex	X				Produit non identifié

	Banned	Restricted	Allowed	Year	Comments
<b>Central African Republic</b>					
PCB		X			Aucune mesure applicable à l'utilisation de ces produits n'est mise en place La continuité des enquêtes sur le terrain nous permettra d'avoir des clstification sur ce produit et les mesures appliquées aux huiles Moteurs vidanges
Toxaphene		X			Décision finale d'importation publiée en Juillet 1989
<b>Chad</b>					
Aldrin		X		1996	30/08/1996 date de la publication des Décisions d'importation des pays participants Pour les Pesticides, les Décisions d'importation ont été prises par l'autorité nationale désignée (Direction de la Protection des Végétaux et du Conditionnement). Data Source: Programme Conjoint FAO/PNUÉ pour l'application de la procédure.
DDT		X			Suivant procédure ICP (principe de l'Information et du Consentement Préalable) Pour les Pesticides, les Décisions d'importation ont été prises par l'autorité nationale désignée (Direction de la Protection des Végétaux et du Conditionnement). Data Source: Programme Conjoint FAO/PNUÉ pour l'application de la procédure.
Dioxin_Furan			X		Pour les Pesticides, les Décisions d'importation ont été prises par l'autorité nationale désignée (Direction de la Protection des Végétaux et du Conditionnement). Data Source: Programme Conjoint FAO/PNUÉ pour l'application de la procédure.
Endrin		X			Suivant procédure ICP (principe de l'Information et du Consentement Préalable) Pour les Pesticides, les Décisions d'importation ont été prises par l'autorité nationale désignée (Direction de la Protection des Végétaux et du Conditionnement). Data Source: Programme Conjoint FAO/PNUÉ pour l'application de la procédure.

	Banned	Restricted	Allowed	Year	Comments
<b>Chad</b>					
Hexachlorobenzene	X				Suivant procédure ICP (principe de l'Information et du Consentement Préalable) Pour les Pesticides, les Décisions d'importation ont été prises par l'autorité nationale désignée (Direction de la Protection des Végétaux et du Conditionnement). Data Source: Programme Conjoint FAO/PNUÉ pour l'application de la procédure.
Mirex			X		Décision d'importance à vérifier
PCB		X			Autoriser un délai supplémentaire est nécessaire pour prendre une décision définitive. Pour les Pesticides, les Décisions d'importation ont été prises par l'autorité nationale désignée (Direction de la Protection des Végétaux et du Conditionnement). Data Source: Programme Conjoint FAO/PNUÉ pour l'application de la procédure.
Toxaphene			X		Décision d'importation à vérifier
<b>Chile</b>					
Aldrin	X			1989	Resolution N° 2003 (November 1988), Servicio Agrícola y Ganadero, which banned the import and manufacture of Aldrin since January 1989, and the distribution, sale and use since April 1989, as well. This Resolution bans only the agricultural uses of Aldrin. To use Aldrin for other purposes, it is necessary to have an specific authorization from the Ministry of Health
Chlordane	X			1998	Resolution N° 2142 (October 1987), Servicio Agrícola y Ganadero, which banned the import and manufacture of Chlordane since October 1987, and the distribution, sale and use since January 1988, as well. This Resolution bans only the agricultural uses of Chlordane. To use Chlordane for other purposes, it is necessary to have an specific authorization from the Ministry of Health.

	Banned	Restricted	Allowed	Year	Comments
<b>Chile</b>					
DDT	X			1985	Resolution N° 639 (May 1984), Servicio Agrícola y Ganadero, which banned the import and manufacture of DDT since May 1984 and the distribution, sale and use since January 1985, as well. This Resolution bans only the agricultural uses of DDT. To use DDT for other purposes, it is necessary to have an specific authorization from the Ministry of Health.
Dieldrin	X			1998	Resolution N° 2142 (October 1987), Servicio Agrícola y Ganadero, which banned the import and manufacture of Dieldrin since October 1987 and the distribution, sale and use since January 1988, as well. This Resolution bans only the agricultural uses of Dieldrin. To use Dieldrin for other purposes, it is necessary to have an specific authorization from the Ministry of Health.
Dioxin_Furan			X		There are some Resolutions of Health Services where contaminated sawdust stockpiles exists. The Resolutions banned the use, burn and transport of all the sawdust stockpiles belonging to those sawmills where Sodium Pentachlorophenate had been used in wood.
Endrin	X			1998	Resolution N° 2142 (October 1987), Servicio Agrícola y Ganadero, which banned the import and manufacture of Endrin since October 1987 and the distribution, sale and use since January 1988, as well. This Resolution bans only the agricultural uses of Aldrin. To use Endrin for other purposes, it is necessary to have an specific authorization from the Ministry of Health.
Heptachlor	X			1998	Resolution N° 2142 (October 1987), Servicio Agrícola y Ganadero, which banned the import and manufacture of Heptachlor since October 1987 and the distribution, sale and use since January 1988, as well. This Resolution covers only the agricultural uses of Heptachlor. To use Heptachlor for other purposes, it is necessary to have an specific authorization from the Ministry of Health.

	Banned	Restricted	Allowed	Year	Comments
<b>Chile</b>					
Hexachlorobenzene	X				<p>Resolution N° 90 (January 2002), Servicio Agrícola y Ganadero, which banned the import, manufacture, distribution, sale and use of Hexachlorobenzene since January 2002.</p> <p>This Resolution bans only the agricultural uses of Hexachlorobenzene. To use Hexachlorobenzene for other purposes, it is necessary to have specific an authorization from the Ministry of Health.</p> <p>Hexachlorobenzene has not been used in Chile neither as agricultural pesticide nor industrial raw material</p>
Mirex	X				<p>Resolution N° 91 (January 2002), Servicio Agrícola y Ganadero, which banned the import, manufacture, distribution, sale and use of Mirex since January 2002.</p> <p>This Resolution covers only the agricultural uses of Mirex. To use Mirex for other purposes, it is necessary to have an specific authorization from the Ministry of Health.</p> <p>Mirex has not been used in Chile neither as agricultural pesticide nor industrial raw material.</p>
PCB	X			1982	<p>Resolution N° 610 (September 1982), Superintendencia de Electricidad y Combustibles, banned the use of PCBs in electrical equipments since 1982. However this Resolution allows the use of those electrical equipments which were in use at September 1982 (and they continued being used), until it is necessary to drain off the PCB liquid.</p> <p>This Resolution covers only the electrical uses of PCBs. To use PCBs for other purposes, it is necessary to have an specific authorization from the Ministry of Health.</p>
Toxaphene	X			1998	<p>Resolution N° 2179 (July 1998), Servicio Agrícola y Ganadero, banned the import, manufacture, distribution, sale and use of Toxaphene, since July 1998.</p> <p>This Resolution covers only the agricultural uses of Toxaphene. To use Toxaphene for other purposes, it is necessary to have an specific authorization from the Ministry of Health.</p>
<b>China</b>					
Aldrin		X			Max. residue limit in grain: 0,02mg/kg. GB2715-81

	Banned	Restricted	Allowed	Year	Comments
<b>China</b>					
<b>Chlordane</b>		X			Regulations for Environmental management on the First Import of Chemicals and Import and Export of Toxic Chemicals, implemented since May 1994, no import/export allowed without permission
<b>DDT</b>		X			Max residue limit MRL(mg/kg) in milk, dairy products, vegetables, fruits<0,1; in cereals (final products) and meat<0,2; and in eggs and other products<=2.0. National standards GB2763-81 and GBn136-81. Max. permissible conc. Ambient air in factories 0,3mg/m3. National standard TJ36-39. MAC surface water 0,2mg/l, and fishery water<0,001?g/ml. National standard TJ36-79. Ministry of Agriculture, Animal Husbandry and fishery "Rules for safe use of pesticides" 1982-6. Guidelines for use of pesticides" (1)(2)1988, (3)1990. GB8321.1~8321.2-87 and GB8321.3-89. Production banned in Jan 1983 (Decision of State Council). The code of Criminal Procedure (Revised) of P.R. of China March 1997.
<b>Dieldrin</b>		X			Max. residue limit in grain: 0,02mg/kg. GB 5127-85
<b>Endrin</b>		X			Regulations for Environmental management on the First Import of Chemicals and Import and Export of Toxic Chemicals, implemented since May 1994, no import/export allowed without permission
<b>Heptachlor</b>		X			Regulations for Environmental management on the First Import of Chemicals and Import and Export of Toxic Chemicals, implemented since May 1994, no import/export allowed without permission. MRL in grain 0,02mg/kg. National standard GB 2718-81
<b>Hexachlorobenzene</b>		X			Regulations for Environmental management on the First Import of Chemicals and Import and Export of Toxic Chemicals, implemented since May 1994, no import/export allowed without permission
<b>Mirex</b>		X			Regulations for Environmental management on the First Import of Chemicals and Import and Export of Toxic Chemicals, implemented since May 1994, no import/export allowed without

	Banned	Restricted	Allowed	Year	Comments
<b>China</b>					
PCB		X			Regulations for Environmental management on the First Import of Chemicals and Import and Export of Toxic Chemicals, implemented since May 1994, no import/export allowed without permission . Max. PCB limit in sea foods 0,2mg/kg. Chinese standard GB 9674-88. Control limit >=50 mg/kg. Chinese standard GB 13015-91
Toxaphene		X			Regulations for Environmental management on the First Import of Chemicals and Import and Export of Toxic Chemicals, implemented since May 1994, no import/export allowed without permission
<b>Colombia</b>					
Aldrin		X		1987	Resolution 366 of February 19th, 1987, which cancels the sale registry of the organochlorinated pesticides that include, among their components: Aldrin, Heptachlor, Dieldrin, chlordane and Toxaphene. Decree 305 of 1988 from the Presidency of the Republic, prohibits the import, production and y formulation of organochlorinated products: Aldrin, Heptachlor, Dieldrin, Chlordane and Toxaphene and its compounds. Dieldrin and Chlordane are temporarily exempt of this prohibition for uses in wood and the use of Toxaphene is temporarily valid to obtain a licence that permits the Toxaphene and Methyl Parathión composition, in a formula ultra low volume.
Chlordane		X		1988	Decree 305 of 1988 from the Presidency of the Republic, prohibits the import, production and y formulation of organochlorinated products : Aldrin, Heptachlor, Dieldrin, Chlordane and Toxaphene and its compounds. Dieldrin and Chlordane are temporarily exempt of this prohibition for uses in wood and the use of Toxaphene is temporarily valid to permits the Toxaphene and Methyl Parathión composition, in a formula ultra low volume. Resolution 010255 of 1993 of the Ministry of Health, prohibits the import, production, comercializing, use and handling of the following products: Dieldrin, Chlordano, Mirex, Pentachlorofenol, Dicofol, DDT, BHC (HCH), Heptachlor, Lindane and its related compounds. Lindane, as an ectoparasite in health is temporarily exempt from the prohibition and Endosulfan as well, until a substitute is available.obtain a licence that

	Banned	Restricted	Allowed	Year	Comments
<b>Colombia</b>					
DDT		X		1986	<p>Decree 704 of 1986 of the Presidency of the Republic, prohibits the use of DDT, its by-products and compounds, unless they are employed in the execution of programs or campaigns carried out by the Ministry of Health.</p> <p>Resolution 891 of 1986 from the Instituto Colombiano Agropecuario (Colombian Agricultural and Farming Institute) cancels two licenses for sale of products that include DDT compounds in their formula.</p> <p>Resolution 010255 of 1993 of the Ministry of Health, prohibits the import, production, comercializing, use and handling of the following products: Dieldrin, Chlordane, Mirex, Pentachlorophenol, Dicofol, DDT, BHC (HCH), Heptachlor, Lindane and its related compounds. Lindane, as an ectoparasite in health is temporarily exempt from the prohibition and Endosulfan as well, until a substitute is available.</p>
Dieldrin		X		1988	<p>Decree 305 of 1988 from the Presidency of the Republic, prohibits the import, production and y formulation of organochlorinated products : Aldrin, Heptachlor, Dieldrin, Chlordane and Toxaphene and its compounds. Dieldrin and Chlordane are temporarily exempt of this prohibition for uses in wood and the use of Toxaphene is temporarily valid to obtain a licence that permits the Toxaphene and Methyl Parathion composition, in a formula ultra low volume.</p> <p>Resolution 010255 of 1993 of the Ministry of Health, prohibits the import, production, comercializing, use and handling of the following products: Dieldrin, Chlordano, Mirex, Pentachlorofenol, Dicofol, DDT, BHC (HCH), Heptachlor, Lindane and its related compounds. Lindane, as an ectoparasite in health is temporarily exempt from the prohibition and Endosulfan as well, until a substitute is available.</p>
Dioxin_Furan			X	2001	<p>Resolution 970 of 2001, which establishes the requirements, the conditions and the maximum limits permitted for dioxin and furans emissions during the disposal of plastics contaminated with pesticides in a cement kiln during the production of clinker in cement plants.</p> <p>The Ministry of the Environment is carrying out pilot tests to determine the levels of dioxin and furans emissions during the incineration process of hazardous solid and liquid wastes; the Ministry is at the final revision stage of a resolution on the subject.</p>



	Banned	Restricted	Allowed	Year	Comments
<b>Colombia</b>					
<b>Endrin</b>		X		1985	The Resolution 1849 of 1985 of the Instituto Colombiano Agropecuario (Colombian Agricultural and Farming Institute) prohibits the import, production and sale of insecticides containing the active ingredient Endrin as their base.
<b>Heptachlor</b>		X		1988	Decree 305 of 1988 from the Presidency of the Republic, prohibits the import, production and y formulation of organochlorinated products : Aldrin, Heptachlor, Dieldrin, Chlordane and Toxaphene and its compounds. Dieldrin and Chlordane are temporarily exempt of this prohibition for uses in wood and the use of Toxaphene is temporarily valid to obtain a licence that permits the Toxaphene and Methyl Parathion composition, in a formula ultra low volume. Resolution 010255 of 1993 of the Ministry of Health, prohibits the import, production, comercializing, use and handling of the following products: Dieldrin, Chlordano, Mirex, Pentachlorofenol, Dicofol, DDT, BHC (HCH), Heptachlor, Lindane and its related compounds. Lindane, as an ectoparasite in health is temporarily exempt from the prohibition and Endosulfan as well, until a substitute is available.
<b>Hexachlorobenzene</b>		X		1993	Resolution 010255 of 1993 of the Ministry of Health, prohibits the import, production, comercializing, use and handling of the following products: Dieldrin, Chlordano, Mirex, Pentachlorofenol, Dicofol, DDT, BHC (HCH), Heptachlor, Lindane and its related compounds. Lindane, as an ectoparasite in health is temporarily exempt from the prohibition and Endosulfan as well, until a substitute is available.
<b>Mirex</b>		X		1993	Resolution 010255 of 1993 of the Ministry of Health, prohibits the import, production, comercializing, use and handling of the following products: Dieldrin, Chlordano, Mirex, Pentachlorofenol, Dicofol, DDT, BHC (HCH), Heptachlor, Lindane and its related compounds. Lindane, as an ectoparasite in health is temporarily exempt from the prohibition and Endosulfan as well, until a substitute is available..

**Banned Restricted Allowed Year Comments**

**Colombia**

PCB

X

1994

Ministry of the Environment has prepared a PCB Management Manual with standards for PCB management in Colombia. Currently Colombia has regulations covering environmental protection and environmental quality, the production, collection and disposal of wastes, special and dangerous waste management including PCBs, the adherence to the Basel Convention on the transboundary movement of hazardous wastes and the requirements for contingency planning, of the following manner:

Resolution 189 of 1994 of the Ministry of the Environment, establishes the halogen compounds, including Polychlorinated Biphenyls and Polybrominated as substances that give a toxicity to a residue.

Decree 1594 of 1984 of the Ministry of Health, regulates the uses of water and liquid residues, establishing the Polychlorinated Biphenyls PCB 1242, PCB1254, PCB1221, PCB1232, PCB1260, PCB 1016, as substances of sanitary interest and determines the water quality criteria according to its agricultural and farming use, or for recreational purposes and the preservation of flora and fauna.

Decree 475 of 1998 of the Ministry of Health, establishes the technical norms for the quality of drinking water, signalling the organoléptico, physical, chemical and microbiological requirements. Article 81 of the Political Constitution of Colombia, dated 1991, bans the importation of toxic residues, among which, those containing PCBs

Law 253, 1995 of the Congress of the Republic ratifies the Basel Convention and classifies PCBs as hazardous wastes, establishing controls for its transboundary movements.

The transportation of PCBs must comply with the Colombian Technical Standard NTC 3972 of ICONTEC, "Class 9 Dangerous Goods transport, Various dangerous Substances, Packaging/Packing and Land Transport" and NTC1692 "Classification, Labelling and Marking".

The MMA also has under development regulations for the sale in commerce of PCB equipment and materials and for the preparation of a National PCB Inventory. In the future MMA will prepare regulations for other aspects of PCB management including the handling, storage, transportation and treatment of PCBs.

	Banned	Restricted	Allowed	Year	Comments
<b>Colombia</b>					
Toxaphene		X		1988	Decree 305 of 1988 from the Presidency of the Republic, prohibits the import, production and y formulation of organchlorinated products : Aldrin, Heptachlor, Dieldrin, Chlordane and Toxaphene and its compounds. Dieldrin and Chlordane are temporarily exempt of this prohibition for uses in wood and the use of Toxaphene is temporarily valid to obtain a licence that permits the Toxaphene and Methyl Parathi3n composition, in a formula ultra low volume.  Resolution 02971 of 2000 of the Ministry of Health, prohibits the import, fabrication, formulation, comercializing and use of pesticide products based on toxaphene alone or combined with other chemical substances.
<b>Congo</b>					
Aldrin		X			Produit plus jamais utilis3 au Congo
Chlordane		X			Produit plus jamais utilis3 au Congo
DDT		X			Produit plus jamais utilis3 au Congo
Dieldrin		X			Produit plus jamais utilis3 au Congo
Endrin		X			Produit plus jamais utilis3 au Congo
Heptachlor		X			Produit plus jamais utilis3 au Congo
Hexachlorobenzene		X			Produit plus jamais utilis3 au Congo
Mirex		X			Produit plus jamais utilis3 au Congo
PCB		X			Produit plus jamais utilis3 au Congo
Toxaphene		X			Produit plus jamais utilis3 au Congo

	Banned	Restricted	Allowed	Year	Comments
<b>Costa Rica</b>					
Aldrin	X			1988	10/08/1988- Gazeta n°151. Reglamento Técnico 18346 MAG-S-TSS
Chlordane	X			1991	24/01/91, Decreto ejecutivo n° 20184-S-MAG
DDT	X			1988	10/08/88, Decreto ejecutivo n°18345 MAG-S-TSS
Dieldrin	X			1999	13/04/99, Decreto ejecutivo n° 27773 MAG-S-TSS
Dioxin_Furan		X			Regulado, Aritculo 252, no incineración, o otras fuentes
Endrin	X			1990	02/06/90, Decreto ejecutivo n° 19447 MAG-S-TSS
Heptachlor	X			1991	24/01/91, Decreto ejecutivo 20184 MAG-S-TSS
Hexachlorobenzene			X		Regulado, no control measures
Mirex			X		
PCB		X			Articulo 252, regulado la utiliyacion, importacion, exportacion, vente y uso
Toxaphene	X			1988	8/10/88, Decreto ejecutivo 18346 MAG-S-TSS
<b>Croatia</b>					
Aldrin	X			1999	"Law on poisons", Official gazette, n°27/99
Chlordane	X			1999	"Law on poisons", Official gazette, n°27/103
DDT	X			1999	"Law on poisons", Official gazette, n°27/101
Dieldrin	X			1999	"Law on poisons", Official gazette, n°27/100

	Banned	Restricted	Allowed	Year	Comments
<b>Croatia</b>					
Dioxin_Furan		X		1999	"Law on poisons", Official gazette, n°27/109
Endrin	X			1999	"Law on poisons", Official gazette, n°27/102
Heptachlor	X			1999	"Law on poisons", Official gazette, n°27/107
Hexachlorobenzene	X			1999	"Law on poisons", Official gazette, n°27/104
Mirex	X			1999	"Law on poisons", Official gazette, n°27/105
PCB	X			1999	"Law on poisons", Official gazette, n°27/108. Existence of a number of public health and occupational, environmental standards (data source:questionnaires)
Toxaphene	X			1999	"Law on poisons", Official gazette, n°27/106
<b>Cuba</b>					
Aldrin		X		1990	
Chlordane			X		Exclusivamente en cebos para combatir las hormigas cortadoras
DDT	X			1990	
Dieldrin	X			1990	
Endrin	X			1990	
Heptachlor	X			1990	
Hexachlorobenzene			X		
Mirex			X		

	Banned	Restricted	Allowed	Year	Comments
<b>Cuba</b>					
PCB		X			A equipos eléctricos. Prohibida la importación de equipos eléctricos con contenido de PCB mayor de 50 ppm.
Toxaphene	X			1990	
<b>Cyprus</b>					
Aldrin		X		1980	
Chlordane	X			1988	
DDT	X			1976	
Dieldrin	X			1980	
Endrin	X			1900	
Heptachlor	X			1900	
Hexachlorobenzene		X			Not submitted for authorization as mixture of HCH isomers. Lindane (Containing more than 99% gamma isomer of HCH) is allowed to be used as wood preservative. (for HCB as a by-product) HCH containing less than 99% of the gamma isomer is prohibited (date of effectiveness: 12/12/87)
Mirex	X			1900	
Toxaphene	X			1900	
<b>Czech Republic</b>					
Aldrin		X		1997	The import of the chemical is prohibited from all sources since the 29th April 1997. This chemical is not registered, manufactured and formulated in the country currently.

	Banned	Restricted	Allowed	Year	Comments
<b>Czech Republic</b>					
Chlordane		X		1997	<p>The import of the chemical is prohibited from all sources since the 29th April 1997.</p> <p>The national legislative or administrative measure: Import of the substance is banned by the Act No. 147/1996 Code, on phytosanitary care and amending some other Acts, as last amended, and by its implementing Degree No. 84/1997 Code as last amended. The import of substance for research purposes is permitted.</p> <p>This chemical is not registered, manufactured and formulated in the country currently.</p>
DDT		X		1997	<p>The import of the chemical is prohibited from all sources since the 29th April 1997.</p> <p>This chemical is not registered, manufactured and formulated in the country currently.</p>
Dieldrin		X		1997	<p>The import of the chemical is prohibited from all sources since the 29th April 1997.</p> <p>The national legislative or administrative measure : Import of the substance is banned by the Act No. 147/1996 Code, on phytosanitary care and amending some other Acts, as last amended, and by its implementing Degree No. 84/1997 Code as last amended. The import of substance for research purposes is permitted.</p> <p>This chemical is not registered, manufactured and formulated in the country currently.</p>
Dioxin_Furan			X		<p>These chemicals are prohibited from all sources since the 1st January 2003.</p> <p>Regulatory document: The Act No. 86/2002 Code for protection of air and amending some other Acts, as last amended, and by its implementing Degree No. 354/2002 Code, on determination of emission limits and another conditions for combustion of waste and Degree No. 356/2002 Code, on determination of the list of contaminant compounds, general emission limits, method of presentation reports and information, survey of amount contaminated compounds, murkiness of fume, intensity of smell, conditions of authorisation, requests for managing operation evidence of air pollution sources and their fulfilment.</p> <p>This chemicals are not manufactured in the country currently.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Czech Republic</b>					
Endrin		X		1997	<p>The import of the chemical is prohibited from all sources since the 29th April 1997.</p> <p>The national legislative or administrative measure : Import of the substance is banned by the Act No. 147/1996 Code, on phytosanitary care and amending some other Acts, as last amended, and by its implementing Degree No. 84/1997 Code as last amended. The import of substance for research purposes is permitted. This chemical is not registered, manufactured and formulated in the country currently.</p>
Heptachlor		X		1997	<p>The import of the chemical is prohibited from all sources since the 29th April 1997. This chemical is not registered, manufactured and formulated in the country currently.</p>
Hexachlorobenzene		X		1997	<p>The import of the chemical is prohibited from all sources since the 29th April 1997</p> <p>The national legislative or administrative measure: Import of the substance is banned by the Act No. 147/1996 Code, on phytosanitary care and amending some other Acts, as last amended, and by its implementing Degree No. 84/1997 Code as last amended. The import of substance for research purposes is permitted. This chemical is not registered, manufactured and formulated in the country currently.</p>
Mirex		X			<p>This chemical is not registered, manufactured and formulated in the country currently.</p>
PCB		X		1999	<p>The import of the chemical is prohibited from all sources since the 1st January 1999</p> <p>Regulatory document: Act No. 157/1998 Code, on chemical substances and chemical preparations and amending some other Acts, as amended. The Decree No. 301/1998 Code laying down the list of chemical substances and chemical preparation production marketing and use of which is restricted as last amended. This chemical is not registered, manufactured and formulated in the country currently.</p>



	Banned	Restricted	Allowed	Year	Comments
<b>Czech Republic</b>					
Toxaphene	X			1997	<p>The import of the chemical is prohibited from all sources since the 29th April 1997.</p> <p>The national legislative or administrative measure: Import of the substance is banned by the Act No. 147/1996 Code, on phytosanitary care and amending some other Acts, as last amended, and by its implementing Degree No. 84/1997 Code as last amended. The import of substance for research purposes is permitted. This chemical is not registered, manufactured and formulated in the country currently.</p>
<b>D.R.Congo</b>					
Dioxin_Furan		X		1986	Pesticides Control Regulation and Licensing SKONo56 of 1986 to control importation
<b>Denmark</b>					
Aldrin	X			1996	Danish Act on Chemical Substances and products (consolidated Act n°21, January 16, 1996). All import, sale, use for plant protection products containing aldrin have been prohibited. For other pesticides containing aldrin, a written authorization is required. No authorizations are given for such pesticides.
Chlordane	X			1996	Danish Act on Chemical Substances and products (consolidated Act n°21, January 16, 1996). All import, sale, use for plant protection products containing aldrin have been prohibited. For other pesticides containing aldrin, a written authorization is required. No authorizations are given for such pesticides.
DDT	X			1996	Danish Act on Chemical Substances and products (consolidated Act n°21, January 16, 1996). All import, sale, use for plant protection products containing aldrin have been prohibited. For other pesticides containing aldrin, a written authorization is required. No authorizations are given for such pesticides. For other pesticides containing DDT, all import, sale and use have been prohibited since October 1, 1984 according to Statutory Order n°459, September 5, 1984.

	Banned	Restricted	Allowed	Year	Comments
<b>Denmark</b>					
Dieldrin	X			1996	Danish Act on Chemical Substances and products (consolidated Act n°21, January 16, 1996). All import, sale, use for plant protection products containing aldrin have been prohibited. For other pesticides containing aldrin, a written authorization is required. No authorizations are given for such pesticides.
Dioxin_Furan		X			Tolerable Daily Intake (TDI) 5pg I-TEQ/kgbw. Danish Guidelines.
Endrin	X			1996	Danish Act on Chemical Substances and products (consolidated Act n°21, January 16, 1996). All import, sale, use for plant protection products containing aldrin have been prohibited. For other pesticides containing aldrin, a written authorization is required. No authorizations are given for such pesticides.
Heptachlor	X			1996	Danish Act on Chemical Substances and products (consolidated Act n°21, January 16, 1996). All import, sale, use for plant protection products containing aldrin have been prohibited. For other pesticides containing aldrin, a written authorization is required. No authorizations are given for such pesticides.
Hexachlorobenzene	X			1996	Danish Act on Chemical Substances and products (consolidated Act n°21, January 16, 1996). All import, sale, use for plant protection products containing aldrin have been prohibited. For other pesticides containing aldrin, a written authorization is required. No authorizations are given for such pesticides. Not used in Denmark as an industrial chemical
Mirex	X				
PCB		X			Statutory Order n° 925 of 13th December 1998 on restriction in use and disposal of PCBs and PCT. Import and marketing of PCB and PCT as well as articles containing PCB and PCT are banned.

	Banned	Restricted	Allowed	Year	Comments
<b>Denmark</b>					
Toxaphene	X			1996	Danish Act on Chemical Substances and products (consolidated Act n°21, January 16, 1996). All import, sale, use for plant protection products containing aldrin have been prohibited. For other pesticides containing aldrin, a written authorization is required. No authorizations are given for such pesticides.
<b>Djibouti</b>					
Aldrin	X				
Chlordane	X				
DDT	X				
Dieldrin	X				
Endrin	X				
Hexachlorobenzene	X				
<b>Dominican Republic</b>					
Aldrin	X			1991	The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product. At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process.
Chlordane	X			1991	The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product. At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process
DDT	X			1991	The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product. At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process

	Banned	Restricted	Allowed	Year	Comments
<b>Dominican Republic</b>					
<b>Dieldrin</b>	X			1991	The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product. At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process
<b>Dioxin_Furan</b>		X			Pesticides Control Regulation and Licensing SKO N°56 of 1986 to control importation.
<b>Endrin</b>	X			1991	The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product. At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process
<b>Heptachlor</b>	X			1991	The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product. At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process
<b>Hexachlorobenzene</b>	X			1991	The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product. At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process
<b>Mirex</b>	X			1991	The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product. At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process

	Banned	Restricted	Allowed	Year	Comments
<b>Dominican Republic</b>					
PCB		X		1991	<p>The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product</p> <p>At this moment , the secretary is developing state regulations on PCB´s.</p> <p>At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process</p>
Toxaphene		X		1991	<p>The action of taken under Decree Number 217 of June 4th of 1991. Prohibits the import, development, formulation, marketing and use of this product.</p> <p>At this moment, the secretary is developing state regulations on risk substance. Also, the Rotterdam convention is going through the ratification process</p>
<b>Ecuador</b>					
Aldrin		X		1985	<p>National Plant Protection Program prohibit the registration of this product due to be harmful to the health and because it had been prohibited to manufacturing, commercialisation and use in other countries.</p> <p>Ministerial agreement No. 242 published on Official Register No. 231 on July, 18/1985</p>
Chlordane		X		1992	<p>National Plant Protection prohibit the registration of this product with regard to environmental pollution , toxic effects and it was prohibit in other countries.</p> <p>Executive declaration No. 012 published in Official Registry No. 64 on November,12/1992.</p>
DDT			X	1985	<p>National Plant Protection Program prohibit the registration of this product due to be harmful to the health and because it had been prohibited to manufacturing, commercialisation and use in other countries.</p> <p>Ministerial agreement No. 242 published on Official Register No. 231 on July, 18/1985</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Ecuador</b>					
Dieldrin	X			1985	National Plant Protection Program prohibit the registration of this product due to be harmful to the health and because it had been prohibited to manufacturing, commercialisation and use in other countries.  Ministerial agreement No. 242 published on Official Register No. 231 on July, 18/1985
Dioxin_Furan			X		
Endrin	X			1985	National Plant Protection Program prohibit the registration of this product due to be harmful to the health and because it had been prohibited to manufacturing, commercialisation and use in other countries.  Ministerial agreement No. 242 published on Official Register No. 231 on July, 18/1985
Heptachlor	X			1992	National Plant Protection Program prohibit the registration of this product due to be harmful to the health and because it had been prohibited to manufacturing, commercialisation and use in other countries.  Ministerial agreement No. 112 published on Official Register No. 64 on November, 12/1992.

	Banned	Restricted	Allowed	Year	Comments
<b>Ecuador</b>					
Hexachlorobenzene			X	1985	<p>In 1985 National Plant Protection Program prohibit the registration of this product due to be harmful to the health and because it had been prohibited to manufacturing, commercialisation and use in other countries and it was ratified in 1992.</p> <p>In 2001 It was established as a dangerous chemical product under control of the Ecuadorian Environmental Ministry which must to fulfil the INEN regulations and standards for the correct management.</p> <p>Ministerial agreement No. 242 published on Official Register No. 231 on July, 18/1985</p> <p>Ministerial agreement No. 112 published on Official Register No. 64 on November, 12/1992</p> <p>Executive declaration No. 046 published in Official Registration No. 324 on May, 11/2001 It was notified to Interim Secretariat for the Rotterdam Convention on March/2003.</p>
Mirex	X			1992	<p>The registration of Mirex is prohibited with regard to produce environmental pollution, toxic effects and also it was already prohibited in other countries.</p> <p>Ministerial agreement No. 112 published on Official Register No. 64 on November, 12/1992.</p>
PCB	X			2001	<p>To prohibit the importation, formulation, manufacturing and final disposal of this substance in the national territory that it causes environmental pollution and to have toxic effects against the human health. The sectional and institutional authorities related with the appropriate chemical products management in coordination with the Environmental Ministry those in charge of the control in their competition being held to the national regulations of this agreement determine the for the definitive elimination of the suitable substances as forbidden.</p> <p>Executive declaration No. 046 published in Official Registration No. 324 on May,11/2001. It was notified to Interim Secretariat for the Rotterdam Convention on March,2003</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Ecuador</b>					
Toxaphene	X			1991	To prohibit the importation, formulation, manufacturing and final disposal of this substance in the national territory that it causes environmental pollution and to have toxic effects against the human health. The sectional and institutional authorities related with the appropriate chemical products management in coordination with the Environmental Ministry those in charge of the control in their competition being held to the national regulations of this agreement determine the for the definitive elimination of the suitable substances as forbidden.  Executive declaration No. 046 published in Official Registration No. 324 on May,11/2001. It was notified to Interim Secretariat for the Rotterdam Convention on March,2003
<b>Egypt</b>					
Aldrin	X			1995	INCLUDED IN LIST OF BANNED CHEMICALS AND PESTICIDE FORMULATIONS USED FOR AGRICULTURAL PEST CONTROL ACCORDING TO THE EGYPTIAN PESTICIDE COMMITTEE AND INTERNATIONAL ORGANIZATIONS DECISIONS, OCTOBER 1, 1995 & MINISTERIAL DECREE NO. 55/1996 .
Chlordane	X			1996	INCLUDED IN LIST OF BANNED CHEMICALS AND PESTICIDE FORMULATIONS USED FOR AGRICULTURAL PEST CONTROL ACCORDING TO THE EGYPTIAN PESTICIDE COMMITTEE AND INTERNATIONAL ORGANIZATIONS DECISIONS, OCTOBER 1, 1995 & MINISTERIAL DECREE NO. 55/1996 .
DDT	X			1996	INCLUDED IN LIST OF BANNED CHEMICALS AND PESTICIDE FORMULATIONS USED FOR AGRICULTURAL PEST CONTROL ACCORDING TO THE EGYPTIAN PESTICIDE COMMITTEE AND INTERNATIONAL ORGANIZATIONS DECISIONS, OCTOBER 1, 1995 & MINISTERIAL DECREE NO. 55/1996 .
Dieldrin	X			1996	INCLUDED IN LIST OF BANNED CHEMICALS AND PESTICIDE FORMULATIONS USED FOR AGRICULTURAL PEST CONTROL ACCORDING TO THE EGYPTIAN PESTICIDE COMMITTEE AND INTERNATIONAL ORGANIZATIONS DECISIONS, OCTOBER 1, 1995 & MINISTERIAL DECREE NO. 55/1996 .
Dioxin_Furan		X			Controlled by EEAA AND ministry of Health for incineration of hospital waste.



	Banned	Restricted	Allowed	Year	Comments
<b>Egypt</b>					
Endrin	X			1995	INCLUDED IN LIST OF BANNED CHEMICALS AND PESTICIDE FORMULATIONS USED FOR AGRICULTURAL PEST CONTROL ACCORDING TO THE EGYPTIAN PESTICIDE COMMITTEE AND INTERNATIONAL ORGANIZATIONS DECISIONS, OCTOBER 1, 1995 & MINISTERIAL DECREE NO. 55/1996 .
Heptachlor	X			1995	INCLUDED IN LIST OF BANNED CHEMICALS AND PESTICIDE FORMULATIONS USED FOR AGRICULTURAL PEST CONTROL ACCORDING TO THE EGYPTIAN PESTICIDE COMMITTEE AND INTERNATIONAL ORGANIZATIONS DECISIONS, OCTOBER 1, 1995 & MINISTERIAL DECREE NO. 55/1996 .
Hexachlorobenzene		X			A Ministerial decree has been issued since 1999 to use Hexachlorobenzene with a licence.
Mirex	X			1995	INCLUDED IN LIST OF BANNED CHEMICALS AND PESTICIDE FORMULATIONS USED FOR AGRICULTURAL PEST CONTROL ACCORDING TO THE EGYPTIAN PESTICIDE COMMITTEE AND INTERNATIONAL ORGANIZATIONS DECISIONS, OCTOBER 1, 1995 & MINISTERIAL DECREE NO. 55/1996 .
PCB	X			2002	Waste, substances, equipments which contain or composed or contaminated with PCBs are not allowed to be imported, and be under control and handled according to licence if it is produced from the industrial activities (Ministerial decree no. 165 for the year 2002.
Toxaphene	X			1995	INCLUDED IN LIST OF BANNED CHEMICALS AND PESTICIDE FORMULATIONS USED FOR AGRICULTURAL PEST CONTROL ACCORDING TO THE EGYPTIAN PESTICIDE COMMITTEE AND INTERNATIONAL ORGANIZATIONS DECISIONS, OCTOBER 1, 1995 & MINISTERIAL DECREE NO. 55/1996 .
<b>El Salvador</b>					
Aldrin	X			1980	Por ser un producto organoclorado persistente y por su alta residualidad, con posibles efectos teratogénicos en el humano, 1980.
Chlordane	X			1986	Es un producto organoclorado persistente en el ambiente y por su alta residualidad, en los productos de consumo y exportación, 1986.

	Banned	Restricted	Allowed	Year	Comments
<b>El Salvador</b>					
DDT	X			1980	Por riesgos que implica su uso para la salud humana, como también por la contaminación ambiental, y de la flora, fauna, aguas corrientes y alimentos por ser un producto altamente persistente en el ambiente, 1980
Dieldrin	X			1986	Por ser un producto organoclorado persistente y por su alta residualidad en los productos de consumo y exportación, 1986.
Endrin	X			1986	Es un producto organoclorado persistente en el ambiente y por su alta residualidad, en los productos de consumo y exportación, 1986
Heptachlor	X			1986	Es un producto organoclorado persistente en el ambiente y por su alta residualidad, en los productos de consumo y exportación, 1986.
Hexachlorobenzene			X		Sustancia controlada, se sugiere por ley que el Ministerio de Medio Ambiente y Recursos Naturales autorice el ingreso
Mirex			X		Registrado para utilizarlo como insecticida vigente.
PCB			X		Sustancia controlada, se sugiere por ley que el Ministerio del Medio Ambiente y Recursos Naturales autorice el ingreso
Toxaphene	X			1988	Producto persistente por su alta residualidad en el ambiente, 1988.
<b>Estonia</b>					
Aldrin	X			1967	Never used in Estonia .  According to the Order from 21.10.1967 approved by the Government the import of chlororganic plant protection products were banned in Estonia. After Estonian independence in 1991, new regulations banned POPs a second time: Governmental Regulation No.6, 5 January 1999 on establishing a procedure for importing and exporting banned and strictly restricted chemicals and No. 36, 26 January 1999 on establishing the list of active substances banned to use in plant protection products ( Dir 79/117/EEC ).

	Banned	Restricted	Allowed	Year	Comments
<b>Estonia</b>					
Chlordane		X		1967	<p>Never used in Estonia .</p> <p>According to the Order from 21.10.1967 approved by the Government the import of chlororganic plant protection products were banned in Estonia.</p> <p>After Estonian independence in 1991, new regulations banned POPs a second time: Governmental Regulation No.6, 5 January 1999 on establishing a procedure for importing and exporting banned and strictly restricted chemicals and No. 36, 26 January 1999 on establishing the list of active substances banned to use in plant protection products ( Dir 79/117/EEC ).</p>
DDT		X			<p>Never used in Estonia .</p> <p>According to the Order from 21.10.1967 approved by the Government the import of chlororganic plant protection products were banned in Estonia.After Estonian independence in 1991, new regulations banned POPs a second time: Governmental Regulation No.6, 5 January 1999 on establishing a procedure for importing and exporting banned and strictly restricted chemicals and No. 36, 26 January 1999 on establishing the list of active substances banned to use in plant protection products ( Dir 79/117/EEC ).</p>
Dieldrin		X		1967	<p>Never used in Estonia .</p> <p>According to the Order from 21.10.1967 approved by the Government the import of chlororganic plant protection products were banned in Estonia.</p> <p>After Estonian independence in 1991, new regulations banned POPs a second time: Governmental Regulation No.6, 5 January 1999 on establishing a procedure for importing and exporting banned and strictly restricted chemicals and No. 36, 26 January 1999 on establishing the list of active substances banned to use in plant protection products ( Dir 79/117/EEC ).</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Estonia</b>					
Dioxin_Furan		X			<p>1. Integrated Pollution Prevention and Control Act ( Adopted October 10, 2001 )( <a href="http://www.envir.ee/ippc">http://www.envir.ee/ippc</a> )( Base European Union Directive 96/61/EC ).</p> <p>2. Food control ( Base: Council Regulation ( EC ) No. 2375/2001 of November 2001 ) - Baltic Sea fish .</p> <p>IPPC Act ( Integrated permits ):            ( 1 ) 20 Substances that shall be taken into account when fixing emission limit values.            ( 2 ) In particular, the emission limit values for following substances shall be determined in air emissions ; 13) PCDD and PCDF.            ( 3 ) In particular, the emission limit values for following substances are fixed in water: 1) Organohalogen compounds....., etc.</p> <p>Baltic Sea fish samples taken from four regions of Estonian coastal waters during the spring of 2002 year the dioxin content of them all was below the internationally permitted threshold ( Council Regulation ( EC ) No. 2375/2001 of November 2001 ).</p>
Endrin		X		1967	<p>Never used in Estonia .</p> <p>According to the Order from 21.10.1967 approved by the Government the import of chlororganic plant protection products were banned in Estonia.</p> <p>After Estonian independence in 1991, new regulations banned POPs a second time: Governmental Regulation No.6, 5 January 1999 on establishing a procedure for importing and exporting banned and strictly restricted chemicals and No. 36, 26 January 1999 on establishing the list of active substances banned to use in plant protection products ( Dir 79/117/EEC ).</p>
Heptachlor		X		1967	<p>Never used in Estonia .</p> <p>According to the Order from 21.10.1967 approved by the Government the import of chlororganic plant protection products were banned in Estonia.</p> <p>After Estonian independence in 1991, new regulations banned POPs a second time: Governmental Regulation No.6, 5 January 1999 on establishing a procedure for importing and exporting banned and strictly restricted chemicals and No. 36, 26 January 1999 on establishing the list of active substances banned to use in plant protection products ( Dir 79/117/EEC ).</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Estonia</b>					
Hexachlorobenzene	X			1967	<p>Never used in Estonia .</p> <p>According to the Order from 21.10.1967 approved by the Government the import of chlororganic plant protection products were banned in Estonia.</p> <p>After Estonian independence in 1991, new regulations banned POPs a second time: Governmental Regulation No.6, 5 January 1999 on establishing a procedure for importing and exporting banned and strictly restricted chemicals and No. 36, 26 January 1999 on establishing the list of active substances banned to use in plant protection products ( Dir 79/117/EEC ).</p>
Mirex	X			1967	<p>Never used in Estonia .</p> <p>According to the Order from 21.10.1967 approved by the Government the import of chlororganic plant protection products were banned in Estonia.After Estonian independence in 1991, new regulations banned POPs a second time: Governmental Regulation No.6, 5 January 1999 on establishing a procedure for importing and exporting banned and strictly restricted chemicals and No. 36, 26 January 1999 on establishing the list of active substances banned to use in plant protection products ( Dir 79/117/EEC ).</p>
PCBs	X			1999	<p>Each owner must inform Estonian Environment Information Centre about all installations that contain more than 5dm<sup>3</sup> PCBs by July 1, 2001; The results of the inventory as well as other declarations of PCB containing equipment hold in a PCB database at the Estonian Environment Information Centre ( and EEIC homepage <a href="http://www.envir.ee/eeic">http://www.envir.ee/eeic</a> ).</p> <p>The requirements of the PCB directive are transported into two Estonian legal acts:</p> <ul style="list-style-type: none"> <li>-Regulation No. 71 ( 1999 ) of the Minister for the Environment on the management of wastes containing PCBs/PTCs.</li> <li>-Government Regulation No.99 ( 1999 ) on products posing threat to environment as waste, production, import and export, sale and use of which is prohibited</li> </ul> <p>Owners of equipment containing PCBs must remove them from use or clear from pollution and eliminate PCBs from equipment as soon as possible but not later than 31.12.2010.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Estonia</b>					
Toxaphene		X		1967	Never used in Estonia .  According to the Order from 21.10.1967 approved by the Government the import of chlororganic plant protection products were banned in Estonia.  After Estonian independence in 1991, new regulations banned POPs a second time: Governmental Regulation No.6, 5 January 1999 on establishing a procedure for importing and exporting banned and strictly restricted chemicals and No. 36, 26 January 1999 on establishing the list of active substances banned to use in plant protection products ( Dir 79/117/EEC ).
<b>Ethiopia</b>					
Aldrin			X		
Chlordane			X		
DDT		X			Restricted use for vector-borne disease control such as Malaria.
Dieldrin			X		
Endrin			X		
Heptachlor			X		
Hexachlorobenzene			X		
Mirex			X		
PCB			X		
Toxaphene			X		

	Banned	Restricted	Allowed	Year	Comments
<b>European Commission</b>					
<b>Aldrin</b>		X		1978	Council Directive 79/117/EEC of 21 December 1978 prohibiting the placing on the market and use of plant protection products containing certain active substances restricted and later on prohibited use of aldrin for plant protection purposes in the European Community. There are no other uses of aldrin in the Community.
<b>Chlordane</b>		X		1978	Council Directive 79/117/EEC of 21 December 1978 prohibiting the placing on the market and use of plant protection products containing certain active substances prohibited use of chlordane for plant protection purposes in the Community. Placing of chlordane containing products on the market for biocidal uses (e.g. wood preservation) is not possible without a pre-authorisation in accordance with the Directive 98/8/EC.
<b>DDT</b>		X		1978	Council Directive 79/117/EEC of 21 December 1978 prohibiting the placing on the market and use of plant protection products containing certain active substances restricted and later on prohibited use of DDT for plant protection purposes in the Community. Placing of DDT containing products on the market for biocidal uses (e.g. non-agricultural insecticides) is not possible without a pre-authorisation in accordance with the Directive 98/8/EC.
<b>Dieldrin</b>		X		1978	Council Directive 79/117/EEC of 21 December 1978 prohibiting the placing on the market and use of plant protection products containing certain active substances prohibited use of dieldrin for plant protection purposes in the European Community. There are no other uses of dieldrin in the Community.
<b>Dioxin_Furan</b>			X		<p>The Community level regulatory and other actions are described in the Communication from the Commission on a "Community Strategy for Dioxins, Furans and Polychlorinated Biphenyls" (COM (2001) 593 final). This Communication is available at: <a href="http://europa.eu.int/eur-lex/en/com/pdf/2001/com2001_0593en01.pdf">http://europa.eu.int/eur-lex/en/com/pdf/2001/com2001_0593en01.pdf</a>.</p> <p>By the end of 2003 the Commission will prepare a Progress Report to the Council on the implementation of the Community Strategy.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>European Commission</b>					
Endrin	X			1978	Council Directive 79/117/EEC of 21 December 1978 prohibiting the placing on the market and use of plant protection products containing certain active substances restricted and later on prohibited use of endrin for plant protection purposes in the European Community. There are no other uses of endrin in the Community.
Heptachlor	X			1978	Council Directive 79/117/EEC of 21 December 1978 prohibiting the placing on the market and use of plant protection products containing certain active substances prohibited use of heptachlor for plant protection purposes in the Community. Placing of heptachlor containing products on the market for biocidal uses (e.g. wood preservation) is not possible without a pre-authorisation in accordance with the Directive 98/8/EC.
Hexachlorobenzene		X			Council Directive 79/117/EEC of 21 December 1978 prohibiting the placing on the market and use of plant protection products containing certain active substances prohibited use of HCB for plant protection purposes in the European Community.
Mirex	X				Mirex is not marketed or used in the European Community. Placing of mirex containing products on the market for plant protection or biocidal uses is not possible without a pre-authorisation in accordance with the Directive 91/414/EEC or 98/8/EC, respectively.
Toxaphene	X				Toxaphene is not known to be marketed or used in the European Community. Placing of toxaphene containing products on the market for plant protection or biocidal uses is not possible without a pre-authorisation in accordance with the Directive 91/414/EEC or 98/8/EC, respectively.
<b>Fiji</b>					
Aldrin	X			1995	
Chlordane	X			1971	After Pesticide Act was enforced in 1971
DDT	X			1971	After Pesticide Act was enforced in 1971



	Banned	Restricted	Allowed	Year	Comments
<b>Fiji</b>					
Dieldrin	X			1995	
Endrin	X			1971	After Pesticide Act was enforced in 1971
Heptachlor	X			1900	Never registered in Fiji for any use. Importation is prohibited.
Hexachlorobenzene	X			1971	After Pesticide Act was enforced in 1971
Mirex	X			1900	Never registered
PCB		X		1971	Products containing PCB or under PCB category not registered for Agricultural use. Importation prohibited. Old electrical equipment (transformers may be containing PCB fluids)
Toxaphene	X			1971	After Pesticide Act was enforced in 1971
<b>Finland</b>					
Aldrin	X			1972	Use as pesticide banned in 1972 (Decision of the Ministry of Agriculture and Forestry 671/1972) No other known uses.  It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, aldrin and preparations containing aldrin. Import and export for placing on the market of products and goods containing or treated with aldrin is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing aldrin must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the aldrin content is low, the waste may be disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)

	Banned	Restricted	Allowed	Year	Comments
<b>Finland</b>					
Chlordane		X		1972	<p>Use as pesticide banned in 1972 (Decision of the Ministry of Agriculture and Forestry 671/1972). Use as wood preservative stopped at early 1990's after which no products containing chlordane have been registered as wood preservatives.</p> <p>It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, chlordane and preparations containing chlordane. Import and export for placing on the market of products and goods containing or treated with chlordane is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing chlordane must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the chlordane content is low, the waste may be disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)</p>
DDT		X		1976	<p>Use as pesticide banned in 1976 (Decision of the Ministry of Agriculture and Forestry 503/1976) No other known uses.</p> <p>It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, DDT and preparations containing DDT. Import and export for placing on the market of products and goods containing or treated with DDT is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing DDT must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the DDT content is low, the waste may be disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Finland</b>					
<b>Dieldrin</b>		X		1972	<p>Use as pesticide banned in 1972 (Decision of the Ministry of Agriculture and Forestry 671/1972) No other known uses.</p> <p>It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, dieldrin and preparations containing dieldrin. Import and export for placing on the market of products and goods containing or treated with dieldrin is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing dieldrin must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the dieldrin content is low, the waste may disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)</p>
<b>Dioxin_Furan</b>			X		<p>Regulatory control on major sources (plant permits).</p> <p>Waste containing dioxins or furans must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the dioxins or furans content is low, the waste may disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)</p>
<b>Endrin</b>		X		1972	<p>Use as pesticide banned in 1972 (Decision of the Ministry of Agriculture and Forestry 671/1972) No other known uses.</p> <p>It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, endrin and preparations containing endrin. Import and export for placing on the market of products and goods containing or treated with endrin is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing endrin must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the endrin content is low, the waste may disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Finland</b>					
<b>Heptachlor</b>		X		1996	<p>Use as pesticide banned in 1996 (Council of State Decision 1361/1996). Use as wood preservative stopped at early 1990's after which no products containing heptachlor have been registered as wood preservatives.</p> <p>It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, heptachlor and preparations containing heptachlor. Import and export for placing on the market of products and goods containing or treated with heptachlor is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing heptachlor must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the heptachlor content is low, the waste may be disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)</p>
<b>Hexachlorobenzene</b>		X		1996	<p>Use as pesticide banned in 1996 (Council of State Decision 1361/1996).</p> <p>It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, hexachlorobenzene (HCB) and preparations containing HCB. Import and export for placing on the market of products and goods containing or treated with HCB is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing HCB must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the HCB content is low, the waste may be disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Finland</b>					
Mirex		X			<p>Mirex has never been used or registered as pesticide or other biocide in Finland.</p> <p>It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, mirex and preparations containing mirex. Import and export for placing on the market of products and goods containing or treated with mirex is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing mirex must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the mirex content is low, the waste may disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)</p>
PCB		X		1990	<p>Use banned from 1990 (Council of State Decision 1071/1989). Existing transformers and capacitors (&gt; 1 kvar) were to be taken out of use by the end of 1994.</p> <p>It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, PCBs and preparations containing PCBs. Import and export for placing on the market of products and goods containing or treated with PCBs is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing PCBs must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the PCBs content is low, the waste may disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Finland</b>					
Toxaphene		X		1969	Use as pesticide banned in 1969 (Decision of the Ministry of Agriculture and Forestry 655/1969) No other known uses.  It is forbidden as of 1.9.2002 to manufacture and use, and to import and export for placing on the market, toxaphene and preparations containing toxaphene. Import and export for placing on the market of products and goods containing or treated with toxaphene is forbidden as of 1.9.2002. The prohibitions are not applied to unintentional trace contaminants in products and goods nor to laboratory-scale research or use as a reference standard. Waste containing toxaphene must be disposed of in such a way that waste does not exhibit the characteristics of persistent organic substances. If this is not the environmentally preferable option or the toxaphene content is low, the waste may be disposed of in some other environmentally sound manner (Government Decree on persistent organic pollutants 735/2002)
<b>France</b>					
Aldrin		X		1992	Usage agricole: 01/04/73, Protection du bois: 04/10/94, Tout usage: cf regl. CE 2455/92
Chlordane		X		1992	Usage agricole: 21/08/91, Protection du bois: 04/10/92, Tout usage: cf regl. CE 2455/92
DDT		X		1992	Tout usage: cf regl. CE 2455/92
Dieldrin		X		1992	Usage agricole: 01/04/73, Protection du bois: 04/10/94, Tout usage: cf regl. CE 2455/92
Dioxin_Furan			X		Usines d'incinération des déchets industriels spéciaux: limite d'émission à 0.1ng TEQ/m3 depuis le 10/10/96 (Application immédiate pour les nouvelles installations) application en 2000 pour les installations existantes). Usines d'incinération nouvelles des ordures ménagères: limites d'émissions: 0.1ngTEQ/m3 depuis le 24/02/97
Endrin		X		1992	Usage agricole: 21/08/91, Protection du bois: 04/10/92, Tout usage: cf regl. CE 2455/92

	Banned	Restricted	Allowed	Year	Comments
<b>France</b>					
Heptachlor	X			1992	Usage agricole:01/01/73, Traitement des bois, peintures anti-salissures: 04/10/92, Tout usage:: cf.Regl.CE2455/92
Hexachlorobenzene	X			1992	Peinture anti-salissures: 04/10/92, Tout usage: cf.Regl.CE 2455/92
Mirex		X			Jamais utilisé en France en tant que matière active de produits phytosanitaires
PCB		X			Produits et préparations dont la teneur en PCB est>0.01%: interdits le 02/02/87., Produits et préparations dont la teneur en PCB est>0.005%: interdits le 04/10/93
Toxaphene	X			1992	Usage agricole: 03/07/90, Peinture anti-salissures: 04/10/92, Tout usage:cf.Regl. CE 2455/92
<b>FS Micronesia</b>					
Aldrin			X		Chemicals have not been inventoried. Limited quantities may be present in the FSM.
Chlordane			X		Small quantities are known to be stored in the FSM. In Chuuk State quantities of chlordane have been stored in a shipping container for off island disposal that has not yet eventuated due to a shortage of funding and expertise.
DDT			X		Small quantities are known to be stored at the Agriculture Station in each FSM State. Quantities are also known to have been buried elsewhere in the FSM.
Dieldrin			X		Chemicals have not been inventoried. Limited quantities may be present in the FSM.
Endrin			X		Chemicals have not been inventoried. Limited quantities may be present in the FSM.
Heptachlor			X		Chemicals have not been inventoried. Limited quantities may be present in the FSM.

	Banned	Restricted	Allowed	Year	Comments
<b>FS Micronesia</b>					
Hexachlorobenzene			X		Chemicals have not been inventoried. Limited quantities may be present in the FSM.
Mirex			X		Chemicals have not been inventoried. Limited quantities may be present in the FSM.
PCB			X		Sampling of old transformers is currently underway. These transformers have been tagged for future action.
Toxaphene			X		Chemicals have not been inventoried. Limited quantities may be present in the FSM.
<b>Gambia, The</b>					
Aldrin	X			1994	
Chlordane	X			1994	
DDT	X			1994	DDT together with other obsolete pesticides were shipped to UK in August 1999, for high-temperature incineration.
Dieldrin	X			1997	
Endrin	X			1996	
Heptachlor	X			1997	
Hexachlorobenzene	X			1997	
Mirex	X			1999	
PCB			X		No regulatory action taken, but final decision not import taken.
Toxaphene	X			1999	



	Banned	Restricted	Allowed	Year	Comments
<b>Germany</b>					
<b>Aldrin</b>		X		1979	<p>Aldrin is banned as a component of plant protection products according to the provisions of Council Directive 79/117/EEC of 21 December 1978 [1]</p> <p>Corresponding German legislation: Ordinance for Banned Uses of Plant Protection Products (Plant Protection Use Ordinance (Verordnung über Anwendungsverbote für Pflanzenschutzmittel) [2], last amendment by Regulation of the Nature and Landscape Conservation Right and on the Adjustment of other legal Provisions (BNatSchGNeuregG) [3].</p>
<b>Chlordane</b>		X			<p>Chlordane is banned as a component of plant protection products according to the provisions of Council Directive 79/117/EEC of 21 December 1978</p> <p>-Ordinance for Banned Uses of Plant Protection Products (Plant Protection Use Ordinance (Verordnung über Anwendungsverbote für Pflanzenschutzmittel) [2], last amendment by Regulation of the Nature and Landscape Conservation Right and on the Adjustment of other legal Provisions (BNatSchGNeuregG) [3].</p>
<b>DDT</b>		X		1979	<p>DDT is banned as a component of plant protection products according to the provisions of Council Directive 79/117/EEC of 21 December 1978</p> <p>Gesetz über den Verkehr mit DDT (DDT-Gesetz) [2]</p> <p>Ordinance for Banned Uses of Plant Protection Products (Plant Protection Use Ordinance (Verordnung über Anwendungsverbote für Pflanzenschutzmittel) [3], last amendment by Regulation of the Nature and Landscape Conservation Right and on the Adjustment of other legal Provisions (BNatSchGNeuregG) [4].</p>
<b>Dieldrin</b>		X		1979	<p>Dieldrin is banned as a component of plant protection products according to the provisions of Council Directive 79/117/EEC of 21 December 1978</p> <p>-Ordinance for Banned Uses of Plant Protection Products (Plant Protection Use Ordinance (Verordnung über Anwendungsverbote für Pflanzenschutzmittel) [2], last amendment by Regulation of the Nature and Landscape Conservation Right and on the Adjustment of other legal Provisions (BNatSchGNeuregG) [3].</p>

Banned Restricted Allowed Year Comments

**Germany**

Dioxin\_Furan

X

There is a variety of regulatory actions in place to reduce PCDD/Fs impacts:

-Ban of production and use of substances known to be contaminated with PCDD/Fs; i.e. PCBs (since 18/07/1989) and PCP (since 12/12/1989).

-Ban of production and use of substances known to form PCDD/Fs; i.e. PCBs, i.e. halogenated scavengers in gasoline fuels (since 17/01/1992)

-Ordinance on the Prohibition of Certain Chemicals under the Chemical Act , setting limits for PCDD/PCDF in substances, preparations and articles to be placed on the market (either 1 µg/kg, or 5 µg/kg or < 100 µg/kg, depending on congener composition)

-Off-gas concentrations of waste incinerator plants and of crematories must not exceed 0.1 ng I-TEQ /m3.

The content of PCDD/PCDFs in sewage sludge to be used on agricultural land is limited to 100 ng I-TEQ / kg dry weight.

-Ordinance on the Prohibition of Certain Chemicals [Chemikalien-Verbotsverordnung ChemVerbotsV vom 14/10/1993, BGBl. I, S. 1720 in der Fassung vom 06/07/1994, BGBl. I, S. 1493]

-Ordinance on Ban of Halogenated Scavengers [Neunzehnte Verordnung zur Durchführung des Bundes-Immissionsschutzgesetzes 19. BImSchV - Verordnung über Chlor- und Bromverbindungen als Kraftstoffzusatz vom 17/01/1992 (BGBl. I S. 75; , 2000 S. 1956)]

-Directive 2000/76/EC of 04.12.2000 on incineration of waste with a limit value of 0,1 ng TE/m3.

-Ordinance on Incinerators for Waste and Similar Combustible Material [Siebzehnte Verordnung zur Durchführung des Bundes-Immissionsschutzgesetzes (Verordnung über Verbrennungsanlagen für Abfälle und ähnliche brennbare Stoffe - 17. BImSchV) vom 23/11/1990 (BGBl. I S. 2545, zuletzt geändert 27/07/2001, BGBl. I S. 1950(2003)]  
under the Federal Immission Control Act [Gesetz zum Schutz vor schädlichen Umwelteinwirkungen durch Luftverunreinigungen, Geräusche, Erschütterungen und ähnliche Vorgänge (Bundes-Immissionsschutzgesetz - BImSchG) BGBl I S. 880, 14/05/1990, zuletzt geändert 29/10/2001 BGBl I S. 2785 (2795) with a limit value of 0,1 ng TE/m3 for incineration of waste.]

-Technical Instructions according to the Federal Immission Control Act (BimSchG) with a target value of 0,1 ng TE/m3 for all industrial plants.

**Banned Restricted Allowed Year Comments**

Banned	Restricted	Allowed	Year	Comments
				<p>-Ordinance on Crematories [Siebenundzwanzigste Verordnung zur Durchführung des Bundes-Immissionschutz-gesetzes (Verordnung über Anlagen zur Feuerbestattung - 27.BImSchV) vom 19/03/1997 (BGBl. I S. 545, geändert 03/05/2000 (BGBl. I S. 632)) with a limit value of 0,1 ng TE/m<sup>3</sup> for cremation.</p> <p>-Ordinance on Sewage Sludge [Klärschlammverordnung (AbfKlärV) , 15/04/1992 (BGBl. I 1992 S.912)]</p> <p>? Ordinance on bans and restrictions on the placing on the market of dangerous substances preparations and articles pursuant to the Chemicals Act: Substances, preparations and articles may not be placed on the market if they contain</p> <p>? more than 1 µg/kg (sum) 2,3,7,8-TCDD, 1,2,3,7,8 PeCDD, 2,3,7,8-TCDF, 2,3,4,7,8 PeCDF</p> <p>? more than 5 µg/kg (sum) 1,2,3,4,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 1,2,3,6,7,8-HxCDF, 2,3,4,6,7,8-HxCDF</p> <p>? more than 100 µg/kg (sum) 1,2,3,4,6,7,8-HpCDD, OCDD, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, OCDF</p> <p>Brominated congeners are counted like chlorinated analoga.</p>
<b>Endrin</b>	X		1979	<p>Endrin is banned as a component of plant protection products according to the provisions of Council Directive 79/117/EEC [1]</p> <p>Ordinance for Banned Uses of Plant Protection Products (Plant Protection Use Ordinance (Verordnung über Anwendungsverbote für Pflanzenschutzmittel) [2], last amendment by Regulation of the Nature and Landscape Conservation Right and on the Adjustment of other legal Provisions (BNatSchGNeuregG) [3].</p>
<b>Heptachlor</b>	X			<p>Heptachlor is banned as a component of plant protection products according to the provisions of Council Directive 79/117/EEC of 21 December 1978</p> <p>-Ordinance for Banned Uses of Plant Protection Products (Plant Protection Use Ordinance (Verordnung über Anwendungsverbote für Pflanzenschutzmittel) [2], last amendment by Regulation of the Nature and Landscape Conservation Right and on the Adjustment of other legal Provisions (BNatSchGNeuregG) [3].</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Germany</b>					
Hexachlorobenzene		X			<p>Hexachlorobenzene is banned as a component of plant protection products according to the provisions of Council Directive 79/117/EEC of 21 December 1978</p> <p>-Ordinance for Banned Uses of Plant Protection Products (Plant Protection Use Ordinance (Verordnung über Anwendungsverbote für Pflanzenschutzmittel) [2], last amendment by Regulation of the Nature and Landscape Conservation Right and on the Adjustment of other legal Provisions (BNatSchGNeuregG) [3].</p> <p>-Ordinance for Banned Uses of Plant Protection Products (Plant Protection Use Ordinance (Verordnung über Anwendungsverbote für Pflanzenschutzmittel) [2], last amendment by Regulation of the Nature and Landscape Conservation Right and on the Adjustment of other legal Provisions (BNatSchGNeuregG) [3].</p>
Mirex			X		<p>Not actually banned but authorisation of Mirex in plant protection products was never sought in Germany. Mirex will be banned when the convention is put into force</p>
PCB				X	<p>PCBs must not be produced nor marketed.</p> <p>There is legislation in force (96/59/EEC) which aims at eliminating PCBs completely. It includes requirements for (among others):</p> <ul style="list-style-type: none"> <li>-compilation and regularly updating of inventories of equipment containing PCBs</li> <li>-draw up national plans for the decontamination and disposal of PCBs and equipment containing PCBs</li> <li>-ensure decontamination of equipment or disposal of PCBs within specified deadlines.</li> <li>-labelling of inventoried equipment</li> <li>-prohibition of separation of PCBs from other substances for purposes of re-use</li> <li>-filling of transformers with PCBs§ ensuring compliance with requirements of Council Directive 96/47/EC (Hazardous Waste Incineration) in case of incineration of PCBs - or equivalent standards and application of best available technique in cases were other disposal methods are used</li> </ul> <p>The content of PCBs in sewage sludge to be used in agriculture is limited to 0.2 mg/kg dry weight.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Germany</b>					
Toxaphene	X				Toxaphene is banned as a component of plant protection products according to the provisions of Council Directive 79/117/EEC [1]  National legislation: Ordinance for Banned Uses of Plant Protection Products (Plant Protection Use Ordinance) [2], last amendment by Regulation of the Nature and Landscape Conservation Right and on the Adjustment of other legal Provisions (BNatSchGNeuregG) [3].
<b>Ghana</b>					
Aldrin	X			1985	
Chlordane	X			1975	
DDT	X			1975	
Dieldrin	X			1986	
Endrin	X			1975	
Heptachlor	X			1975	
Hexachlorobenzene	X			1975	
Mirex			X		
PCB			X		
Toxaphene			X		
<b>Greece</b>					
Aldrin	X			1972	Ban of all the POP used as plant protection product in 1972.
Chlordane	X			1972	Ban of all the POP used as plant protection product in 1972.

	Banned	Restricted	Allowed	Year	Comments
<b>Greece</b>					
DDT	X			1972	Ban of all the POP used as plant protection product in 1972.
Dieldrin	X			1972	Ban of all the POP used as plant protection product in 1972.
Endrin	X			1972	Ban of all the POP used as plant protection product in 1972.
Heptachlor	X			1972	Ban of all the POP used as plant protection product in 1972.
Hexachlorobenzene	X			1972	Ban of all the POP used as plant protection product in 1972.
Mirex	X			1972	Ban of all the POP used as plant protection product in 1972.
Toxaphene	X			1972	Ban of all the POP used as plant protection product in 1972.
<b>Guinea</b>					
Aldrin		X			Licence professionnelle requise pour l'importation et l'usage sur le marché des pesticides. Arrêté 5714/MAEF/SGG/96
Chlordane		X			Licence professionnelle requise pour l'importation et l'usage sur le marché des pesticides. Arrêté 5714/MAEF/SGG/100
DDT		X			Licence professionnelle requise pour l'importation et l'usage sur le marché des pesticides. Arrêté 5714/MAEF/SGG/98
Dieldrin		X			Licence professionnelle requise pour l'importation et l'usage sur le marché des pesticides. Arrêté 5714/MAEF/SGG/97

	Banned	Restricted	Allowed	Year	Comments
<b>Guinea</b>					
Endrin		X			Licence professionnelle requise pour l'importation et l'usage sur le marché des pesticides. Arrêté 5714/MAEF/SGG/99
Heptachlor		X			Licence professionnelle requise pour l'importation et l'usage sur le marché des pesticides. Arrêté 5714/MAEF/SGG/104
Hexachlorobenzene		X			Licence professionnelle requise pour l'importation et l'usage sur le marché des pesticides. Arrêté 5714/MAEF/SGG/101
Mirex		X			Licence professionnelle requise pour l'importation et l'usage sur le marché des pesticides. Arrêté 5714/MAEF/SGG/102
PCB			X		Mesure spécifique inexistante concernant les PCB.
Toxaphene		X			Licence professionnelle requise pour l'importation et l'usage sur le marché des pesticides. Arrêté 5714/MAEF/SGG/103
<b>Hungary</b>					
Aldrin		X		1966	
Chlordane		X		1968	
DDT		X		1966	
Dieldrin		X		1966	
Dioxin_Furan			X		Emission limit values and in case of waste incineration emission limit values also are established for these chemicals
Endrin		X		1968	

	Banned	Restricted	Allowed	Year	Comments
<b>Hungary</b>					
Heptachlor	X			1900	
Hexachlorobenzene	X			1966	
Mirex	X			1900	
PCB		X			It can be used with the permit of NPHOS (1993) only.
Toxaphene	X			1992	
<b>Iceland</b>					
Aldrin	X			1996	Never registered as a pesticide, but was probably used between 1940/50 and 1960/70.
Chlordane	X			1996	Never registered as a pesticide, but was probably used between 1940/50 and 1960/70.
DDT	X			1996	Never registered as a pesticide. Used before 1975 as a pesticide. Used after 1975 on horses for the treatment of scabies.
Dieldrin	X			1996	Never registered as a pesticide
Dioxin_Furan		X			Dioxins and furans are not known to have ever been used in Iceland. There are emission limits 0,1 ng/m <sup>3</sup> in force since 1996, for incineration of hazardous wastes
Endrin	X			1996	Never registered as a pesticide.
Heptachlor	X			1996	Never registered as a pesticide
Hexachlorobenzene	X			1996	Never registered as a pesticide
Mirex	X			1998	Never registered as a pesticide



	Banned	Restricted	Allowed	Year	Comments
<b>Iceland</b>					
PCB		X			Restriction on import, use and disposal of substances containing more than 0,2% of PCBs in 1988. The limit was lowered to 0,005% in 1995
Toxaphene		X		1996	Never registered as a pesticide.
<b>Indonesia</b>					
Aldrin		X		1974	1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which aldrin is banned under this regulation 2. National Inventory of Hazardous substance industry in West Java  Need financial support for study of chemicals alternative of the replacement of aldrin and technology for the waste and stockpile
Chlordane		X		1992	1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which chlordane is banned under this regulation  2. National Inventory of Hazardous substance industry in West Java  Need financial support for study of chemicals alternative of the replacement of chlordane and technology for the waste and stockpile
DDT		X			1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which DDT is banned under this regulation  2. National Inventory of Hazardous substance industry in West Java  Need financial support for study of chemicals alternative of the replacement of DDT and technology for the waste and stockpile

	Banned	Restricted	Allowed	Year	Comments
<b>Indonesia</b>					
Dieldrin		X		1992	<p>1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which dieldrin is banned under this regulation</p> <p>2. National Inventory of Hazardous substance industry in West Java</p> <p>Need financial support for study of chemicals alternative of the replacement of dieldrin and technology for the waste and stockpile</p>
Dioxin_Furan			X		<p>It is not controlled under the specific regulation,. Governmental regulation Number 18 Jo. Government Regulation Number 85 of 1999 concerning "Hazardous Waste Management" is controlled the DRE of Dioxins/Furans, which is about 99.9999% for incineration process</p> <p>Need financial support for country to analyze the emission including the technology for reducing Dioxins/Furans release to the environment (I.e. Infrastructure laboratory)</p> <p>The government of Indonesia now is trying to use the Dioxins toolkit published by UNEP to predict the dioxins and furans release to the environment for the basis data</p>
Endrin		X		1974	<p>1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which endrin is banned under this regulation</p> <p>2. National Inventory of Hazardous substance industry in West Java</p> <p>Need financial support for study of chemicals alternative of the replacement of endrin and technology for the waste and stockpile</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Indonesia</b>					
<b>Heptachlor</b>		X		1974	<p>1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which Heptachlor is banned under this regulation</p> <p>2. National Inventory of Hazardous substance industry in West Java</p> <p>Need financial support for study of chemicals alternative of the replacement of Heptachlor and technology for the waste and stockpile</p>
<b>Hexachlorobenzene</b>		X			<p>1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which Hexachlorobenzene is banned under this regulation</p> <p>2. National Inventory of Hazardous substance industry in West Java</p> <p>Need financial support for study of chemicals alternative of the replacement of Hexachlorobenzene and technology for the waste and stockpile</p>
<b>Mirex</b>		X			<p>Not Registered</p> <p>1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which Mirex is banned under this regulation</p> <p>2. National Inventory of Hazardous substance industry in West Java</p>
<b>PCB</b>		X		1994	<p>1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which PCB is banned under this regulation</p> <p>2. National Inventory of Hazardous substance industry in West Java</p> <p>Need financial support for study of chemicals alternative of the replacement of PCB and technology for the waste and stockpile</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Indonesia</b>					
<b>Toxaphene</b>	X			1980	<p>1. Socialization of the Governmental Regulation Number 74 of 2001 concerning "Hazardous Substance Management", which Toxaphene is banned under this regulation</p> <p>2. National Inventory of Hazardous substance industry in West Java</p> <p>Need financial support for study of chemicals alternative of the replacement of Toxaphene and technology for the waste and stockpile</p>
<b>Iran</b>					
<b>Aldrin</b>	X			1976	<p>The use, production and import are banned based on Resolution of 11 July 1976 under "The Control of Pesticides Act" 1968</p> <p>Pesticide Supervision Board is responsible for issuing administrative measures</p>
<b>Chlordane</b>	X			1976	<p>The use, production and import are banned based on Resolution of 11 July 1976 under "The Control of Pesticides Act" 1968</p> <p>Pesticide Supervision Board is responsible for issuing administrative measures</p>
<b>DDT</b>		X			<p>Restricted use by the Ministry of Health for vector control</p> <p>The use, production and import are prohibited based on Resolution of 1983 under the "Control of Pesticides Act"</p>
<b>Dieldrin</b>	X			1976	<p>The use, production and import are banned based on Resolution of 11 July 1976 under "The Control of Pesticides Act" 1968</p> <p>Pesticide Supervision Board is responsible for issuing administrative measures</p>
<b>Endrin</b>	X			1976	<p>The use, production and import are banned based on Resolution of 11 July 1976 under "The Control of Pesticides Act" 1968</p> <p>Pesticide Supervision Board is responsible for issuing administrative measures</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Iran</b>					
Heptachlor	X			1976	Based on Resolution of 11 July 1976 under "The Control of Pesticides Act" product, use and import are prohibited  Pesticide Supervision Board is responsible for issuing administrative measures
Hexachlorobenzene	X				Never registered as plant protection product  Pesticide Supervision Board is responsible for issuing administrative measures
Mirex	X				Never registered as plant protection product  Pesticide Supervision Board is responsible for issuing administrative measures
Toxaphene	X			1984	Based on Resolution of 1984 under "The Control of Pesticides Act" product, uses and import are prohibited  Pesticide Supervision Board is responsible for issuing administrative measures
<b>Ireland</b>					
Aldrin	X			1981	Banned as a plant protection product
Chlordane	X			1992	
DDT	X			1985	Banned as a plant protection product
Dieldrin	X			1981	Banned as a plant protection product
Dioxin_Furan		X			Control of incineration of hazardous waste, SI. 64 of 1998 (Regulations giving effect to Council Direction 94/67/EC on incineration of Hazardous waste). Provision of directives on Prevention of pollution from municipal incinerators (89/369/EEC), not yet applicable.
Endrin	X			1981	Banned as a plant protection product

	Banned	Restricted	Allowed	Year	Comments
<b>Ireland</b>					
Heptachlor	X			1981	
Hexachlorobenzene	X			1981	
Mirex	X			1900	Mirex has never been authorized for use in Ireland as a pesticide and therefore, no stockpile exist
PCB	X			1994	Waste management (hazardous waste): regulations, si.163 of 1998, require: Management and decontamination of PCBs and equipment containing PCBs. Reporting of quantities to the EPA. Certain prohibition on use and marketing of PCBs.
Toxaphene	X			1985	Banned as a plant protection product. No stockpiles exist.
<b>Italy</b>					
Aldrin	X			1992	Banned for use as a plant protection product 26 October 1973; production banned with Regulation 2455/92 – CEE
Chlordane	X			1973	Banned for use as a plant protection product 26 October 1973; production banned with Regulation 2455/92 – CEE
DDT		X			Specific authorization granted by Ministry of Health: To produce an anti-scab remedy. In the composition of a product for wood protection.
Dieldrin	X			1973	Banned for use as a plant protection product 26 October 1973; production banned with Regulation 2455/92 – CEE
Dioxin_Furan		X			0.1 ng TE/m <sup>3</sup> PCDDs and PCDFs in effluent gas from new incineration plants. DH. 503: 19N ov 1997, enforcement of EEC Directives 89/369 and 89/429 and 94/67/CE Directive.

	Banned	Restricted	Allowed	Year	Comments
<b>Italy</b>					
Endrin	X			1973	Banned for use as a plant protection product 26 October 1973; production banned with Regulation 2455/92 – CEE
Heptachlor	X			1973	Banned for use as a plant protection product 26 October 1973; production banned with Regulation 2455/92 – CEE
Hexachlorobenzene	X			1978	
Mirex	X			1900	No authorization granted for use or production.
PCB	X				Introduction into national market – Law 216 – May 24, 1988. Enforcement of EEC directives Decontamination and disposal of pre-existing equipment containing PCBs in a time depending on size and concentration. D. Leg. 22 May 1999 – No. 209, enforcement of Directive 96/59/CE
Toxaphene	X			1900	
<b>Jamaica</b>					
Aldrin	X				The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction. Data Source: Pesticide Control Authority

	Banned	Restricted	Allowed	Year	Comments
<b>Jamaica</b>					
<b>Chlordane</b>		X			<p>The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction.</p> <p>Data Source: Pesticide Control Authority</p>
<b>DDT</b>		X			<p>The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction.</p> <p>Data Source: Pesticide Control Authority</p>
<b>Dieldrin</b>		X			<p>The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction.</p> <p>Data Source: Pesticide Control Authority</p>



	Banned	Restricted	Allowed	Year	Comments
<b>Jamaica</b>					
<b>Endrin</b>		X			<p>The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction.</p> <p>Data Source: Pesticide Control Authority</p>
<b>Heptachlor</b>		X			<p>The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction.</p> <p>Data Source: Pesticide Control Authority</p>
<b>Hexachlorobenzene</b>		X			<p>The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction.</p> <p>Data Source: Pesticide Control Authority</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Jamaica</b>					
<b>Mirex</b>		X			<p>The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction.</p> <p>Data Source: Pesticide Control Authority</p>
<b>PCB</b>		X			<p>The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction.</p> <p>Data Source: Pesticide Control Authority</p>
<b>Toxaphene</b>		X			<p>The only pesticide in use that comes close to this category is Endosulphan. Its use is restricted to coffee and there are no alternative pesticides available. There has been a gradual reduction in the quantities applied at the farm level as demonstrated by the reduction in quantities imported in recent years (from 10000 to 6000 litres). The coffee industry has an ongoing research programme to develop appropriate integrated pest management, the latest being the introduction of a parasitic wasp which is now registered with the PCA. A new parasite is also being investigated for introduction.</p> <p>Data Source: Pesticide Control Authority</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Japan</b>					
<b>Aldrin</b>		X		1981	Use is not permitted except certain use designated by the law. No use has been designated since the 1981. Use for research and testing is allowed. Authorization is required for manufacture and import. No authorization has been granted since 1981. The sale for agricultural use is banned except for certain uses since 1971. Registration for agricultural use made invalid since 1975. No chemical is allowed to be put on the market for agricultural use without registration. Therefore, invalidity of registration of a chemical means banning marketing of the chemical.
<b>Chlordane</b>		X		1981	Use is not permitted except certain use designated by the law. No use has been designated since the 1981. Use for research and testing is allowed. Authorization is required for manufacture and import. No authorization has been granted since 1981. Registration for agricultural use made invalid since 1969. No chemical is allowed to be put on the market for agricultural use without registration. Therefore, invalidity of registration of a chemical means banning marketing of the chemical.
<b>DDT</b>		X		1971	Use is not permitted except certain use designated by the law. No use has been designated since the 1981. Use for research and testing is allowed. Authorization is required for manufacture and import. No authorization has been granted since 1981. The sale for agricultural use is banned since 1971.
<b>Dieldrin</b>		X		1981	Use is not permitted except certain use designated by the law. No use has been designated since the 1981. Use for research and testing is allowed. Authorization is required for manufacture and import. No authorization has been granted since 1981. The sale for agricultural use is banned except for certain uses since 1971. Registration for agricultural use made invalid since 1975. No chemical is allowed to be put on the market for agricultural use without registration. Therefore, invalidity of registration of a chemical means banning marketing of the chemical.

	Banned	Restricted	Allowed	Year	Comments
<b>Japan</b>					
Dioxin_Furan		X			Emission standards for waste incinerators and electrical steel mills since 1997. Air Pollution Control Law. (for waste incinerators and electrical steel mills), Waste Management and Public Cleansing Law. (for waste incinerators). Emissions standards and effluent standards for certain types of facilities since 2000. Law Concerning Special Measures Against Dioxins. Emission standards for waste incinerators, electrical steel mills, steel sintering facilities, zinc recovery facilities with chlorine compounds, decomposition facilities for PCB wastes, cleaning facilities for PCB contaminants, emission gas cleaning facilities and wet dust collection facilities for aluminum production, cleaning facilities for vinyl chloride production, waste incinerator related facilities, final sewage treatment facilities which treat discharges wastewater from above-mentioned facilities etc.
Endrin		X		1981	Use is not permitted except certain use designated by the law. No use has been designated since the 1981. Use for research and testing is allowed. Authorization is required for manufacture and import. No authorization has been granted since 1981. The sale for agricultural use is banned except for certain uses since 1971. Registration for agricultural use made invalid since 1975. No chemical is allowed to be put on the market for agricultural use without registration. Therefore, invalidity of registration of a chemical means banning marketing of the chemical.
Heptachlor		X		1986	Use is not permitted except certain use designated by the law. No use has been designated since the 1986. Use for research and testing is allowed. Authorization is required for manufacture and import. No authorization has been granted since 1986. Registration for agricultural use made invalid since 1975. No chemical is allowed to be put on the market for agricultural use without registration. Therefore, invalidity of registration of a chemical means banning marketing of the chemical.
Hexachlorobenzene		X		1900	Use is not permitted except certain use designated by the law. No use has been designated since the 1979. Use for research and testing is allowed. Authorization is required for manufacture and import. No authorization has been granted since 1979. Never used as an agricultural pesticide in Japan.

	Banned	Restricted	Allowed	Year	Comments
<b>Japan</b>					
Mirex	X			1900	Never produced in Japan. Never used as an agricultural pesticide in Japan. A regulatory action similar to Aldrin will be taken when a notification of production or import to the Minister of Health and Welfare and the Minister of International Trade and Industry.
PCB		X			Use is not permitted except certain use designated by the law. No use has been designated since the 1974. Use for research and testing is allowed. Authorization is required for manufacture and import. No authorization has been granted since 1974.
Toxaphene	X			1901	Never used as an agricultural pesticide in Japan. A regulatory action similar to Aldrin will be taken when a notification of production or import to the Minister of Health and Welfare and the Minister of International Trade and Industry.
<b>Jordan</b>					
Aldrin	X			1980	
Chlordane	X			1980	
DDT	X			1995	
Dieldrin	X			1980	
Dioxin_Furan			X		Not registered
Endrin	X			1980	
Heptachlor	X			1980	
Hexachlorobenzene	X			1995	
Mirex	X				Not registered

	Banned	Restricted	Allowed	Year	Comments
<b>Jordan</b>					
PCB	X				Not registered
Toxaphene	X			1980	
<b>Kazakhstan</b>					
Aldrin	X			1996	
DDT	X			1989	
Dieldrin	X			1996	
Heptachlor	X			1996	
<b>Kuwait</b>					
Aldrin	X			1995	28.03.1995 No. 95/95
Chlordane	X			1995	28.03.1995 No. 95/95
DDT	X			1995	28.03.1995 No. 95/95
Dieldrin	X			1995	28.03.1995 No. 95/95
Dioxin_Furan		X			There is a project for monitoring and assessment of dioxins and furans from hospitals' incinerators. As a result five incinerators have been closed because of their low efficiency.
Endrin	X			1995	28.03.1995 No. 95/95
Heptachlor	X			1995	28.03.1995 No. 95/95

	Banned	Restricted	Allowed	Year	Comments
<b>Kuwait</b>					
Hexachlorobenzene	X			1995	28.03.1995 No. 95/95
Mirex	X			1995	28.03.1995 No. 95/95
PCB	X			1994	In 1992 PCBs transformers, have been replaced in ministry of electricity
Toxaphene	X			1995	28.03.1995 No. 95/95
<b>Kyrgyzstan</b>					
Aldrin	X			1972	Use is banned since 1972, by Ministry of Public health services of SU The new resolution of Kyrgyz Republic Government # 376, 7.27.2001, "About actions of human health and environmental protection from some chemicals and pesticides impact"
Chlordane	X			1978	Use is banned since 1978, by Ministry of Public health services of SU The new resolution of Kyrgyz Republic Government # 376, 7.27.2001, "About actions of human health and environmental protection from some chemicals and pesticides impact"
DDT	X			1970	Use is banned since 1970, by Ministry of Public health services of SU The new resolution of Kyrgyz Republic Government # 376, 7.27.2001, "About actions of human health and environmental protection from some chemicals and pesticides impact"
Dieldrin	X			1985	Use is banned since 1985, by Ministry of Public health services of S The new resolution of Kyrgyz Republic Government # 376, 7.27.2001, "About actions of human health and environmental protection from some chemicals and pesticides impact"
Dioxin_Furan			X		no laboratory and analytical facilities for assessing emission sources

	Banned	Restricted	Allowed	Year	Comments
<b>Kyrgyzstan</b>					
Endrin	X			1970	Use is banned since 1970, by Ministry of Public health services of SU
Heptachlor	X			1986	Use is banned since 1986, by Ministry of Public health services of SU The new resolution of Kyrgyz Republic Government # 376, 7.27.2001, "About actions of human health and environmental protection from some chemicals and pesticides impact"
Hexachlorobenzene	X			1986	Use is banned since 1986, by Ministry of Public health services of SU
Mirex		X		1980	Since 1980, by Ministry of Public health services of SU
PCB	X				The new resolution of Kyrgyz Republic Government # 376, 7.27.2001, "About actions of human health and environmental protection from some chemicals and pesticides impact" No laboratory and analytical facilities for assessing emission sources
<b>Lao PDR</b>					
Aldrin	X			1992	Has been banned since November 21, 1992 (Regulation on the management and usage of plant protection products in the Lao PDR No. 0894/DA-MAF) PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government. Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB



	Banned	Restricted	Allowed	Year	Comments
<b>Lao PDR</b>					
<b>Chlordane</b>		X			<p>Not imported, under consideration to be banned by Government.</p> <p>Lao PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government.</p> <p>Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB</p>
<b>DDT</b>		X		1992	<p>Has been banned since November 21, 1992 (Regulation on the management and usage of plant protection products in the Lao PDR No. 0894/DA-MAF)</p> <p>Lao PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government.</p> <p>Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB</p>
<b>Dieldrin</b>		X		1992	<p>Has been banned since November 21, 1992 (Regulation on the management and usage of plant protection products in the Lao PDR No. 0894/DA-MAF)</p> <p>Lao PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government.</p> <p>Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Lao PDR</b>					
<b>Endrin</b>		X		1992	<p>Has been banned since November 21, 1992 (Regulation on the management and usage of plant protection products in the Lao PDR No. 0894/DA-MAF)</p> <p>Lao PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government.</p> <p>Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB</p>
<b>Heptachlor</b>		X		1992	<p>Has been banned since November 21, 1992 (Regulation on the management and usage of plant protection products in the Lao PDR No. 0894/DA-MAF)</p> <p>Lao PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government.</p> <p>Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB</p>
<b>Hexachlorobenzene</b>		X			<p>Not imported, under consideration to be banned by Government.</p> <p>Lao PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government.</p> <p>Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB</p>
<b>Mirex</b>		X			<p>Not imported, under consideration to be banned by Government.</p> <p>Lao PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government.</p> <p>Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Lao PDR</b>					
PCB		X			<p>Not imported, under consideration be be banned by Government.</p> <p>Lao PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government.</p> <p>Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB</p>
Toxaphene		X		1992	<p>Has been banned since November 21, 1992 (Regulation on the management and usage of plant protection products in the Lao PDR No. 0894/DA-MAF)</p> <p>Lao PDR does not produce or export any chemicals of pesticides. Chemicals and pesticides used in Lao PDR are imported from foreign countries in several forms for several purposes. Specific POPs chemical have see banned (see table), other consideration to be banned by the Government.</p> <p>Data Source: Ministry of Agriculture and Forestry-MAF, Ministry of Industry and Handicraft-MIB</p>
<b>Latvia</b>					
Aldrin		X		1972	<p>1. It is prohibited to import, distribute or use in Latvia plant protection products containing Aldrin.</p> <p>2. The use of Aldrin as pesticide shall be minimised and whenever possible banned.</p> <p>The use of Aldrin in Latvia is banned since 1972. Now the use of Aldrin is banned according to the latest Regulations issued by the Cabinet of Ministers on 21 March, 2000, Nr.107.</p>
Chlordane		X			<p>1. It is prohibited to import, distribute or use in Latvia plant protection products containing chlordane.</p> <p>2. The use of chlordane as pesticide shall be minimised and whenever possible banned.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Latvia</b>					
DDT		X		1967	<p>1. It is prohibited to import, distribute or use in Latvia plant protection products containing DDT.</p> <p>2. Substance banned for all final uses, except for drugs.</p> <p>The use of DDT in Latvia is banned since 1967. Now the use of DDT is banned according to the latest Regulations issued by the Cabinet of Ministers on 21 March, 2000, Nr.107.</p> <p>There are 108 t of DDT kept in the storage of toxic chemicals.</p>
Dieldrin		X			<p>1. It is prohibited to import, distribute or use in Latvia plant protection products containing Dieldrin.</p> <p>2. The use of Dieldrin as pesticide shall be minimised and whenever possible banned.</p> <p>1. Regulations of the Cabinet of Ministers No.107 "Regulation Regarding Prohibited Plant Protection Products" (21.03.2000).</p> <p>2. Law on Convention on the Protection of the Marine Environment of the Baltic Sea Area (03.03.1994, in force from 17.01.2000).</p>
Dioxin_Furan			X		<p>1. The half-hourly average air emission limit value for Furans is 0,01ng/m3.</p> <p>2. Furans' and Dioxins total emission limit values for:  ? waste incineration plants – 0,1 ng/m3;  ? waste co-incineration plants in cement kilns - 0,1 ng/m3;  ? discharges of waste water from the cleaning of exhaust gases from waste incineration plants – 0,3 ng/m3.</p> <p>1. Regulations of the Cabinet of Ministers No. 219 "On Air Quality" (15.06.1999, in force from 01.01.2000)  2. Regulations of the Cabinet of Ministers No.323 "On requirements for incineration of waste and for operation of waste incineration plants" (17.07.2001.)</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Latvia</b>					
<b>Endrin</b>		X			<p>1. It is prohibited to import, distribute or use in Latvia plant protection products containing Endrin.</p> <p>2. The use of Endrin as pesticide shall be minimised and whenever possible banned.</p> <p>Endrin has never been used in Latvia</p>
<b>Heptachlor</b>		X		1986	<p>1. It is prohibited to import, distribute or use in Latvia plant protection products containing Heptachlor.</p> <p>2. The use of Heptachlor as pesticide shall be minimised and whenever possible banned.</p> <p>The use of Heptachlor in Latvia is banned since 1986. Now the use of Heptachlor is banned according to the latest Regulations issued by the Cabinet of Ministers on 21 March, 2000, Nr.107</p>
<b>Hexachlorobenzene</b>			X		<p>1. It is prohibited to import, distribute or use in Latvia plant protection products containing Hexachlorobenzene.</p> <p>2. It is prohibited to offer and to market carcinogenic substances of the second category for common use in concentration equal or greater than 0,1%.</p>
<b>Mirex</b>		X			Mirex has never been used in Latvia

**Banned Restricted Allowed Year Comments**

**Latvia**

PCB

X

1. Prohibition of use of PCB, PCT and preparations with a content of PCB/PCT higher than 0,005% by weight, except closed system electrical equipment, large condensers, small condensers, certain heat transmitting fluids, certain hydraulic fluids, etc., closely following provisions of Council Directive 76/769/EEC

2. Regulations of the Cabinet of Ministers No.117 contains provisions:  
 - if volume of PCB/PCT in the equipment is above 5 dm<sup>3</sup>, owner or holder of equipment has to provide information about such equipment to the regional environmental board, as well as for the changes of amounts of PCB/PCT bigger than 10%;  
 - labelling of PCB/PCT equipment;  
 - decontamination of PCB/PCT equipment, if incineration or disposal is causing more serious risk to the environment;  
 - Treatment of equipment containing less than 5 dm<sup>3</sup> of PCB/PCT;  
 - Prohibition to recover PCB/PCT and topping up of transformers with PCB/PCT

3. In accordance with Regulations of the Cabinet of Ministers No.529, owner or holder of PCB/PCT containing waste shall ensure that:  
 - waste is stored separately from flammable products and chemicals;  
 - Contaminated equipment (e.g., transformers, capacitors, receptacles) containing or having contained PCB/PCT is disposed of only at disposal facilities for hazardous waste which have received A category permit, if disposal of such equipment is not causing more serious pollution than incineration;  
 - Prohibition to incinerate PCB/PCT on ships.

4. Substance banned for all uses, except in existing closed equipment until the end of service life or for research, development and analytical purposes

1. The half-hourly average air emission limit value for Furans is 0,01ng/m<sup>3</sup>.

2. Furans' and Dioxins total emission limit values for:  
 - waste incineration plants - 0,1 ng/m<sup>3</sup>;  
 -waste co-incineration plants in cement kilns - 0,1 ng/m<sup>3</sup>;  
 -discharges of waste water from the cleaning of exhaust gases from waste incineration plants - 0,3 ng/m<sup>3</sup>.

	Banned	Restricted	Allowed	Year	Comments
<b>Latvia</b>					
Toxaphene	X			1993	1. It is prohibited to import, distribute or use in Latvia plant protection products containing Toxaphene.  2. The use of Toxaphene as pesticide shall be minimised and whenever possible banned.  The use of Toxaphene in Latvia is banned since 1993. Now the use of Toxaphene is banned according to the latest Regulations issued by the Cabinet of Ministers on 21 March, 2000, Nr.107. There are 3,8 t of Polychlorcamphen kept in the storage of hazardous waste
<b>Lebanon</b>					
Aldrin	X			1992	Banned by Ministerial Decision issued on the same date
Chlordane	X			1992	Banned by ministerial decision issued on the same date
DDT	X			1992	Banned by ministerial decision issued on the same date
Dieldrin	X			1992	Banned by ministerial decision issued on the same date
Dioxin_Furan			X		
Endrin	X			1992	Banned by ministerial decision issued on the same date
Heptachlor	X			1992	Banned by ministerial decision issued on the same date
Hexachlorobenzene			X		
Mirex	X			1998	Banned by a ministerial decision issued on the same date
PCB			X		
Toxaphene	X			1998	Banned by a ministerial decision issued on the same date

	Banned	Restricted	Allowed	Year	Comments
<b>Lithuania</b>					
Aldrin		X		1997	<p>Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000)</p> <p>Discharges to water , i.e. to sewerage systems and to the receiving water body are regulated/controlled by setting emission limit values (according Dangerous substances directive 74/464/EEC and daughter directives).</p>
Chlordane		X		1997	<p>Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000)</p> <p>Hygienic Standard 63:2000 "Banned and restricted pesticides" (adopted by the Order of the Misister for Health of 17 Jan 2000 No. 24; replaces HN 63-1996</p>
DDT		X		1997	<p>Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000)</p> <p>Discharges to water , i.e. to sewerage systems and to the receiving water body are regulated/controlled by setting emission limit values (according Dangerous substances directive 74/464/EEC and daughter directives).</p>
Dieldrin		X		1997	<p>Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000)</p> <p>Discharges to water , i.e. to sewerage systems and to the receiving water body are regulated/controlled by setting emission limit values (according Dangerous substances directive 74/464/EEC and daughter directives).</p>
Dioxin_Furan			X		<p>Established basic technological requirements for waste incineration and limited values of pollutants in ambient air.</p> <p>Established maximum permissible concentration of chemicals (including dioxins and furans) polluting air of residential areas.</p> <p>Established basic requirements for waste incineration and limited values of pollutants from waste incineration plant.</p>



	Banned	Restricted	Allowed	Year	Comments
<b>Lithuania</b>					
Endrin		X		1997	<p>Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000)</p> <p>Discharges to water , i.e. to sewerage systems and to the receiving water body are regulated/controlled by setting emission limit values (according Dangerous substances directive 74/464/EEC and daughter directives).</p>
Heptachlor		X		1997	<p>Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000)</p>
Hexachlorobenzene		X		1997	<p>Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000)</p> <p>Discharges to water , i.e. to sewerage systems and to the receiving water body are regulated/controlled by setting emission limit values (according Dangerous substances directive 74/464/EEC and daughter directives).</p>
Mirex		X		1997	<p>Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000)</p>
PCB		X		1997	<p>Banned placing on the market and use from 1999. The use of equipment, plant, installations containing PCBs shall continue to be authorized until they are disposed of or reach the end of their service life if their exploitation started before entry into force of this Hygienic Standard. PCB can be used for the supplement the level of liquids in mentioned equipments.</p> <p>Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000).</p> <p>Established basic requirements for regeneration of waste oils containing PCBs or PCTs. The regenerated oils do not contain PCB/PCT beyond a maximum limit which in no case may exceed 50 ppm.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Lithuania</b>					
Toxaphene		X		1997	Banned import, production and use of pesticides containing this active substance from 1997 (updated in 2000)
<b>Macedonia</b>					
Aldrin		X			Article 4 of the Law on traffic in poisonous substances
Chlordane		X			Article 4 of the Law on traffic in poisonous substances
Dieldrin		X			Article 4 of the Law on traffic in poisonous substances
Heptachlor		X			Article 4 of the Law on traffic in poisonous substances
<b>Madagascar</b>					
Aldrin		X		1993	Il est interdit de l'utiliser en agriculture à cause de leur haute toxicité et de l'importance bio-accumulation de ses résidus  Arrêté N° 6225/93 portant suspension et restriction d'usage de quelques produits agropharmaceutiques en date du 30 Novembre 1993 signé par le Ministre de l'agriculture
Chlordane		X		1993	Arrêté N° 6225/93 portant suspension et restriction d'usage de quelques produits agropharmaceutique en date du 30 Novembre 1993 signé par le Ministre de l'agriculture
DDT		X		1993	Il est interdit de l'utiliser en agriculture à cause de leur haute toxicité et de l'importance bio-accumulation de ses résidus.  Etant signataire de la Convention de Stockholm, on a obtenu une dérogation d'une durée de 10 ans d'utiliser le DDT dans la lutte anti-vectorielle  Arrêté N° 6225/93 portant suspension et restriction d'usage de quelques produits agropharmaceutiques en date du 30 Novembre 1993 signé par le Ministre de l'agriculture  Liste des pays obtenus de dérogation dans le texte de Convention de Stockholm

	Banned	Restricted	Allowed	Year	Comments
<b>Madagascar</b>					
Dieldrin		X		1993	Il est interdit de l'utiliser en agriculture à cause de leur haute toxicité et de l'importance bio-accumulation de ses résidus  Arrêté N° 6225/93 portant suspension et restriction d'usage de quelques produits agropharmaceutiques en date du 30 Novembre 1993 signé par le Ministre de l'agriculture
Endrin		X		1993	Il est interdit de l'utiliser en agriculture à cause de leur haute toxicité et de l'importance bio-accumulation de ses résidus  Arrêté N° 6225/93 portant suspension et restriction d'usage de quelques produits agropharmaceutiques en date du 30 Novembre 1993 signé par le Ministre de l'agriculture
Heptachlor			X		Arrêté N° 6225/93 portant suspension et restriction d'usage de quelques produits agropharmaceutiques en date du 30 Novembre 1993 signé par le Ministre de l'agriculture
PCB		X		1993	Decree 93/625. It is a legal instrument issued by the Ministry of Agriculture
Toxaphene		X		1993	Il est interdit de l'utiliser en agriculture à cause de leur haute toxicité et de l'importance bio-accumulation de ses résidus  Arrêté N° 6225/93 portant suspension et restriction d'usage de quelques produits agropharmaceutiques en date du 30 Novembre 1993 signé par le Ministre de l'agriculture
<b>Malaysia</b>					
Aldrin		X		1994	Registration under the Pesticides Act 1974, Withdrawn since 1994.
Chlordane		X		1998	No more registration under the Pesticides Act 1974, After 1.10.98
DDT		X		1999	No more registration under the Pesticides Act 1974, since 1. 5. 99

	Banned	Restricted	Allowed	Year	Comments
<b>Malaysia</b>					
Dieldrin	X			1994	Registration under the Pesticides Act 1974, Withdrawn since 1994.
Endrin	X			1900	Never registered under the Pesticides Act 1974
Heptachlor	X			1990	No registration under the Pesticides Act 1974 since 1.8.90
Hexachlorobenzene	X			1900	Never registered under the Pesticides Act 1974.
Mirex	X			1900	Never registered under the Pesticides Act 1974.
PCB		X			Import is banned under the Prohibition of Import Order under the Customs Act 1967 since 1994.
Toxaphene	X			1900	Never registered under the Pesticides Act 1974.
<b>Mauritius</b>					
Aldrin	X			1991	Data Source: Pesticide Control Board, Ministry of Health  Controlled by Pesticides Control Board, Ministry of Health (1991)
Chlordane	X			1993	Controlled by Pesticides Control Board, Ministry of Health (1993)  Data Source: Pesticide Control Board, Ministry of Health
DDT		X			Controlled by Pesticides Control Board, Ministry of Health  Imported for use for vector control by Ministry of Health since 1940. Last import of stock of DDT was made in 1980. Use of DDT has always been restricted for vector control to prevent malarial outbreak.

	Banned	Restricted	Allowed	Year	Comments
<b>Mauritius</b>					
<b>Dieldrin</b>	X			1991	Controlled by Pesticides Control Board, Ministry of Health (1991)  Data Source: Pesticide Control Board, Ministry of Health
<b>Dioxin_Furan</b>			X		Data Source: Pesticide Control Board, Ministry of Health
<b>Endrin</b>	X				Controlled by Pesticides Control Board, Ministry of Health.  Data Source: Pesticide Control Board, Ministry of Health
<b>Heptachlor</b>	X			1993	Controlled by Pesticides Control Board, Ministry of Health (1993)  Data Source: Pesticide Control Board, Ministry of Health
<b>Hexachlorobenzene</b>	X				Controlled by Pesticides Control Board, Ministry of Health  Data Source: Pesticide Control Board, Ministry of Health
<b>Mirex</b>	X				Controlled by Pesticides Control Board, Ministry of Health  Data Source: Pesticide Control Board, Ministry of Health
<b>PCB</b>	X			2000	Controlled by Pesticides Control Board, Ministry of Health (2000)  PCBs have been banned in Mauritius under Prior Informed Consent (P.I.C) on 1st September 2000 Data Source: Pesticide Control Board, Ministry of Health
<b>Toxaphene</b>	X				Controlled by Pesticides Control Board, Ministry of Health  Data Source: Pesticide Control Board, Ministry of Health

	Banned	Restricted	Allowed	Year	Comments
<b>Mexico</b>					
Aldrin		X		1991	<p>Banned (Importation, production, formulation, commercialization and use) in the Official Journal of the Federation (D.O.F.) on January the 3rd, 1991.</p> <p>Banned in the Official Catalogue of Pesticides, Fertilizers and Toxic Substances since 1998. Working Centers have established maximum allowed levels under the Norm: NOM-010-STPS-1994 (D.O.F. July 8th, 1994). Catálogo Oficial de Plaguicidas, Fertilizantes y Sustancias Tóxicas, 1998 Diario Oficial de la Federación, 3 de Enero de 1991</p>
Chlordane			X	1991	<p>Plaguicida Restringido de uso Urbano e Industrial</p> <p>Restricted (Sales, handling and application) in the Official Journal of the Federation (D.O.F.) on January the 3rd, 1991.</p> <p>Restricted in the Official Catalogue of Pesticides, Fertilizers and Toxic Substances since 1998.</p> <p>It is considered a hazardous waste and its producers must handle it in accordance to the norms and the procedures established by the authorities (NOM-052-ECOL-1993 and the Reform Pre-Project, 1999) In 1998, chlordane stockpiles in Mexico were completely depleted. It should soon become prohibited.</p> <p>Working Centers have established maximum allowed levels under the Norm: NOM-010-STPS-1994 (D.O.F. July 8th, 1994). Catálogo Oficial de Plaguicidas, Fertilizantes y Sustancias Tóxicas, 1998 Diario Oficial de la Federación, 3 de Enero de 1991</p>
DDT			X		<p>Por su alto riesgo para la salud humana, su elevada persistencia y sus propiedades de bioacumulacion, este plaguicida solo podrá ser utilizado por las dependencias del ejecutivo en campanas sanitarias</p> <p>Restricted, in the Official Catalogue of Pesticides, Fertilizers and Toxic Substances, to Public Health Campaigns to control malaria. DDT is no longer used in Mexico. It will soon be banned in the Official Catalogue of Pesticides, Fertilizers and Toxic Substances. Catálogo Oficial de Plaguicidas, Fertilizantes y Sustancias Tóxicas.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Mexico</b>					
Dieldrin		X		1991	<p>Plaguicida cuya importación, fabricación, formulación comercialización y esta prohibido en México de acuerdo al Diario Oficial de la Federación del 3 de enero de 1991</p> <p>Banned (Importation, production, formulation, commercialization and use) in the Official Journal of the Federation (D.O.F.) on January the 3rd, 1991.</p> <p>Banned in the Official Catalogue of Pesticides, Fertilizers and Toxic Substances since 1998. Working Centers have established maximum allowed levels under the Norm: NOM-010-STPS-1994 (D.O.F. July 8th, 1994).</p> <p>Catálogo Oficial de Plaguicidas, Fertilizantes y Sustancias Tóxicas, 1998 Diario Oficial de la Federación, 3 de Enero de 1991</p>
Dioxin_Furan			X		<p>Under the Commission for Environmental Cooperation (USA, Mexico and Canada) we are developing the North America Regional Action Plan on dioxins and furans. We are also developing specific regulations for wastes incineration and cement kilns dioxins and furans emissions</p>
Endrin		X		1991	<p>Plaguicida cuya importación, fabricación, formulación comercialización y esta prohibido en México de acuerdo al Diario Oficial de la Federación del 3 de enero de 1991</p> <p>Banned (Importation, production, formulation, commercialization and use) in the Official Journal of the Federation (D.O.F.) on January the 3rd, 1991.</p> <p>Banned in the Official Catalogue of Pesticides, Fertilizers and Toxic Substances since 1998. Working Centers have established maximum allowed levels under the Norm: NOM-010-STPS-1994 (D.O.F. July 8th, 1994).</p> <p>It is considered a hazardous waste and its producers must handle it in accordance to the norms and the procedures established by the authorities (NOM-052-ECOL-1993 and the Reform Pre-Project, 1999)</p> <p>Catálogo Oficial de Plaguicidas, Fertilizantes y Sustancias Tóxicas, 1998 Diario Oficial de la Federación, 3 de Enero de 1991</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Mexico</b>					
<b>Heptachlor</b>		X		1993	<p>No se encuentra registrado en el pais</p> <p>Working Centers have established maximum allowed levels under the Norm: NOM-010-STPS-1994 (D.O.F. July 8th, 1994)</p> <p>It is considered a hazardous waste and its producers must handle it in accordance to the norms and the procedures established by the authorities (NOM-052-ECOL-1993 and the Reform Pre-Project, 1999) Diario Oficial de la Federación, 8 de Julio de 1994</p>
<b>Hexachlorobenzene</b>	X			1998	<p>No se encuentra registrado en el pais</p> <p>Banned in the Official Catalogue of Pesticides, Fertilizers and Toxic Substances, 1998</p> <p>Under the Commission for Environmental Cooperation (USA, Mexico, Canada) we are developing the North America Regional Action Plan on HCB in conjunction with dioxins and furans for their chemical proprieties relation.</p> <p>Catalogo Oficial de Plaguicidas</p>
<b>Mirex</b>		X		1991	<p>Plaguicida cuya importación, fabricación, formulación comercializacion y esta prohibido en México de acuerdo al Diario Oficial de la Federación del 3 de enero de 1991</p> <p>Banned (Importation, production, formulation, commercialization and use) in the Official Journal of the Federation (D.O.F.) on January the 3rd, 1991.</p> <p>Banned in the Official Catalogue of Pesticides, Fertilizers and Toxic Substances since 1998. Catálogo Oficial de Plaguicidas, Fertilizantes y Sustancias Tóxicas, 1998</p> <p>Diario Oficial de la Federación, 3 de Enero de 1991</p>



**Banned Restricted Allowed Year Comments**

**Mexico**

Banned	Restricted	Allowed	Year	Comments
	X			<p>En febrero de 2001 se publico la Norma Oficial Mexicana NOM-133-ECOL-2000 "Protección ambiental - Bifenilos policlorados (BPCs) - Especificaciones de manejo" que establece como fecha limite para la eliminación de PCB's el año 2008. Esta norma se toma como base para diseñar el Plan de Acción de Manejo para eliminar los PCB's, en el año 2003.</p> <p>Guidelines for proper PCB handling, management, and treatment/disposal have been in place since 1988; new regulation in place in December 2001. PCB are considered hazardous wastes under the Hazardous Waste Regulation of the General Law of Equilibrium and Environmental Protection Government Permits for the official exportation of PCB</p>

	X		1991	<p>No se encuentra registrado en el pais</p> <p>Banned (Importation, production, formulation, commercialization and use) in the Official Journal of the Federation (D.O.F.) on January the 3rd, 1991. It did not appear in the 1998 Official Catalogue of Pesticides, Fertilizers and Toxic Substances, although it was prohibited from 1992 to 1997.</p> <p>Working Centers have established maximum allowed levels under the Norm: NOM-010-STPS-1994 (D.O.F. July 8th, 1994).</p> <p>It is considered a hazardous waste and its producers must handle it in accordance to the norms and the procedures established by the authorities (NOM-052-ECOL-1993). Catálogo Oficial de Plaguicidas, Fertilizantes y Sustancias Tóxicas, 1998 Diario Oficial de la Federación, 3 de Enero de 1991</p>
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**Moldova**

	X		1972	<p>Never was produced in the Republic of Moldova. Presently doesn't use.</p> <p>Prohibited since 1972. Not included in official register of permitted substances for use in agriculture, including and individual farms, forestry and household</p>
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	Banned	Restricted	Allowed	Year	Comments
<b>Moldova</b>					
<b>Chlordane</b>	X				<p>Never was produced in the Republic of Moldova. Presently doesn't use.</p> <p>Not included in official register of permitted substances for use in agriculture, including and individual farms, forestry and household.</p>
<b>DDT</b>	X			1970	<p>Never was produced in the Republic of Moldova. In conformity with official data DDT doesn't use in the Republic of Moldova approximately 30 years.</p> <p>Prohibited since 1970. Not included in official register of permitted substances for use in agriculture, including and individual farms, forestry and household.</p>
<b>Dieldrin</b>	X				<p>Never was produced in the Republic of Moldova. Presently doesn't use.</p> <p>Not included in official register of permitted substances for use in agriculture, including and individual farms, forestry and household.</p>
<b>Dioxin_Furan</b>		X			<p>Restricted by hygienic standard on maximum permissible concentrations of chemicals polluting air of residential areas (0,5 pg/m3). Also, restricted by hygienic standards on maximum permissible concentrations of chemicals polluting soil and drinking water.</p>
<b>Endrin</b>	X				<p>Never was produced in the Republic of Moldova. Presently doesn't use.</p> <p>Not included in official register of permitted substances for use in agriculture, including and individual farms, forestry and household.</p>
<b>Heptachlor</b>	X			1986	<p>Never was produced in the Republic of Moldova. Presently doesn't use.</p> <p>Prohibited since 1986. Does not included in official register of permitted substances for use in agriculture, including and individual farms, forestry and household.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Moldova</b>					
<b>Hexachlorobenzene</b>		X			<p>As pesticide: Never was produced in the Republic of Moldova. Presently doesn't use.</p> <p>As pesticide: Not included in official register of permitted substances for use in agriculture, including and individual farms, forestry and household.</p> <p>As industrial chemicals: N/A.</p> <p>As unintentional release: Restricted by hygienic standard:  -on maximum permissible concentrations of chemicals polluting: air of working zone (0,9 mg/m3); water used potable purposes (0,05 mg/l);  -on the indicative safe exposure level of chemicals polluting air of residential areas (0,013 mg/m3);  -on the indicative permissible quantity of chemicals polluting soil 0,03 mg/kg</p> <p>As industrial chemicals: Not produced. Not known to have been used in any industrial applications.</p>
<b>Mirex</b>		X			<p>Not included in official register of permitted substances for use in agriculture, including and individual farms, forestry and household.</p> <p>Never was produced in the Republic of Moldova. Presently doesn't use.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Moldova</b>					
PCB		X			<p>Trichlorobiphenyl is one from PCBs used in the Republic of Moldova. Its use is restricted by hygienic standard:</p> <ul style="list-style-type: none"> <li>- on the indicative safe exposure level of chemicals polluting air of residential areas (0,001 mg/m3);</li> <li>- on the indicative permissible quantity of chemicals polluting soil (0,03 mg/kg);</li> <li>- on maximum permissible concentration of chemicals polluting water used potable purposes (0,001 mg/l).</li> </ul> <p>Pentachlorobiphenyl is restricted by hygienic standard on the indicative permissible quantity of chemicals polluting soil (0,1 mg/kg).</p> <p>Tetrachlorobiphenyl is restricted by hygienic standard on the indicative permissible quantity of chemicals polluting soil (0,06 mg/kg).</p> <p>Polychlorinated biphenyls (summary) are restricted by hygienic standard on the indicative permissible quantity of chemicals polluting soil (0,06 mg/kg).</p> <p>Never was produced in the Republic of Moldova. Were used in past. There is equipment in reserve, containing PCBs (mostly Trichlorobiphenyl).</p>
Toxaphene		X			<p>Never was produced in the Republic of Moldova. Presently doesn't use.</p> <p>Prohibited since 1991. Not included in official register of permitted substances for use in agriculture, including and individual farms, forestry and household.</p>
<b>Monaco</b>					
Aldrin			X		<p>At the present time, there is no national regulation concerning aldrin in Monaco. However, since France and Monaco form a customs union, European and French regulations concerning sale and use of aldrin are in fact applied in Monaco.</p>
Chlordane			X		<p>At the present time, there is no national regulation concerning chlordane in Monaco. However, since France and Monaco form a customs union, European and French regulations concerning sale and use of chlordane are in fact applied in Monaco.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Monaco</b>					
DDT			X		At the present time, there is no national regulation concerning DDT in Monaco. However, since France and Monaco form a customs union, European and French regulations concerning sale and use of DDT are in fact applied in Monaco.
Dieldrin			X		At the present time, there is no national regulation concerning dieldrin in Monaco. However, since France and Monaco form a customs union, European and French regulations concerning sale and use of dieldrin are in fact applied in Monaco.
Dioxin_Furan		X			A study of the possibility of reduction of emissions of dioxins and furans during the incineration of solid municipal wastes in Monaco has been done in 2002. The results of this study show that this reduction is possible by installing in the incineration plant new purification systems in addition to those which already exist. These purification systems will be installed before 2005, in order that the incineration plant in Monaco be in conformity with the requirements of the "Directive européenne 2000/76/CE du 4 décembre 2000" which are applicable on 28 December 2005 to existing incineration plants.
Endrin			X		At the present time, there is no national regulation concerning endrin in Monaco. However, since France and Monaco form a customs union, European and French regulations concerning sale and use of endrin are in fact applied in Monaco.
Heptachlor			X		At the present time, there is no national regulation concerning heptachlor in Monaco. However, since France and Monaco form a customs union, European and French regulations concerning sale and use of heptachlor are in fact applied in Monaco.
Hexachlorobenzene			X		At the present time, there is no national regulation concerning hexachlorobenzene in Monaco. However, since France and Monaco form a customs union, European and French regulations concerning sale and use of hexachlorobenzene are in fact applied in Monaco.

	Banned	Restricted	Allowed	Year	Comments
<b>Monaco</b>					
Mirex			X		At the present time, there is no national regulation concerning mirex in Monaco.
PCB	X			1988	Production and use of PCBs and PCTs in Monaco are forbidden by the "Ordonnance Souveraine n° 9287 du 23 novembre 1988". This Ordinance does not apply to apparatus containing these substances which were operated before 23 November 1988. Elimination of PCBs and PCTs is regulated by the "Arrêté Ministériel n° 88-638 du 28 novembre 1988". Wastes contaminated by PCBs or PCTs should be eliminated according to an environmentally sound manner. Therefore, they are sent to a centre in France which is specially authorized for the destruction of these POPs.
Toxaphene			X		At the present time, there is no national regulation concerning toxaphene in Monaco. However, since France and Monaco form a customs union, European and French regulations concerning sale and use of toxaphene are in fact applied in Monaco.
<b>Mongolia</b>					
Aldrin	X			1997	
Chlordane	X			1997	
DDT	X			1997	
Dieldrin	X			1997	
Endrin	X			1997	
Heptachlor	X			1997	
Toxaphene	X			1997	

	Banned	Restricted	Allowed	Year	Comments
<b>Morocco</b>					
<b>Aldrin</b>	X			1984	Interdit depuis 1984  Arrêté no 466-84 du 19 mars 1984 portant réglementation des pesticides organo-chlorés
<b>Chlordane</b>	X			1984	Interdit depuis 1984  Arrêté no 466-84 du 19 mars 1984 portant réglementation des pesticides organo-chlorés
<b>DDT</b>		X		1984	Interdit depuis 1984 pour usage en agriculture et autorise uniquement dans l'hygiene publique.  Arrêté no 466-84 du 19 mars 1984 portant réglementation des pesticides organo-chlorés
<b>Dieldrin</b>	X			1984	Interdit depuis 1984  Arrêté no 466-84 du 19 mars 1984 portant réglementation des pesticides organo-chlorés
<b>Endrin</b>	X			1984	Interdit depuis 1984  Arrêté no 466-84 du 19 mars 1984 portant réglementation des pesticides organo-chlorés
<b>Heptachlor</b>	X			1984	Interdit depuis 1984  Arrêté no 466-84 du 19 mars 1984 portant réglementation des pesticides organo-chlorés
<b>Hexachlorobenzene</b>	X			1984	Interdit depuis 1984  Arrêté no 466-84 du 19 mars 1984 portant réglementation des pesticides organo-chlorés
<b>Mirex</b>	X			1900	N'est pas enregistré comme pesticide
<b>PCB</b>		X			Les PCB sont utilisés dans les appareils en circulation. Des action ont déjà été entamées par certaines sociétés pour l'élimination des transformateurs à PCB dans des sociétés agréés en Europe

	Banned	Restricted	Allowed	Year	Comments
<b>Morocco</b>					
Toxaphene	X			1984	Interdit depuis 1984  Arrêté no 466-84 du 19 mars 1984 portant réglementation des pesticides organo-chlorés
<b>Myanmar</b>					
Aldrin	X			1996	Not further use and no registration in Myanmar after 1996.  Banned in 1996, 5th Pesticide Registration Board Meeting.
Chlordane	X			1996	Not used and no registration in Myanmar after 1996.  Banned in 1996, 5th Pesticide Registration Board Meeting.
DDT		X			Only use in malaria control in Myanmar.  Restricted to malaria control only in 1994.
Dieldrin	X			1996	Not used and no registration in Myanmar after 1996.  Banned in 1996, 5th Pesticide Registration Board Meeting.
Dioxin_Furan			X		Inconclusive data, not possible to determine status.
Endrin	X			1996	Not used and no registration in Myanmar after 1996.  Banned in 1996, 5th Pesticide Registration Board Meeting.
Heptachlor	X				Not used, no registration in Myanmar.  Not used no registration.
Hexachlorobenzene	X				Not used and no registration
Mirex	X				Not used, no registration in Myanmar.



	Banned	Restricted	Allowed	Year	Comments
<b>Myanmar</b>					
PCB			X		Inconclusive data, not possible to determine status.
Toxaphene	X			1996	Not used and no registration in Myanmar after 1996.  Banned in 1996, 5th Pesticide Registration Board Meeting.
<b>Nepal</b>					
Aldrin		X			Banned to produce or to import under the Pesticide Act and Rules, 1994. Restricted to use under Pesticide Act 1991 & Pesticides Rule 1993.
Chlordane		X			Banned to produce or to import under the Pesticide Act and Rules, 1994. Restricted to use under Pesticide Act 1991 & Pesticides Rule 1993.
DDT		X			Banned to produce or to import under the Pesticide Act and Rules, 1994. Restricted to use under Pesticide Act 1991 & Pesticides Rule 1993.
Dieldrin		X			Banned to produce or to import under the Pesticide Act and Rules, 1994. Restricted to use under Pesticide Act 1991 & Pesticides Rule 1993.
Endrin		X			
Heptachlor		X			Banned to produce or to import under the Pesticide Act and Rules, 1994. Restricted to use under Pesticide Act 1991 & Pesticides Rule 1993.
Hexachlorobenzene		X			Banned to produce or to import under the Pesticide Act and Rules, 1994. Restricted to use under Pesticide Act 1991 & Pesticides Rule 1993.
Mirex		X			Banned to produce or to import under the Pesticide Act and Rules, 1994. Restricted to use under Pesticide Act 1991 & Pesticides Rule 1993.

	Banned	Restricted	Allowed	Year	Comments
<b>Nepal</b>					
Toxaphene		X			Banned to produce or to import under the Pesticide Act and Rules, 1994. Restricted to use under Pesticide Act 1991 & Pesticides Rule 1993.
<b>Netherlands</b>					
Aldrin		X		1990	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79) as amended by Directives 83/131/EEC of 14/3/83 (O.J.L.91/35 of 9/4/83), 85/298/EEC of 22/5/85 (O.J.L.154/48 of 13/6/85), 87/477/EEC of 9/9/87 (O.J.L.273/40 of 26/9/87) and 90/335/EEC of 7/6/90 (O.J.L.162/37 of 28/6/90)
Chlordane		X		1979	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79)
DDT		X		1985	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79) as amended by Directives 83/131/EEC of 14/3/83 (O.J.L.91/35 of 9/4/83), 85/298/EEC of 22/5/85 (O.J.L.154/48 of 13/6/85),
Dieldrin		X		1979	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79)
Endrin		X		1990	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79) as amended by Directives 85/298/EEC of 22/5/85 (O.J.L.154/48 of 13/6/85), and 90/335/EEC of 7/6/90 (O.J.L.162/37 of 28.6.90)
Heptachlor		X		1983	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79) as amended by Directives 83/131/EEC of 14/3/83 (O.J.L.91/35 of 9/4/83),
Hexachlorobenzene		X		1979	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79)
Toxaphene		X		1983	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79) as amended by Directives 83/131/EEC of 14/3/83 (O.J.L.91/35 of 9/4/83),
<b>New Zealand</b>					
Aldrin		X		1985	Last product containing aldrin was voluntarily withdrawn in 1985 (Pesticides Board Minutes, September 1985);

	Banned	Restricted	Allowed	Year	Comments
<b>New Zealand</b>					
Chlordane	X			1992	Registration of chlordane was declined 1992 (Pesticides Board Minutes, May 1992).
DDT	X			1988	Last products for dieldrin, DDT, and mirex were deregistered in 1988 (Pesticides Board Minutes, September 1988);
Dieldrin	X			1988	Last products for dieldrin, DDT, and mirex were deregistered in 1988 (Pesticides Board Minutes, September 1988);
Dioxin_Furan		X			Point source industrial emissions are regulated by decisions at the Regional Government level. National standards are under preparation
Endrin	X			1976	Last product containing endrin was voluntarily withdrawn in 1976 (Agricultural Chemicals Board Minutes, October 1976);
Heptachlor	X			1971	Last product containing heptachlor (for research purposes only) was voluntarily withdrawn in 1971 (Agricultural Chemicals Board Minutes, October 1972);
Hexachlorobenzene	X			1972	Last product containing HCB was deregistered in 1972 (Agricultural Chemicals Board Minutes, October 1972);
Mirex	X			1988	Last products for dieldrin, DDT, and mirex were deregistered in 1988 (Pesticides Board Minutes, September 1988);
PCB	X			1994	Under the Toxic Substances Regulations
Toxaphene	X			1979	Toxaphene - Never registered, imported or used in New Zealand. Registration is required under the Pesticides Act 1979 before any pesticide can be sold in New Zealand.

	Banned	Restricted	Allowed	Year	Comments
<b>Nicaragua</b>					
Aldrin		X			restricciones legales concretas para los aldrines existen desde 1993, además se respaldan con la recién aprobada Ley Básica de Plaguicidas y la Ley General del Medio Ambiente para la contaminación por sustancias tóxicas a la salud y al ambiente. Ley Básica de plaguicidas, Ley General del Medio Ambiente, Resolución Ministerial del Ministerio de Agricultura y ganadería y Plan de acción ambiental para Nicaragua: Plaguicidas, Ambiente y Desarrollo (VAUGHAN, 1993).
Dieldrin		X			restricciones legales concretas para los aldrines existen desde 1993, además se respaldan con la recién aprobada Ley Básica de Plaguicidas y la Ley General del Medio Ambiente para la contaminación por sustancias tóxicas a la salud y al ambiente. Ley Básica de plaguicidas, Ley General del Medio Ambiente, Resolución Ministerial del Ministerio de Agricultura y ganadería y Plan de acción ambiental para Nicaragua: Plaguicidas, Ambiente y Desarrollo (VAUGHAN, 1993).
Endrin		X			restricciones legales concretas para los aldrines existen desde 1993, además se respaldan con la recién aprobada Ley Básica de Plaguicidas y la Ley General del Medio Ambiente para la contaminación por sustancias tóxicas a la salud y al ambiente. Ley Básica de plaguicidas, Ley General del Medio Ambiente, Resolución Ministerial del Ministerio de Agricultura y ganadería y Plan de acción ambiental para Nicaragua: Plaguicidas, Ambiente y Desarrollo (VAUGHAN, 1993).
Mirex			X		Nicaragua, en 1993 restringió y prohibió el uso de 15 plaguicidas de uso agrícola, a través de una resolución Ministerial del Ministerio de Agricultura a Ganadería. La mayoría son productos de la familia de los organoclorados y otros, pero el Mirex no fue incluido en la restricción, asimismo se ha interrumpido su importación al país. Los 15 kg/ha que se reflejan corresponden al consumo nacional promedio anual respecto al área agrícola en 1987 y a la importación general de insecticidas agriquímicos.
<b>Niger</b>					
Aldrin			X		Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
Chlordane			X		Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.

	Banned	Restricted	Allowed	Year	Comments
<b>Niger</b>					
DDT		X			Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
Dieldrin	X			1999	Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
Dioxin_Furan		X			Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
Endrin		X			Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
Heptachlor		X			Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
Hexachlorobenzene		X			Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
Mirex		X			Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
PCB		X			Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
Toxaphene		X			Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.
<b>Norway</b>					
Aldrin	X			1969	
Chlordane	X			1968	
DDT	X			1989	
Dieldrin	X			1900	
Dioxin_Furan		X			Emissions and discharges from industry and combustion are regulated by permits given through a license procedure
Endrin	X			1966	

	Banned	Restricted	Allowed	Year	Comments
<b>Norway</b>					
Heptachlor		X		1900	
Hexachlorobenzene		X			Banned as pesticide. (for HCB as a by-product) Emissions from industrial processes restricted by emission limits set in permits
Mirex		X		1900	
PCB		X		1980	New use banned in 1980
PCB		X			In 1980 new uses of PCB was banned. In 1995 the use of capacitors filled with more than 1kg of PCB or with material containing PCB and the use transformers containing PCB was prohibited. Regulation on PCB of 17.04.2000: From 1.1.2005 the use of PCB-containing capacitors in fluorescent light fixtures is prohibited. From 1.1.2010 the use of electricity lead-insulating bushing containing PCB is prohibited.
Toxaphene		X		1900	
<b>Panama</b>					
Aldrin		X		1997	Desde el 18 de septiembre de 1997, oficialmente para los COPs plaguicidas o pesticidas d uso en la agricultura. Resuelto ALP n°074 ADM de 18 de septiembre de 1997 publicada en la Gaceta Oficial 23,388 de 30 de sptiembre de 1997 (prohibe los plaguicidaas COPs y otros en la agricultura). Ley N°36 de 17 de Mayo de 1996, por la cual se establecen los controles para evitar la contaminación ocasionada por combustibles y plomo publicada en la Gaceta Oficial N°23,040 de 21 de Mayo de 1996, que le confiere al Instituto Especializado de Análisis el monitoreo en agua, suelo y aire de hidrocarburos clorinados y otros contaminantes. análisis de residuos.

	Banned	Restricted	Allowed	Year	Comments
<b>Panama</b>					
Chlordane		X		1997	Desde el 18 de septiembre de 1997, oficialmente para los COPs plaguicidas o pesticidas d uso en la agricultura. Resuelto ALP n°074 ADM de 18 de septiembre de 1997 publicada en la Gaceta Oficial 23,388 de 30 de sptiembre de 1997 (prohibe los plaguicidaas COPs y otros en la agricultura). Ley N°36 de 17 de Mayo de 1996, por la cual se establecen los controles para evitar la contaminación ocasionada por combustibles y plomo publicada en la Gaceta Oficial N°23,040 de 21 de Mayo de 1996, que le confiere al Instituto Especializado de Análisis el monitoreo en agua, suelo y aire de hidocarburos clorinados y otros contaminantes.
DDT		X		1997	Desde el 18 de septiembre de 1997, oficialmente para los COPs plaguicidas o pesticidas d uso en la agricultura. Resuelto ALP n°074 ADM de 18 de septiembre de 1997 publicada en la Gaceta Oficial 23,388 de 30 de sptiembre de 1997 (prohibe los plaguicidaas COPs y otros en la agricultura). Ley N°36 de 17 de Mayo de 1996, por la cual se establecen los controles para evitar la contaminación ocasionada por combustibles y plomo publicada en la Gaceta Oficial N°23,040 de 21 de Mayo de 1996, que le confiere al Instituto Especializado de Análisis el monitoreo en agua, suelo y aire de hidocarburos clorinados y otros contaminantes.
Dieldrin		X		1997	Desde el 18 de septiembre de 1997, oficialmente para los COPs plaguicidas o pesticidas d uso en la agricultura. Resuelto ALP n°074 ADM de 18 de septiembre de 1997 publicada en la Gaceta Oficial 23,388 de 30 de sptiembre de 1997 (prohibe los plaguicidaas COPs y otros en la agricultura). Ley N°36 de 17 de Mayo de 1996, por la cual se establecen los controles para evitar la contaminación ocasionada por combustibles y plomo publicada en la Gaceta Oficial N°23,040 de 21 de Mayo de 1996, que le confiere al Instituto Especializado de Análisis el monitoreo en agua, suelo y aire de hidocarburos clorinados y otros contaminantes.

	Banned	Restricted	Allowed	Year	Comments
<b>Panama</b>					
Endrin		X		1997	Desde el 18 de septiembre de 1997, oficialmente para los COPs plaguicidas o pesticidas d uso en la agricultura. Resuelto ALP n°074 ADM de 18 de septiembre de 1997 publicada en la Gaceta Oficial 23,388 de 30 de sptiembre de 1997 (prohibe los plaguicidaas COPs y otros en la agricultura). Ley N°36 de 17 de Mayo de 1996, por la cual se establecen los controles para evitar la contaminación ocasionada por combustibles y plomo publicada en la Gaceta Oficial N°23,040 de 21 de Mayo de 1996, que le confiere al Instituto Especializado de Análisis el monitoreo en agua, suelo y aire de hidocarburos clorinados y otros contaminantes.
Heptachlor		X		1997	Desde el 18 de septiembre de 1997, oficialmente para los COPs plaguicidas o pesticidas d uso en la agricultura. Resuelto ALP n°074 ADM de 18 de septiembre de 1997 publicada en la Gaceta Oficial 23,388 de 30 de sptiembre de 1997 (prohibe los plaguicidaas COPs y otros en la agricultura). Ley N°36 de 17 de Mayo de 1996, por la cual se establecen los controles para evitar la contaminación ocasionada por combustibles y plomo publicada en la Gaceta Oficial N°23,040 de 21 de Mayo de 1996, que le confiere al Instituto Especializado de Análisis el monitoreo en agua, suelo y aire de hidocarburos clorinados y otros contaminantes.
Hexachlorobenzene		X		1997	Desde el 18 de septiembre de 1997, oficialmente para los COPs plaguicidas o pesticidas d uso en la agricultura. Resuelto ALP n°074 ADM de 18 de septiembre de 1997 publicada en la Gaceta Oficial 23,388 de 30 de sptiembre de 1997 (prohibe los plaguicidaas COPs y otros en la agricultura). Ley N°36 de 17 de Mayo de 1996, por la cual se establecen los controles para evitar la contaminación ocasionada por combustibles y plomo publicada en la Gaceta Oficial N°23,040 de 21 de Mayo de 1996, que le confiere al Instituto Especializado de Análisis el monitoreo en agua, suelo y aire de hidocarburos clorinados y otros contaminantes.



	Banned	Restricted	Allowed	Year	Comments
<b>Panama</b>					
Mirex		X		1997	Desde el 18 de septiembre de 1997, oficialmente para los COPs plaguicidas o pesticidas d uso en la agricultura. Resuelto ALP n°074 ADM de 18 de septiembre de 1997 publicada en la Gaceta Oficial 23,388 de 30 de sptiembre de 1997 (prohibe los plaguicidaas COPs y otros en la agricultura). Ley N°36 de 17 de Mayo de 1996, por la cual se establecen los controles para evitar la contaminación ocasionada por combustibles y plomo publicada en la Gaceta Oficial N°23,040 de 21 de Mayo de 1996, que le confiere al Instituto Especializado de Análisis el monitoreo en agua, suelo y aire de hidocarburos clorinados y otros contaminantes.
PCB		X		1997	Desde el 18 de septiembre de 1997, oficialmente para los COPs plaguicidas o pesticidas d uso en la agricultura. Resuelto ALP n°074 ADM de 18 de septiembre de 1997 publicada en la Gaceta Oficial 23,388 de 30 de septiembre de 1997 (prohibe los plaguicidaas COPs y otros en la agricultura). Ley N°36 de 17 de Mayo de 1996, por la cual se establecen los controles para evitar la contaminación ocasionada por combustibles y plomo publicada en la Gaceta Oficial N°23,040 de 21 de Mayo de 1996, que le confiere al Instituto Especializado de Análisis el monitoreo en agua, suelo y aire de hidocarburos clorinados y otros contaminantes. Norma N°43-22 de 13 de marzo de 1990 del Antiguo IRHE (hoy ETESA)
Toxaphene		X		1997	
<b>Paraguay</b>					
Aldrin		X			Prohibido - Resolucion No. 447/93
Chlordane		X			Prohibido - Resolucion No. 447/93
DDT		X			Prohibido - Resolucion No. 447/93
Dieldrin		X			Prohibido - Resolucion No. 447/93
Dioxin_Furan			X		No existen acciones concretas al respecto

	Banned	Restricted	Allowed	Year	Comments
<b>Paraguay</b>					
Endrin	X				Prohibido - Resolucion No. 447/93
Heptachlor	X				Prohibido - Resolucion No. 447/93
Hexachlorobenzene	X				Tiene ciertas restricciones, no esta prohibido, se estan realizando las gestiones para so prohibicion
Mirex	X				Prohibido - Resolucion No. 447/93
PCB	X				En proceso para so restriccion y posterior prohibicion
Toxaphene	X				En proceso para so restriccion y posterior phohibicion
<b>Peru</b>					
Aldrin	X				Supreme Decree N° 037-91-AG publ.September 11, 1991
Chlordane	X				R.J. N° 036-99-AG-SENASA, publ.March 26, 1999
DDT	X				Supreme Decree N° 037-91-AG publ.September 11, 1991
Dieldrin	X				Supreme Decree N° 037-91-AG publ.September 11, 1991
Endrin	X				Supreme Decree N° 037-91-AG publ.September 11, 1991
Heptachlor	X				Supreme Decree N° 037-91-AG publ.September 11, 1991
Hexachlorobenzene	X				R.J. N° 036-99-AG-SENASA, publ.March 26, 1999
Mirex	X			1900	this pesticide is not registered in Peru

	Banned	Restricted	Allowed	Year	Comments
<b>Peru</b>					
PCB		X			DIGESA does not authorize the import of products that contains PCB's. We've authorized operation of incineration companies for incineration of hospital wastes and another hazard, we control gas emissions of these activities. o data available in Ministry of Agriculture The Ministry of Health is going to establish some PCBs regulations
Toxaphene	X				Supreme Decree N° 037-91-AG publ.September 11, 1991
<b>Philippines</b>					
Aldrin		X		1989	
Chlordane		X			Its use is limited to the pre-construction treatment of the white ants.
DDT		X			All uses cancelled in 1992 except for malaria control purposes by the Department of Health As per Dept. of Health Circular n°1, effective 1992. So far, the following are the known substitute for DDT: Vectron, Sulfac and Icon 10 for Malaria control
Dieldrin	X			1989	
Dioxin_Furan		X			Although it is not yet listed in the PCL, the EMB is currently setting up standards for these chemicals (end products). The probable banning of incinerator in the country will be tackled during the deliveration of the Clean Air Act.
Endrin	X			1989	
Heptachlor	X			1989	
Hexachlorobenzene		X			This chemical is listed in the Priority Chemical List (PCL) which would require any importers, users too submit a hazardous waste registration and further fill up Biennial Report Form for monitoring purposes.

	Banned	Restricted	Allowed	Year	Comments
<b>Philippines</b>					
Mirex		X			The provision is stated at DAO 98-58 on the policy of the government and requirements for its usage. Further, said chemical is included in the Philippines Priority Chemical List.
PCB		X			PCB is in the Priority Chemical List as per DAO 98-58 and is candidate for insurance of Chemical Control Order (CCO) which will be strictly regulated and ultimately banned its use and for strict requirements for disposal.
Toxaphene	X			1989	
<b>Poland</b>					
Aldrin		X			Since 1968/69 aldrin was eliminated from production and use (withdrawal from the register of substances permitted for using in forestry and agriculture). It has been placed on the list of biologically active substances that are particularly hazardous for human health, animals and the environment (1996), and on the list of hazardous chemical substances (1997). Since 1999 an admissible value of this substance in industrial sewage introduced to municipal sewage system is binding.
Chlordane	X				It has been eliminated from production and use since 1968/69 (withdrawal from the register of substances permitted for using). It has been placed on the list of biologically active substances that are particularly hazardous for human health, animals and the environment (1996), and on the list of hazardous chemical substances (1997).
DDT	X			1975	Since 1975-76 DDT has been eliminated from production and use (withdrawal from the register of substances permitted for using). It has been placed on the list of biologically active substances that are particularly hazardous for human health, animals and the environment (1996), and on the list of hazardous chemical substances (1997).

	Banned	Restricted	Allowed	Year	Comments
<b>Poland</b>					
<b>Dieldrin</b>		X			<p>Since 1972 dieldrin was eliminated from production and use (withdrawal from the register of substances permitted for using forestry and agriculture). It has been placed on the list of biologically active substances that are particularly hazardous for human health, animals and the environment (1996), and on the list of hazardous chemical substances (1997)</p> <p>Since 1999 an admissible value of this substance in industrial sewage introduced to municipal sewage system is binding.</p>
<b>Dioxin_Furan</b>			X		<p>Dioxins and furans are subject to emission fees for air pollution and emissions of them have to be inventoried. There are emission limits for dioxins and furans emitted from incineration of municipal waste, hazardous waste and waste fuel oils</p> <p>Some substances from this group were placed on the list of hazardous chemical substances (1996)</p>
<b>Endrin</b>		X			<p>Since 1999 an admissible value of this substance in industrial sewage introduced to municipal sewage system is binding.</p> <p>It has been eliminated from production and use. It has been placed on the list of biological active substances that are particularly hazardous for human health, animals and the environment (1996), and on the list of hazardous chemical substances (1997)</p>
<b>Heptachlor</b>		X			<p>It has been eliminated from production and use. It has been placed on the list of biologically active substances that are particularly hazardous for human health, animals and the environment (1996), and on the list of hazardous chemical substances (1997).</p>
<b>Hexachlorobenzene</b>		X			<p>It has been eliminated from production and use as a pesticide. It has been placed on the list of biologically active substances that are particularly hazardous for human health, animals and environment (1996), and on the list of hazardous chemical substances (1997)</p> <p>Since 1999 an admissible value of this substance in industrial sewage introduced to municipal sewage system is binding.</p> <p>For HCB as a by-product: aromatic hydrocarbons and their derivatives are included in the list of air pollutants that are subject to emission fees in Poland.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Poland</b>					
Mirex		X			It is not produced or used (and it has never been used in Poland). Soon, according to the latest regulatory amendment it will be introduced to the list of biologically active substances particularly hazardous for human health, animals and the environment.
PCB		X			<p>Since 2001 placing on the market and the reuse of PCB is banned (according to article 160 of the Law Act on Environmental Protection).</p> <p>PCBs are subject to emission fees for air pollution and emissions of them have to be inventoried. PCBs was placed on the list of hazardous chemical substances (1997).</p> <p>There is no production of PCBs in Poland and they are not used in electrotechnical devices produced in Poland, but there are some old electrotechnical devices using PCB. According to the law regulations they have to be eliminated from using by 30 June 2010.</p> <p>Since 1999 an admissible value of this substance in industrial sewage introduced to municipal sewage system is binding.</p>
Toxaphene		X			It has been eliminated from production and use. It has been placed on the list of hazardous chemical substances (1997)
<b>Portugal</b>					
Aldrin		X		1988	Banned as a plant protection product since 1988, by Decreto-Lei nº 347/88 of 30th September and Portaria nº 660/88 of 30th September.
Chlordane		X		1988	Banned as a plant protection product since 1988, by Decreto-Lei nº 347/88 of 30th September and Portaria nº 660/88 of 30th September.
DDT		X		1988	Banned as a plant protection product since 1988, by Decreto-Lei nº 347/88 of 30th September and Portaria nº 660/88 of 30th September.
Dieldrin		X		1988	Banned as a plant protection product since 1988, by Decreto-Lei nº 347/88 of 30th September and Portaria nº 660/88 of 30th September.

	Banned	Restricted	Allowed	Year	Comments
<b>Portugal</b>					
Dioxin_Furan					According to Decreto-Lei nº 273/98, of 2nd September, the general ELV established for Dioxin / Furan emissions for incineration of hazardous waste is 0.1 ng TEQ/m3
Endrin	X			1988	Banned as a plant protection product since 1988, by Decreto-Lei nº 347/88 of 30th September and Portaria nº 660/88 of 30th September.
Heptachlor	X			1988	Banned as a plant protection product since 1988, by Decreto-Lei nº 347/88 of 30th September and Portaria nº 660/88 of 30th September.
Hexachlorobenzene	X			1988	Banned as a plant protection product since 1988, by Decreto-Lei nº 347/88 of 30th September and Portaria nº 660/88 of 30th September.
Mirex	X				The substance has never been authorized for use as a pesticide
PCB		X			Restricted marketing and use since 1988, by Decreto-Lei nº 232/94 of 14th September and Decreto-Lei nº 277/99, of 23rd July (which withdrew the Decreto-Lei nº 221/88 of 28th June)
Toxaphene	X			1988	Banned as a plant protection product since 1988, by Decreto-Lei nº 347/88 of 30th September and Portaria nº 660/88 of 30th September.
<b>Romania</b>					
Aldrin	X			1972	Not produced. Not used. Forbidden since 1972  Governmental Decision No 118/2002 (OJ 132/20.02.2002) on the approval of the Action Program for the pollution reduction of the aquatic environment and ground waters, caused by the discharge of dangerous substances, transposes the Council Directive No 76/464/EEC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (and the Daughter Directives).
Chlordane	X			1972	Not produced. Not used. Forbidden since 1972

	Banned	Restricted	Allowed	Year	Comments
<b>Romania</b>					
DDT		X		1995	<p>Not produced anymore. Not used. Highly restricted since 1985. Banned according to Law 85/95.</p> <p>DDT was one of most popular pesticides in agriculture in the early 1980s in Romania. Although it was banned a long time ago, measurements taken from different environmental matrices still attests its persistence. Though it is known that there are stockpiles of DDT, unfortunately, no accurate inventory has been made to document it, because the labels are either missing or unreadable on the drums.</p> <p>According to a report on the stocks of unidentified obsolete banned phytosanitary products, elaborated by the Ministry of Agriculture, Alimentation and Forests, the following stocks were identified at the national level:            -banned products: 512 tonnes            -unidentified products: 86 tonnes            -obsolete products: 568 tonnes</p>
Dieldrin		X			<p>Not produced. Not used. Forbidden since 1972</p> <p>Governmental Decision No 118/2002 (OJ 132/20.02.2002) on the approval of the Action Program for the pollution reduction of the aquatic environment and ground waters, caused by the discharge of dangerous substances, transposes the Council Directive No 76/464/EEC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (and the Daughter Directives).</p>



	Banned	Restricted	Allowed	Year	Comments
<b>Romania</b>					
Dioxin_Furan		X			<p>Dioxins and Furans have never been produced intentionally. They are formed as by-products of numerous industrial activities and combustion processes.</p> <p>GD no. 128/2002 includes clear provisions on including of the incineration and co-incineration installations in the existing installations and a timetable regarding the limit values of the pollutant emissions in air and in water. The Romanian legal act set the deadlines for complying with the limit values for certain pollutants (NOx, SOx, heavy metals, particulates, dioxins, furans) and will contain provisions regarding the permitting procedure for waste installations, as well as control procedures for the receiving of waste.</p> <p>Governmental Decision no. 128/2002 regarding incineration of waste ( Council Directive No 2000/76/EC on the incineration of waste)</p>
Endrin		X		1972	<p>Not produced. Not used. Forbidden since 1972</p> <p>Governmental Decision No 118/2002 (OJ 132/20.02.2002) on the approval of the Action Program for the pollution reduction of the aquatic environment and ground waters, caused by the discharge of dangerous substances, transposes the Council Directive No 76/464/EEC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (and the Daughter Directives).</p>
Heptachlor		X		1972	<p>Not produced. Not used. Forbidden since 1972</p>
Hexachlorobenzene		X			<p>Produced in very small quantities. Forbidden in use, production and commercial purposes</p> <p>Governmental Decision No 118/2002 (OJ 132/20.02.2002) on the approval of the Action Program for the pollution reduction of the aquatic environment and ground waters, caused by the discharge of dangerous substances, transposes the Council Directive No 76/464/EEC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (and the Daughter Directives).</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Romania</b>					
Mirex		X			Never registered. Never allowed to be used. Not produced

**Banned Restricted Allowed Year Comments**

**Romania**

PCB

X

1986

PCBs are not produced since 1986. PCB-formulations are being used only in closed systems and are gradually being replaced. At present, waste landfills are considered to be the most relevant sources of PCB-pollution.

According to the provisions of Governmental Decision No.173/2000 the following actions have to be taken:  
 -by 31 March 2002 a Secretariat for PCB administration has to be constituted within the newly created Waste and Hazardous Chemical Substances Directorate within the Ministry of Waters and Environmental Protection;  
 -by 31 September 2002 a national inventory of equipment and materials containing PCBs has to be compiled by the above Secretariat;  
 -by 31 December 2002 plans for the elimination of equipment and materials containing the above mentioned substances have to be prepared by economic agents;  
 -by 2002 reception emplacements have to be established for the long term storage or the elimination of PCBs; and,  
 - following the approval of emplacements, a programme for the transfer of PCBs to the emplacements prepared for storage has to be worked out by the secretariat for PCB administration together with the territorial authorities for environmental protection.

As a next step all PCBs used in equipment will be changed to environmentally friendly alternatives

Governmental Decision on management and control of PCBs no. 173/2000

-the deadline for using the equipment which contain PCBs in concentration between 50-500 ppm and volum higher than 5 dm<sup>3</sup> is 31 December 2010  
 -the deadline for using the equipment which contain PCBs in concentration higher than 500 ppm and volum higher than 5 dm<sup>3</sup> is 15 September 2006.

Governmental Decision No 118/2002 (OJ 132/20.02.2002) on the approval of the Action Program for the pollution reduction of the aquatic environment and ground waters, caused by the discharge of dangerous substances, transposes the Council Directive No 76/464/EEC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (and the Daughter Directives).

PCBs are not produced since 1986. PCB-formulations are being used only in closed systems and are

Banned	Restricted	Allowed	Year	Comments
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 ? by 31 December 2002 plans for the elimination of equipment and materials containing the above mentioned substances have to be prepared by economic agents;  
 ? by 2002 reception emplacements have to be established for the long term storage or the elimination of PCBs; and,  
 ? following the approval of emplacements, a programme for the transfer of PCBs to the emplacements prepared for storage has to be worked out by the secretariat for PCB administration together with the territorial authorities for environmental protection.

As a next step all PCBs used in equipment will be changed to environmentally friendly alternatives.

Total Emission of PCBs:

1998

194,814 [Kg/year]

1999

178,918 [Kg/year]

- the deadline for using the equipment which contain PCBs in concentration between 50-500 ppm and volum higher than 5 dm<sup>3</sup> is 31 December 2010

- the deadline for using the equipment which contain PCBs in concentration higher than 500 ppm and volum higher than 5 dm<sup>3</sup> is 15 September 2006.

**Toxaphene**

X

1972 Not produced. Not used. Forbidden since 1972

	Banned	Restricted	Allowed	Year	Comments
<b>Rwanda</b>					
<b>Aldrin</b>			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.
<b>Chlordane</b>			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.
<b>DDT</b>			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.
<b>Dieldrin</b>			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.
<b>Endrin</b>			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.

	Banned	Restricted	Allowed	Year	Comments
<b>Rwanda</b>					
Heptachlor			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.
Hexachlorobenzene			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.
Mirex			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.
PCB			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.
Toxaphene			X		No action for the moment, but a National Environmental Strategy is in the process of completion. The control and use of such POPs will be interrupted. People (stakeholders) will be sensitized against the use of the POPs, and the importation agencies, customs, importers, dealers in this POP will be controlled by laws and regulations in place. Alternative chemicals/ methods will be adopted against the use of this POP.
<b>Saudi Arabia</b>					
Aldrin		X		1982	

	Banned	Restricted	Allowed	Year	Comments
<b>Saudi Arabia</b>					
Chlordane	X			1982	
DDT	X			1982	
Dieldrin	X			1982	
Dioxin_Furan		X			Any product that is contaminated with any level of dioxins & furans is banned from registration.
Endrin	X			1982	
Heptachlor	X			1982	
Hexachlorobenzene	X			1982	
Mirex	X			1982	
PCB	X			1982	
Toxaphene	X			1982	
<b>Singapore</b>					
Aldrin	X			1985	Banned from use in 1985.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations
Chlordane	X			1999	Banned from use in 1999.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations

	Banned	Restricted	Allowed	Year	Comments
<b>Singapore</b>					
DDT	X			1985	Banned from use in 1985.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations
Dieldrin	X			1985	Banned from use in 1985.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations
Dioxin_Furan		X			We have already taken measures to limit furans and dioxins from our incineration plants. NEA had recently introduced air emission standards under the Environmental Pollution Control (Air Impurities) Regulations 2001 to limit dioxins and furans releases.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations
Endrin	X			1985	Severely restricted in 1985; Banned from use in 1995.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations
Heptachlor	X			1985	Banned from use in 1985.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations
Hexachlorobenzene		X			Restricted in 1985, for use only in laboratories for research purposes.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations



	Banned	Restricted	Allowed	Year	Comments
<b>Singapore</b>					
Mirex	X			1985	Banned from use in 1985.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations
PCB	X			1980	Transformers containing PCBs have been banned from use since 1980.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations
Toxaphene	X			1985	Banned from use in 1985.  Current relevant legislations : (a) Environmental Pollution Control Act (b) Environmental Pollution Control (Hazardous Substances) Regulations
<b>Slovakia</b>					
Aldrin	X			1999	Ban of import for agricultural use. Regulation N°33/1999.
Chlordane	X			1999	Ban of import for agricultural use. Regulation N°33/1999.
DDT	X			1999	Ban of import for agricultural use. Regulation N°33/1999.
Dieldrin	X			1999	Ban of import for agricultural use. Regulation N°33/1999.
Endrin	X			1999	Ban of import for agricultural use. Regulation N°33/1999.
Heptachlor	X			1999	Ban of import for agricultural use. Regulation N°33/1999.
Hexachlorobenzene	X			1999	Ban of import for agricultural use. Regulation N°33/1999.
Mirex	X			1999	Ban of import for agricultural use. Regulation N°33/1999.

	Banned	Restricted	Allowed	Year	Comments
<b>Slovakia</b>					
PCB		X			Regulation for drinking water (STN757111); regulation on occupational air (AHEM13/87); regulation for irrigation water (CSN757143); guidance document for ambient air (UPKM1988), soil (MP SR 26, 1/1994), meat, milk and products (MZ SR 44, 9-13/1996)
Toxaphene		X		1999	Ban of import for agricultural use. Regulation N°33/1999.
<b>Slovenia</b>					
Aldrin		X			The use or marketing is restricted or banned since 1982 till 1999. In the year 1999 a new Act on Chemicals has come into force. This act doesn't contain any restrictions for hazardous chemicals. Aldrin is banned also from May 1996 as an active substance in plant protection products. There is also an Act on the Ratification of the Rotterdam Convention on the PIC Procedure for certain hazardous chemicals and pesticides in international trade and aldrin is included in Annex III, where are hazardous chemicals, which are subject to the prior informed consent procedure. Official Journal of the Republic of Slovenia No. 26/99, 36/99, 50/2001 and 105/2001
Chlordane		X			The use or marketing is restricted or banned since 1982 till 1999. In the year 1999 a new Act on Chemicals has come into force. This act doesn't contain any restrictions for hazardous chemicals. Chlordane is banned also from May 1996 as an active substance in plant protection products. There is also an Act on the Ratification of the Rotterdam Convention on the PIC Procedure for certain hazardous chemicals and pesticides in international trade and chlordane is included in Annex III, where are hazardous chemicals, which are subject to the prior informed consent procedure. Official Journal of the Republic of Slovenia No. 26/99, 36/99, 50/2001 and 105/2001

	Banned	Restricted	Allowed	Year	Comments
<b>Slovenia</b>					
DDT		X			The use or marketing is restricted or banned since 1996 as an active substance in plant protection products. In the year 1999 a new Act on Chemicals has come into force. This act doesn't contain any restrictions for hazardous chemicals. There is also an Act on the Ratification of the Rotterdam Convention on the PIC Procedure for certain hazardous chemicals and pesticides in international trade and DDT is included in Annex III, where are hazardous chemicals, which are subject to the prior informed consent procedure. Official Journal of the Republic of Slovenia No. 26/99, 36/99, 50/2001 and 105/2001
DDT		X			The use or marketing is restricted or banned since May 1996 as an active substance in plant protection products. In the year 1999 a new Act on Chemicals has come into force. This act doesn't contain any restrictions for hazardous chemicals. O.J. RS No. 36/1999 and 105/2001
Dieldrin		X			The use or marketing is restricted or banned since 1982 till 1999. In the year 1999 a new Act on Chemicals has come into force. This act doesn't contain any restrictions for hazardous chemicals. Dieldrin is banned also from May 1996 as an active substance in plant protection products. There is also an Act on the Ratification of the Rotterdam Convention on the PIC Procedure for certain hazardous chemicals and pesticides in international trade and dieldrin is included in Annex III, where are hazardous chemicals, which are subject to the prior informed consent procedure. Official Journal of the Republic of Slovenia No. 26/99, 36/99, 50/2001 and 105/2001

	Banned	Restricted	Allowed	Year	Comments
<b>Slovenia</b>					
Dioxin_Furan		X			<p>Very specific emission of PCDD/F into the air from coincineration of car tyres and petrol coke in cement kiln are regulatory controlled. Environmental Protection Institute in Maribor makes some analysis of PCDD/F in food.</p> <p>We have considered some critical points where this substances could appear and we check them at least few times a year. There are couple of incinerators for specific hazardous waste</p> <p>In 1999 a new laboratory has been built and new instrument has been bought for the analyses of dioxins/furans and PCB in traces (High resolution mass spectrometer Finnigan MAT 95 XL). We are now able to analyse the traces of dioxins and other POPs in background level in different food or environmental samples.</p>
Heptachlor		X			<p>The use or marketing is restricted or banned since 1982 till 1999. In the year 1999 a new Act on Chemicals has come into force. This act doesn't contain any restrictions for hazardous chemicals. Heptachlor is banned also from May 1996 as an active substance in plant protection products. There is also an Act on the Ratification of the Rotterdam Convention on the PIC Procedure for certain hazardous chemicals and pesticides in international trade and heptachlor is included in Annex III, where are hazardous chemicals, which are subject to the prior informed consent procedure.</p> <p>Official Journal of the Republic of Slovenia No. 26/99, 36/99, 50/2001 and 105/2001</p>
Hexachlorobenzene		X			<p>The use or marketing is restricted or banned since 1982 till 1999. In the year 1999 a new Act on Chemicals has come into force. This act doesn't contain any restrictions for hazardous chemicals.</p> <p>Hexachlorobenzene is banned also from May 1996 as an active substance in plant protection products. There is also an Act on the Ratification of the Rotterdam Convention on the PIC Procedure for certain hazardous chemicals and pesticides in international trade and hexachlorobenzene is included in Annex III, where are hazardous chemicals, which are subject to the prior informed consent procedure.</p> <p>Official Journal of the Republic of Slovenia No. 26/99, 36/99, 50/2001 and 105/2001</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Slovenia</b>					
Mirex		X			In the year 1999 a new Act on Chemicals has come into force. This act doesn't contain any restrictions for hazardous chemicals. Mirex is not included between restricted hazardous chemicals, but it is not allowed (there are no registration) on the market in the Republic of Slovenia. Official Journal No. 36/99.
PCB			X		The use is severely restricted. Preparations, including waste oils, with PCBs content higher than 0,005 % may not be used. By way of exception the placing on the market is possible on the basis of special permit of Minister of Health, in case of supplementing the level of liquids containing PCBs in existing transformers, if there is also a special permit of Minister of Environment, according to regulations on PCBs disposal Act on Chemicals O.J. No. 36/99, Rules on prohibition on placing on the market and use of certain dangerous substances and preparation O.J. RS, No. 73/99, Decree on safety precautions for working with substances, which contains polychlorinated biphenyls, polychlorinated naphthalens and polychlorinated terphenyls, O.J. RS, No. 13/85, Decree on disposal of contains polychlorinated biphenyls and polychlorinated terphenyls, O.J. RS, No. 15/00.
Toxaphene		X			The use or marketing is restricted or banned since May 1996 as an active substance in plant protection products. In the year 1999 a new Act on Chemicals has come into force. This act doesn't contain any restrictions for hazardous chemicals. There is also an Act on the Ratification of the Rotterdam Convention on the PIC Procedure for certain hazardous chemicals and pesticides in international trade and toxaphene is included in the voluntary prior informed consent procedure. Official Journal of the Republic of Slovenia No. 26,99, 36/99, 50/2001 and 105/2001
<b>South Africa</b>					
Aldrin		X		1992	1983: protection of buildings against termites Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa

	Banned	Restricted	Allowed	Year	Comments
<b>South Africa</b>					
Chlordane		X			Registration terminated in April 2000. Remaining stock will be used under permit Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa
DDT		X		1983	1983 except for malaria vector control by government Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa
Dieldrin		X		1983	Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa
Dioxin_Furan			X		By-products of industrial processes Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa
Endrin			X		Never registered for use in South Africa Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa

	Banned	Restricted	Allowed	Year	Comments
<b>South Africa</b>					
Heptachlor		X		1976	Not registered in South Africa Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa
Hexachlorobenzene			X		Never registered as a pesticide By-product of industrial process Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa
Mirex			X		Never registered in South Africa Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa
PCB			X		1-Still being used in some products 2-Voluntary phasing out programmes Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa

	Banned	Restricted	Allowed	Year	Comments
<b>South Africa</b>					
Toxaphene		X			Registration terminated in 1983 Data Source: 1-Department of Environmental Affairs and Tourism 2-Department of Trade and Industry 3-National department of Agriculture 4-Department of Health 5-Chemical Applied Industries Association 6-AVCASA (Agriculture Veterinary Chemical Association of South Africa)
<b>South Korea</b>					
Aldrin		X		1999	-Banned for agricultural use by Agricultural Chemical Management Act (1969). -Banned for all industrial use by Toxic Chemicals Control Act (Public Notice was made by the Ministry of Environment on Sept. 8, 1999 and will take effect from March 8, 2000).
Chlordane		X		1999	Banned for agricultural use by Agricultural Chemical Management Act (1970). -Banned for all industrial use by Toxic Chemicals Control Act (Public Notice was made by the Ministry of Environment on Sept. 8, 1999 and will take effect from March 8, 2000).
DDT		X		1991	Banned for agricultural use by Agricultural Chemical Management Act (1969). -Banned for all industrial use by Toxic Chemicals Control Act (1991).
Dieldrin		X		1999	
Dioxin_Furan			X		Municipal incinerators that have been in operation before July 20, 1997 and that have incinerating capacity equal to 50 tonnes of wastes per day or more are required to keep the release of Dioxins and Furans below 0.5 ng-TEQ/Nm3 until June 30, 2003 and 0.1 ng-TEQ/Nm3 from July 1, 2003. -New municipal incinerators that were under construction or in operation after July 19, 1997 and that have incinerating capacity equal to 50 tonnes of wastes per day or more are required to keep the release of Dioxins and Furans below 0.1 ng-TEQ/Nm3 from July 20, 1997. -All incinerators with incinerating capacity equal to 2 tonnes of wastes per hour or more are required to monitor the release of Dioxins and Furans twice a year: effective from August 9, 1999



	Banned	Restricted	Allowed	Year	Comments
<b>South Korea</b>					
Endrin		X		1999	Banned for agricultural use by Agricultural Chemical Management Act (1970) . -Banned for all industrial use by Toxic Chemicals Control Act (Public Notice was made by the Ministry of Environment on Sept. 8, 1999 and will take effect from March 8, 2000).
Heptachlor		X		1999	Banned for agricultural use by Agricultural Chemical Management Act (1970). -Banned for all industrial use by Toxic Chemicals Control Act (Public Notice was made by the Ministry of Environment on Sept. 8, 1999 and will take effect from March 8, 2000).
PCB		X		1998	Banned for agricultural use by Agricultural Chemical Management Act (1969). -Banned for all industrial use by Toxic Chemicals Control Act (June 1, 1996). However, use of PCB-containing electrical transformers installed before August 30 1979 remains allowed. - Subject to the release and exposure monitoring by Water Environment Conservation Act and Soil Environment Conservation Act, and wastes containing 50 ppm or more of PCBs are subject to the Waste Management Act (please also refer to the POPs Profile Information Reporting Forms submitted on Dec. 16, 1998 and Dec. 24, 1997)
Toxaphene		X		1991	Banned for agricultural use by Agricultural Chemical Management Act (1969). -Banned for all industrial use by Toxic Chemicals Control Act (1991).
<b>Sri Lanka</b>					
Aldrin		X			Use on crops or treatment of agricultural lands prohibited since 01.08.1986.  Banned 01/01/94  Remaining uses of ant and termite treatments in coconut and tobacco nurseries were prohibited since 1994. No remaining uses allowed.
Chlordane		X		1996	All agricultural uses prohibited since 1985. Remaining uses of pre and post construction treatments and timber treatments for control of termites were allowed under limited quantities prior to 1996. No remaining uses allowed.

	Banned	Restricted	Allowed	Year	Comments
<b>Sri Lanka</b>					
DDT	X			1976	All agricultural uses prohibited prior to 1970. Remaining uses for malaria vector control were phased-out in 1976. No remaining uses allowed.
Dieldrin	X			1994	All agricultural uses prohibited prior to 1980. Remaining uses of non agricultural treatments for control of termites or application for timber treatment were prohibited since 1994. No remaining uses allowed.
Dioxin_Furan			X		Presently, there is no data on these chemicals, which are by-products of incineration as there is no equipment for measuring these chemicals
Endrin	X			1970	Banned for use as a pesticide. No remaining uses allowed.
Heptachlor	X			1988	Restricted for subsurface application for termites, banana and cardamom rhizome borer and other soil pests prior to 1986. All uses prohibited since 1988.
Hexachlorobenzene	X			1985	All uses prohibited.
Mirex			X		This product has not been submitted for registration, to-date.
PCB		X			Sri Lanka does not use PCBs in transformers and capacitors.
Toxaphene			X		This product has not been submitted for registration, to-date.
<b>St. Kitts and Nevis</b>					
Aldrin	X				Not licensed for importation
Chlordane	X				Not licensed for importation
DDT	X				Not licensed for importation

	Banned	Restricted	Allowed	Year	Comments
<b>St. Kitts and Nevis</b>					
Dieldrin	X				Not licensed for importation
Endrin	X				Not licensed for importation
Heptachlor	X				Not licensed for importation
Hexachlorobenzene	X				Not licensed for importation
Mirex	X				Not licensed for importation
PCB			X		Not licensed for importation
Toxaphene	X				Not licensed for importation
<b>Sudan</b>					
Aldrin	X			1982	
Chlordane	X			1982	
DDT	X			1982	
Dieldrin	X			1982	
Dioxin_Furan		X			Only legislative measures were implemented to avoid importation of food and feedstuffs from countries suspected to have dioxins and furans problems
Endrin	X			1982	
Heptachlor	X			1982	

	Banned	Restricted	Allowed	Year	Comments
<b>Sudan</b>					
Hexachlorobenzene		X			No control measure applied. Restricted use in seed treatment and Locusts poisoned baits
Mirex	X			1900	
PCB	X			1900	
Toxaphene	X			1982	
<b>Sweden</b>					
Aldrin	X			1970	
Chlordane	X			1971	
DDT	X			1975	
Dieldrin	X			1970	
Dioxin_Furan		X			<p>Operating permits for waste incineration plants include emission limits. A step-wise reduction since mid 1980s. The emission to air from waste incineration plants is estimated to have been reduced from 50-100g TEQ per year to around 1g TEQ. Other industries have also been able to substantially reduce their emissions of dioxins to air and water.</p> <p>The National Food Administration has issued dietary recommendations on fish consumption based on the dioxin and PCB content in fish from certain areas.</p>
Endrin	X			1966	

	Banned	Restricted	Allowed	Year	Comments
<b>Sweden</b>					
Heptachlor	X			1964	No indications of use found since 1964, when new legislation was introduced according to which pesticides became subject to approval and registration before being placed on the market. Thus, it seems like heptachlor has never been approved for use in Sweden. (However, there are indications of earlier use since the substance was included on list of pesticides from 1960.)
Hexachlorobenzene	X			1980	Withdrawn from the market by the producer in 1980, thus not allowed since then.
Mirex	X			1900	Mirex has never been approved for use in Sweden. There are no indications that the substance has ever been used in Sweden.
PCB		X		1995	Practically all PCB in big transformers and capacitors has been destroyed. A programme for dismantling and destruction of remaining PCB in buildings (sealant, insulating windows, flooring material etc) is under way. The National Food Administration has issued dietary recommendations on fish consumption based on the dioxin and PCB content in fish from certain areas.
Toxaphene	X			1964	No indications of use found since 1964, when new legislation was introduced according to which pesticides became subject to approval and registration before being placed on the market. Thus, it seems like toxaphene has never been approved for use in Sweden. (However, there are indications of earlier use since the substance was included on list of pesticides from 1960.)
<b>Switzerland</b>					
Aldrin	X			1986	Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
Chlordane	X			1986	Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
DDT	X			1996	Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal

	Banned	Restricted	Allowed	Year	Comments
<b>Switzerland</b>					
Dieldrin	X			1986	
Endrin	X			1986	Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
Heptachlor	X			1986	Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
Hexachlorobenzene	X			1986	Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
Mirex	X				Not licensed as plant protection product and as biocide
PCB		X		1986	Manufacture supply, import and use of PBBs and preparations and articles containing PCBs are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal  PCBs containing capacitors exceeding a total weight of 1 kg and PCBcontaining transformers had to be taken out of operation and disposed of by 31 August 1998
Toxaphene	X			1986	Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
<b>Syria</b>					
Aldrin	X			1990	
Chlordane	X			1990	
DDT	X			1990	
Dieldrin	X			1990	

	Banned	Restricted	Allowed	Year	Comments
<b>Syria</b>					
Endrin	X			1990	
Heptachlor	X			1990	
Hexachlorobenzene	X			1990	
Mirex	X			1900	This pesticide is not used in Syria
Toxaphene	X			1900	This pesticide is not used in Syria
<b>Thailand</b>					
Aldrin	X			1988	
Chlordane	X				Banned May 1995 (public health use)
DDT	X			1983	
Dieldrin	X			1988	
Dioxin_Furan		X			Emission standard from municipal waste combustors must have dioxin as total chlorinated PCDD plus PCDF less than 30 ng/Nm3
Endrin	X			1981	
Heptachlor	X			1988	
Hexachlorobenzene			X		
Mirex	X			1995	
PCB		X			Importation is prohibited. Only exportation for waste disposal and management is permitted

	Banned	Restricted	Allowed	Year	Comments
<b>Thailand</b>					
Toxaphene	X			1983	
<b>Togo</b>					
Aldrin	X				
Chlordane	X				
DDT	X				
Dieldrin	X				
Endrin	X				
Heptachlor			X		
Hexachlorobenzene	X				
Mirex			X		
PCB		X			The Togolese Power Company does not use PCBs anymore in transformers. But a single PCB using transformer does exist in the Phone Company Service
Toxaphene			X		
<b>Trinidad and Tobago</b>					
Aldrin	X				Aldrin is not registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of this chemical into the country is not allowed.
Chlordane	X				Chlordane is not registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of this chemical into the country is not allowed.



	Banned	Restricted	Allowed	Year	Comments
<b>Trinidad and Tobago</b>					
DDT	X				DDT is not registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board since and therefore importation of this chemical into the country is not allowed.
Dieldrin	X				Dieldrin is not registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of this chemical into the country is not allowed.
Dioxin_Furan		X			Dioxins and Furans are not registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of these chemicals into the country is not allowed.
Endrin	X				Endrin is not registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of this chemical into the country is not allowed.
Heptachlor	X				Hexachlorobenzene is not been registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of this chemical into the country is not allowed.
Hexachlorobenzene	X				Hexachlorobenzene is not been registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of this chemical into the country is not allowed.
Mirex	X				Mirex is not been registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of this chemical into the country is not allowed.
PCB	X				PCBs are not registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of these chemical into the country is not allowed.

	Banned	Restricted	Allowed	Year	Comments
<b>Trinidad and Tobago</b>					
Toxaphene	X				Toxaphene is not registered for use in Trinidad and Tobago by the Pesticides and Toxic Chemical Control Board and therefore importation of this chemical into the country is not allowed.
<b>Turkey</b>					
Aldrin	X			1979	It was banned by Ministry of Agriculture and Rural Affairs since 1979. Regulation on Licensing of Pesticides and Similar Products Used in Plant Production
Chlordane	X			1979	It was banned by Ministry of Agriculture and Rural Affairs since 1979. Regulation on Licensing of Pesticides and Similar Products Used in Plant Production
DDT	X			1985	It was banned by Ministry of Agriculture and Rural Affairs since 1985. Regulation on Licensing of Pesticides and Similar Products Used in Plant Production
Dieldrin	X			1971	It was banned by Ministry of Agriculture and Rural Affairs since 1971. Regulation on Licensing of Pesticides and Similar Products Used in Plant Production
Dioxin_Furan		X		1995	The limit value of 0.1ng/m3 for dioxins and furans in hazardous waste incineration Control of Hazardous Waste Regulation (1995)
Endrin	X			1979	It was banned by Ministry of Agriculture and Rural Affairs since 1979. Regulation on Licensing of Pesticides and Similar Products Used in Plant Production
Heptachlor	X			1979	It was banned by Ministry of Agriculture and Rural Affairs since 1979. Regulation on Licensing of Pesticides and Similar Products Used in Plant Production
Hexachlorobenzene	X			1959	
Mirex	X				

	Banned	Restricted	Allowed	Year	Comments
<b>Turkey</b>					
PCB		X		1993	It was banned by Ministry of Environment since 1993, Regulation on Dangerous Chemicals
Toxaphene		X		1989	It was banned by Ministry of Agriculture and Rural Affairs since 1989. Regulation on Licensing of Pesticides and Similar Products Used in Plant Production
<b>Ukraine</b>					
Aldrin		X		1997	List of pesticides prohibited for use in agriculture of 05/08/1997. State Interdepartmental Commission on Testing and Registration of Plant Protection Products, Growth regulators and Fertilizers. No import, no export
Chlordane		X		1997	List of pesticides prohibited for use in agriculture of 05/08/1997. State Interdepartmental Commission on Testing and Registration of Plant Protection Products, Growth regulators and Fertilizers. No import, no export
DDT		X		1997	List of pesticides prohibited for use in agriculture of 05/08/1997. State Interdepartmental Commission on Testing and Registration of Plant Protection Products, Growth regulators and Fertilizers. No import, no export
Dieldrin		X		1997	List of pesticides prohibited for use in agriculture of 05/08/1997. State Interdepartmental Commission on Testing and Registration of Plant Protection Products, Growth regulators and Fertilizers. No import, no export
Endrin		X		1997	List of pesticides prohibited for use in agriculture of 05/08/1997. State Interdepartmental Commission on Testing and Registration of Plant Protection Products, Growth regulators and Fertilizers. No import, no export
Heptachlor		X		1997	List of pesticides prohibited for use in agriculture of 05/08/1997. State Interdepartmental Commission on Testing and Registration of Plant Protection Products, Growth regulators and Fertilizers. No import, no export
Hexachlorobenzene		X		1997	List of pesticides prohibited for use in agriculture of 05/08/1997. State Interdepartmental Commission on Testing and Registration of Plant Protection Products, Growth regulators and Fertilizers.

	Banned	Restricted	Allowed	Year	Comments
<b>Ukraine</b>					
Mirex			X		
PCB			X		The inventory of the PCB sources is planned. After that, the estimation of possible action plans will be made.
Toxaphene			X		
<b>United Kingdom</b>					
Aldrin	X			1989	(Environmental hazard) under the EC "Prohibition Directive"
Chlordane	X			1992	(Environmental hazard) under the EC "Prohibition Directive"
DDT	X			1984	(Environmental hazard, High acute Toxicity)
Dieldrin	X			1989	(Environmental hazard) under the EC "Prohibition Directive"

**Banned Restricted Allowed Year Comments**

**United Kingdom**

Dioxin\_Furan

X

If regulatory or non-regulatory , briefly describe the action(s) taken and the date(s) on which the action (s) took effect.

UK Tolerable Daily Intake for dioxins and dioxin-like PCBs is 2 pg WHO-TEQ/kg bodyweight/day, effective from 19 November 2001.

Releases of dioxins and furans to the environment are controlled under the Pollution Prevention and Control Regulations 2000, which implement Council Directive 96/61/EC.

Limits and action levels on dioxins and furans in various foods and animal feeding stuffs set by the European Commission on 29 November 2001, to be effective from 1 July 2002.

Statutory limits for dioxins and furans in citrus pulp animal feeding stuffs and kaolinitic clay for use in animal feeding stuffs are unchanged from previous questionnaire in 1999.

Data source

Department of Health. (2001). Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment. Statement on the Tolerable Daily Intake for dioxins and dioxin-like polychlorinated biphenyls. Department of Health, UK.

European Commission. (1996). Council Directive 96/61/EC on Integrated Pollution Prevention and Control. Official Journal of the European Communities, L 257, 10 October 1996, 26.

European Commission. (2001). Council Regulation (EC) No 2375/2001 of 29 November 2001 amending Commission Regulation (EC) No 466/2001 setting maximum levels for certain contaminants in foodstuffs. Official Journal of the European Communities, L 321, 6 December 2001, 1-5.

European Commission. (2002). Council Regulation (EC) No 2375/2001 of 29 November 2001. Council Directive 2001/102/EC of 27 November 2001 amending Directive 1999/29/EC on the undesirable substances and products in animal nutrition. Official Journal of the European Communities, L 6, 10 January 2002, 45.

Endrin

X

1984

	Banned	Restricted	Allowed	Year	Comments
<b>United Kingdom</b>					
Heptachlor	X			1981	(Environmental hazard) under the EC "Prohibition Directive"
Hexachlorobenzene			X		Currently waiting outcome of EU review
Mirex	X				Never approved for use in UK
PCB	X				<p>The manufacture and general use of PCBs ceased in the mid 1970s and was banned under The Control of Pollution (Supply and Use of Injurious Substances) Regulations 1986 (S.I. 1986 No. 902), as amended. The only remaining use of PCBs in the UK is sealed inside some older electrical equipment but these PCBs must be phased and destroyed by the end of 2000 under the UK PCB Regulations.</p> <p>See also under dioxins for Tolerable Daily Intake. Control of Pollution (Supply and Use of Injurious Substances) Regulations 1986. S.I. [1986] No. 902, publ. HMSO, London, UK.</p> <p>Department of the Environment. (2000). The Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (England and Wales) Regulations 2000. Statutory Instrument, 1043. Stationery Office, London, UK.</p>
Toxaphene			X	1990	Not manufactured since 1990
<b>United States</b>					
Aldrin	X			1987	<p>There are no registered uses under the Federal Insecticide, Fungicide, and Rodenticide Act. Most uses were cancelled in 1969. All uses were cancelled by 1987. All tolerances on food crops were revoked in 1986.</p> <p>No US production, import, or export.</p> <p>Aldrin is a priority pollutant under the Clean Water Act.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>United States</b>					
<b>Chlordane</b>		X		1997	<p>There are no registered uses under the Federal Insecticide, Fungicide, and Rodenticide Act. Most uses were cancelled in 1978. All uses were cancelled by 1988. All tolerances on food crops were revoked in 1986.</p> <p>No US production (stopped in 1997), import, or export.</p> <p>Chlordane is a priority pollutant under the Clean Water Act.</p> <p>Chlordane is regulated as a hazardous air pollutant under the Clean Air Act.</p>
<b>DDT</b>		X		1972	<p>There are no registered uses under the Federal Insecticide, Fungicide, and Rodenticide Act. Most uses were cancelled in 1972. All uses were cancelled by 1989. All tolerances on food crops were revoked in 1986.</p> <p>No US production, import, or export.</p> <p>DDE (a breakdown product of DDT) is regulated as a hazardous pollutant under the Clean Air Act.</p> <p>DDT is a priority pollutant under the Clean Water Act.</p>
<b>Dieldrin</b>		X		1987	<p>There are no registered uses under the Federal Insecticide, Fungicide, and Rodenticide Act. Most uses were cancelled in 1969. All uses were cancelled by 1987. All tolerances on food crops were revoked in 1986.</p> <p>No US production, import, or export.</p> <p>Dieldrin is a priority pollutant under the Clean Water Act.</p>
<b>Dioxin_Furan</b>			X		<p>Regulated as hazardous air pollutants under the Clean Air Act.</p> <p>Dioxin in the form of 2,3,7,8-TCDD is a priority toxic pollutant under the Clean Water Act.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>United States</b>					
<b>Endrin</b>		X		1984	<p>There are no registered uses under the Federal Insecticide, Fungicide, and Rodenticide Act. Most uses were cancelled in 1979. All uses were cancelled by 1984.</p> <p>No production, import, or export.</p> <p>Endrin is a priority pollutant under the Clean Water Act.</p>
<b>Heptachlor</b>		X		1989	<p>There are no registered uses under the Federal Insecticide, Fungicide, and Rodenticide Act. Most uses were cancelled in 1978. All uses were cancelled by 2000 when the registrant voluntarily cancelled the remaining use to control fire ants in underground cable boxes. All tolerances on food crops were revoked in 1989.</p> <p>No US production, import, or export.</p> <p>Heptachlor is a priority pollutant under the Clean Water Act.</p> <p>Heptachlor is regulated as a hazardous air pollutant under the Clean Air Act</p>
<b>Hexachlorobenzene</b>		X		1985	<p>There are no registered uses under the Federal Insecticide, Fungicide, and Rodenticide Act. All uses were cancelled by 1985.</p> <p>No US production, import, or export as a pesticide.</p> <p>Manufacture and use for chemical intermediate (as allowed under the Stockholm Convention).</p> <p>Hexachlorobenzene is a priority pollutant under the Clean Water Act.</p> <p>Hexachlorobenzene is regulated as a hazardous air pollutant under the Clean Air Act.</p>
<b>Mirex</b>		X		1977	<p>There are no registered uses under the Federal Insecticide, Fungicide, and Rodenticide Act. All uses were cancelled in 1977.</p> <p>No US production, import, or export.</p>



	Banned	Restricted	Allowed	Year	Comments
<b>United States</b>					
PCB		X			<p>Manufacture and new use was prohibited in 1978 under the Toxic Substances Control Act.</p> <p>PCBs are priority pollutants under the Clean Water Act.</p> <p>PCBs are regulated as hazardous air pollutants under the Clean Air Act.</p>
Toxaphene		X		1982	<p>There are no registered uses under the Federal Insecticide, Fungicide, and Rodenticide Act. Most uses were cancelled in 1982. All uses were cancelled by 1980. All tolerances on food crops were revoked in 1993.</p> <p>No US production, import, or export.</p> <p>Toxaphene is a priority pollutant under the Clean Water Act.</p> <p>Toxaphene is regulated as a hazardous air pollutant under the Clean Air Act.</p>
<b>Uruguay</b>					
Aldrin			X		<p>En 1989 se revocaron todos los registros y autorizaciones de venta para uso agronómico. Se permite el uso para el control de hormigas. En cursos o cuerpos de agua del país se permite un máximo de 0.004 µg/l. Para desagües al colector del alcantarillado público no podrá exceder 500 veces el valor máximo permitido para cursos o cuerpos de agua. Para desgües directos a cursos de agua y desagües que se disponen por infiltración en el terreno no podrá exceder 100 veces el valor máximo permitido para cursos o cuerpos de agua.</p>
Chlordane			X		<p>En 1989 se revocaron todos los registros y autorizaciones de venta para uso agronómico. Se permite el uso industrial en aserraderos y carpinterías. En cursos o cuerpos de agua del país se permite un máximo de 0.01 µg/l. Para desagües al colector del alcantarillado público no podrá exceder 500 veces el valor máximo permitido para cursos o cuerpos de agua. Para desgües directos a cursos de agua y desagües que se disponen por infiltración en el terreno no podrá exceder 100 veces el valor máximo permitido para cursos o cuerpos de agua.</p>

	Banned	Restricted	Allowed	Year	Comments
<b>Uruguay</b>					
DDT		X			No existe desde 1977 productos agrícolas formulados en base a DDT y tampoco se registraron importaciones del mismo. En cursos o cuerpos de agua del país se permite un máximo de 0.001 µg/l. Para desagües a colector del alcantarillado público no podrá exceder 500 veces el valor máximo permitido para cursos o cuerpos de agua. Para desagües directos a cursos de agua y desagües que se disponen por infiltración en el terreno no podrá exceder 100 veces el valor máximo permitido para cursos o cuerpos de agua.
Dieldrin		X			En 1989 se revocaron todos los registros y autorizaciones de venta para uso agronómico. Se permite el uso para el control de hormigas. En cursos o cuerpos de agua del país se permite un máximo de 0.004 µg/l. Para desagües al colector del alcantarillado público no podrá exceder 500 veces el valor máximo permitido para cursos o cuerpos de agua. Para desagües directos a cursos de agua y desagües que se disponen por infiltración en el terreno no podrá exceder 100 veces el valor máximo permitido para cursos o cuerpos de agua.
Endrin		X			En 1988 se revocaron los registros y autorizaciones de venta para uso agronómico. Se permite para el combate de loros y cotarras bajo autorización oficial. Encursos o cuerpos de agua del país se permite un máximo de 0.004 µg/l. para desagües a colector del alcantarillado público no podrá exceder 500 veces el valor máximo permitido para cursos o cuerpos de agua. Para desagües directos a cursos de agua y desagües que se disponene por infiltración en el terreno no podrá exceder 100 veces el valor máximo permitido para cursos o cuerpos
Heptachlor		X			En 1989 se registró la última importación apra uso como hormigicida. En cursos o cuerpos de agua del país se permite un máximo de 0.01 µg/l. Para desagües al colector del alcantarillado público no podrá exceder 500 veces el valor máximo permitido para cursos o cuerpos de agua. Para desgües directos a cursos de agua y desagües que se disponen por infiltración en el terreno no podrá exceder 100 veces el valor máximo permitido para cursos o cuerpos de agua.
Hexachlorobenzene			X		

**Banned Restricted Allowed Year Comments**

**Uruguay**

Banned	Restricted	Allowed	Year	Comments
	X			En 1989 se revocaron todos los registros y autorizaciones de venta para uso agronómico. Se permite el uso para el control de hormigas. En cursos o cuerpos de agua del país se permite un máximo de 0.001 µg/l. Para desagües al colector del alcantarillado público no podrá exceder 500 veces el valor máximo permitido para cursos o cuerpos de agua. Para desagües directos a cursos de agua y desagües que se disponen por infiltración en el terreno no podrá exceder 100 veces el valor máximo permitido para cursos o cuerpos de agua.
PCB		X		Se están sustituyendo por iniciativa particulares.
Toxaphene	X			En 1989 se revocaron todos los registros y autorizaciones de venta para uso agronómico. Se permite el uso para el control de hormigas.

**Uzbekistan**

Aldrin		X		
Chlordane		X		
DDT		X		
Dieldrin		X		
Endrin		X		
Heptachlor		X		
Hexachlorobenzene		X		
Mirex		X		
PCB		X		

	Banned	Restricted	Allowed	Year	Comments
<b>Uzbekistan</b>					
Toxaphene			X		
<b>Venezuela</b>					
Aldrin			X		
Chlordane			X		
DDT			X		
Dieldrin			X		
Endrin			X		
Heptachlor			X		
Hexachlorobenzene			X		
Mirex			X		
PCB			X		
Toxaphene			X		
<b>Vietnam</b>					
Aldrin	X			1992	
Chlordane	X			1992	
DDT	X			1992	
Dieldrin	X			1992	

	Banned	Restricted	Allowed	Year	Comments
<b>Vietnam</b>					
Endrin	X			1992	
Heptachlor	X			1992	
Hexachlorobenzene	X			1992	
Mirex			X		
PCB		X			Serious problems with Dioxins and PCBs that contaminate the soil and human body
Toxaphene	X			1995	
<b>Yemen</b>					
Aldrin	X			1990	1. Monitoring and control actions taken by the Costumes' Authority in all entrances of Yemen (ports, air ports and others); 2. campaigns that carried out by the General Department of Plant Protection, Ministry of Agriculture and Irrigation
Chlordane	X			1990	1. Monitoring and control actions taken by the Costumes' Authority in all entrances of Yemen (ports, air ports and others); 2. campaigns that carried out by the General Department of Plant Protection, Ministry of Agriculture and Irrigation
DDT		X		1988	Use in the agriculture is banned since 1988, still used for disease vector control (malaria) but in very small quantities and in a very limited areas in Yemen due to the use of other alternatives (constituents) through a programme that under the supervision of WHO.  1. Monitoring and control action that are taken by the Costumes' Authority in all entrances of Yemen (ports, air ports and others); 2. Campaigns that carried out by the General Department of Plant Protection;

	Banned	Restricted	Allowed	Year	Comments
<b>Yemen</b>					
<b>Dieldrin</b>	X			1990	1. monitoring and control action that are taken by the Costumes' Authority in all entrances of Yemen (ports, air ports and others); 2. campaigns that carried out by the General Department of Plant Protection
<b>Dioxin_Furan</b>			X		The main sources of Dioxins and Furans in Yemen are the landfills, because all kind of wastes are transferred to these landfills (hospital wastes, domestic wastes and industrial wastes)
<b>Endrin</b>	X			1990	1. monitoring and control action that are taken by the Costumes' Authority in all entrances of Yemen (ports, air ports and others); 2. campaigns that carried out by the General Department of Plant Protection
<b>Heptachlor</b>	X			1990	1. h monitoring and control action that are taken by the Costumes' Authority in all entrances of Yemen (ports, air ports and others); 2. campaigns that carried out by the General Department of Plant Protection
<b>Hexachlorobenzene</b>	X			1990	1. monitoring and control action that are taken by the Costumes' Authority in all entrances of Yemen (ports, air ports and others); 2. campaigns that carried out by the General Department of Plant Protection
<b>Mirex</b>	X			1990	1. monitoring and control action that are taken by the Costumes' Authority in all entrances of Yemen (ports, air ports and others); 2. campaigns that carried out by the General Department of Plant Protection
<b>PCB</b>		X			Oils containing PCBs are still used in Yemen and not banned, but we found, as a result of our field survey, that the Authority of Electricity do not use such oils for transformers and capacitors in such quantities that have been used before, and this is not by purpose but impulsively.

	Banned	Restricted	Allowed	Year	Comments
<b>Yemen</b>					
Toxaphene	X			1990	1. monitoring and control action that are taken by the Costumes' Authority in all entrances of Yemen (ports, air ports and others); 2. campaigns that carried out by the General Department of Plant Protection
<b>Yugoslavia</b>					
Aldrin	X			2000	Federal Law on production and trade on poisons ("Officiel Gazette FRY", No.12/00) 17.03.2000
Chlordane	X			2000	Federal Law on production and trade on poisons ("Officiel Gazette FRY", No.12/00) 17.03.2000
DDT	X			2000	Federal Law on production and trade on poisons ("Officiel Gazette FRY", No.12/00) 17.03.2000
Dieldrin	X			2000	Federal Law on production and trade on poisons ("Officiel Gazette FRY", No.12/00) 17.03.2000
Endrin		X			Federal Law on production and trade on poisons ("Officiel Gazette FRY", No.12/00) 17.03.2000
Heptachlor	X			2000	Federal Law on production and trade on poisons ("Officiel Gazette FRY", No.12/00) 17.03.2000
Hexachlorobenzene	X			2000	Federal Law on production and trade on poisons ("Officiel Gazette FRY", No.12/00) 17.03.2000
PCB	X			2000	Federal Law on production and trade on poisons ("Officiel Gazette FRY", No.12/00) 17.03.2000
<b>Zambia</b>					
Aldrin	X				Not registered for use
Chlordane		X			For construction purposes and termite control
DDT		X			Used for vector control for tsetse and mosquitoes

	Banned	Restricted	Allowed	Year	Comments
<b>Zambia</b>					
Dieldrin		X			Restricted for termite control and building
Endrin		X			For construction only
Heptachlor			X		
Hexachlorobenzene			X		
Mirex	X				Not registered in Zambia
PCB		X			Equipment currently in service, no importation of new equipment with PCBs
Toxaphene			X		



### **3. Activities by Non-Governmental Organizations (NGOs) aiming at the reduction and/or elimination of the releases of POPs**

Updated information included from the following NGOs:

1. AWHHE, Armenian Women for Health and Healthy Environment
2. Centro EULA-Chile de Ciencias Ambientales, Universidad de Concepcion
3. CIP, Center for International Projects, Russian Federation
4. Commonweal
5. GCPF, Global Crop Protection Federation
6. IDEA
7. Japan International Cooperation Agency (JICA)
8. Leefmilieu
9. Oekometric GmbH
10. RAIPON, Russian Association Indigenous People of the North
11. Swiss Federal Institute of Technology Zürich



**AWHHE**

<b>Title</b>	TOXIC CHEMICALS RISK ASSESSMENT AND CREATION OF POPS INFORMATION NETWORK
<b>Objective(s)</b>	TO PROVIDE INFORMATION ON POPS IN COMMUNITY; TO RAISE AWARENESS IN WOMEN AND OTHER GROUPS OF COMMUNITY ON POPS; TO PROTECT THE HEALTH THROUGH AWARENESS RAISING ON POPS; TO INVOLVE AND WORK WITH ACTIVE WOMEN ON LOBBING LOCAL OFFICIALS ABOUT ELIMINATION TOXIC CHEMICALS AND POPS; TO DEVELOP ADEQUATE RESPONSES OF COMMUNITY IN ASSESSING HAZARD AND RISK OF POPS FOR REPRODUCTIVE HEALTH
<b>Timeframe</b>	01.08.00 - 01.02.01
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	ARMENIAN WOMEN FOR HEALTH AND HEALTHY ENVIRONMENT (AWHHE)
<b>Partner(s)(s)</b>	AS CONSULTANTS IPEN, WECF
<b>Project funder(s)</b>	JENIFER ALTMAN FOUNDATION-MITCHELL KAPOR FOUNDATION-STARFIRE FUND
<b>Data Source</b>	Elena Manvelian the head of AWHHE Yerevan 375022 Avan-Arindg 1/14 apt.7 Armenia Phone (3741) 62 66 20
<b>Comments</b>	The First step of this project - to conduct questionnaire interviews regarding the using pesticides and dealing with chemicals (chloropren) was conduct earlier with the financial support by mini grant from IPEN.

**Centro EULA-Chile de Ci**

<b>Title</b>	In search for evidences of long range transport of persistent pollutants: Accumulation of POPs in sediments from remote Andean lakes in Chile.
<b>Objective(s)</b>	To describe if long range transport of pollutants is actually occurring in the southern hemisphere.
<b>Timeframe</b>	2001-2003
<b>Status</b>	Finnished
<b>Project funder(s)</b>	FONDECYT, Fondo Nacional de Ciencia y Tecnología (National Science Foundation)

**CIP**

<b>Title</b>	Seminar on POPs. Plan of action on POPs reducing and eliminating in the Russian Federation
<b>Objective(s)</b>	Awareness-raising Implementation Support
<b>Timeframe</b>	undecided
<b>Partner(s)(s)</b>	UN/ECE, Center for International Projects, State Committee of the Russian Federation for Environment Protection

**Comments**

Field: Public Health, Environmental Protection

**Commonweal****Title**

Commonweal Health and Environment Program

**Objective(s)**

Commonweal is an active member of the International Persistent Organic Pollutants Network (IPEN), helping to disseminate information and resources about POPs chemicals to NGOs worldwide who are committed to ending POPs contamination. Commonweal is responsible for raising levels of awareness of health effects related to POPs chemicals by sponsoring panels at the UNEP INC meetings on POPs.

Commonweal is a founding member of the international campaign Health Care Without Harm (HCWH), a coalition of 290 organizations in 25 countries. The campaign works in collaboration with the healthcare industry to eliminate the use of toxic products and practices such as mercury and dioxin-producing polyvinyl chloride (PVC) plastics. Health Care Without Harm is premised on the idea that hospitals, which exist to promote health and healing, should not be contributing to an avoidable public health threat by relying on unsustainable practices concerning materials procurement and waste disposal. HCWH works to achieve this by encouraging alternatives to incineration, recycling, reusing, and alternative materials procurement

**Timeframe**

ongoing

**Project funder(s)**

Commonweal is funded by various US foundations.

**GCPF****Title**

Disposal of government owned obsolete crop protection products.

**Objective(s)**

Collection and disposal of 1200 MT of obsolete crop protection products, including an estimated 32 MT of POPs in Brazil, Parana state only.

**Timeframe**

1998 - 2000

**Status**

Concurrent

**Responsible Organisation(s)**

Federal State Governments of Parana, Brazil

**Partner(s)(s)**

Supported by the National Association for Crop Protection ANDEF (a member association of the Global Crop Protection Federation, GCPF) and its member companies

**Data Source**

GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta.

**Comments**

The products were incinerated at local industry plant. The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.

**GCPF****Title**

Disposal of government owned obsolete crop protection products.

<b>Objective(s)</b>	Collection and disposal of obsolete crop protection products, including an estimated 2 MT of POPs in Canada.
<b>Timeframe</b>	Started 1999, this program is being phased in across the provinces over a number of years. Estimated completion 2003
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	Federal and Provincial Governments of Canada.
<b>Partner(s)(s)</b>	Managed and supported by the National Association for Crop Protection CPI, (a member association of the Global Crop Protection Federation, GCPF) and its member companies. Contact Lorne Hepworth at hepworth@cropro.org wwwcropro.org
<b>Data Source</b>	GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta. This program
<b>Comments</b>	The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.

### **GCPF**

<b>Title</b>	Disposal of government owned obsolete crop protection products.
<b>Objective(s)</b>	Disposal of >1500 MT of obsolete crop protection products, including an estimated 144 MT POPs from Ethiopia.
<b>Timeframe</b>	Started in 2000, estimated completion in 2001 (?)
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	Federal and State Governments of Ethiopia.
<b>Partner(s)(s)</b>	USAID, Sweden, The Netherlands, FAO, Supported by the National Association for Crop Protection (a member association of the Global Crop Protection Federation, GCPF) and its member companies.
<b>Data Source</b>	GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta, Shell Chemicals Limited (a GCPF associated company).
<b>Comments</b>	Obsolete Stocks disposal operations of government owned stocks are multistakeholder projects as this examples shows. The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the website under „industry positions“ obsolete stocks.

### **GCPF**

<b>Title</b>	Disposal of government owned obsolete crop protection products.
<b>Objective(s)</b>	Collection and disposal of 56 MT of obsolete dieldrin locust control stocks from Madagascar. (Note: The 56 MT of dieldrin locust control product was a formulation which contained around 11 MT of POPs (dieldrin active ingredient)
<b>Timeframe</b>	1992 - 1993
<b>Status</b>	Finnished
<b>Responsible Organisation(s)</b>	Government of Madagascar
<b>Partner(s)(s)</b>	GTZ, GermanyShell Chemicals Limited, London (a GCPF associated company).
<b>Data Source</b>	GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC,

	Monsanto, Sumitomo, Syngenta, Shell Chemicals Limited (a GCPF associated company).
<b>Comments</b>	This is an example of a multi-stakeholder project involving a public and private sector partnership. The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.
<b>GCPF</b>	
<b>Title</b>	Disposal of government owned obsolete crop protection products.
<b>Objective(s)</b>	Collection and disposal of 90 MT of obsolete crop protection products, including 9.5 MT of POPs from Madagascar.
<b>Timeframe</b>	1996 - 2000, completed
<b>Status</b>	Finnished
<b>Responsible Organisation(s)</b>	Government of Madagascar
<b>Partner(s)(s)</b>	Supported by member companies of GCPF.GTZ, Germany, Switzerland
<b>Data Source</b>	GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta.
<b>Comments</b>	Obsolete Stocks disposal operations of government owned stocks are multistakeholder projects, as this example shows. The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.

<b>GCPF</b>	
<b>Title</b>	Disposal of government owned obsolete crop protection products.
<b>Objective(s)</b>	Collection and disposal of 187 MT of obsolete dieldrin locust control stocks from Mauritania. (Note: The 187 MT of dieldrin locust control product was a formulation which contained around 37 MT of POPs (dieldrin active ingredient)
<b>Timeframe</b>	1998
<b>Status</b>	Finnished
<b>Responsible Organisation(s)</b>	Government of Mauritania (Direction de l'Elevage et de l'Agriculture (DEA)).
<b>Partner(s)(s)</b>	GTZ, GermanyShell Chemicals Limited, London (a GCPF associated company).
<b>Data Source</b>	GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta, Shell Chemicals Limited (a GCPF associated company).
<b>Comments</b>	This was a multistakeholder project involving a public and private sector partnership and in which the field work was undertaken by GTZ and the local partner (with Shell involvement), and the shipping and incineration were undertaken by a professional hazardous waste collection and disposal company. The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.

<b>GCPF</b>	
<b>Title</b>	Disposal of government owned obsolete crop protection products

<b>Objective(s)</b>	Collection and disposal of 72 MT of obsolete monocrotophos/DDT stocks in Mozambique. (Note: The 72 MT of monocrotophos/DDT product was a formulation which contained around 22 MT of POPs (DDT active ingredient))
<b>Timeframe</b>	1990 – 1994
<b>Status</b>	Finnished
<b>Responsible Organisation(s)</b>	Government of Mozambique
<b>Partner(s)(s)</b>	GTZ, GermanyShell Chemicals Limited, London (a GCPF associated company).
<b>Data Source</b>	GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta, Shell Chemicals Limited (a GCPF associated company).
<b>Comments</b>	This overall project took place in two phases. In 1990, at the urgent request of the Government of Mozambique, Shell (the original supplier of the product) collected and repacked 72,000 litres of monocrotophos/DDT from a government store in Beira, cleaned the store and transferred the product to a safe store near Maputo, awaiting an anticipated disposal project. In 1994, using German funding, GTZ undertook the disposal project, which involved further repacking, and oversaw the removal of the product from Mozambique and its safe incineration in the UK. The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.

#### **GCPF**

<b>Title</b>	Disposal of government owned obsolete crop protection products.
<b>Objective(s)</b>	Collection and disposal of > 900 MT of obsolete crop protection products, including > 50 MT of POPs from Mozambique.
<b>Timeframe</b>	1997 – 2001 (?)
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	Government of Mozambique
<b>Partner(s)(s)</b>	Supported by member companies of GCPF.DANIDA, Denmark
<b>Data Source</b>	GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta, Shell Chemicals Limited (a GCPF associated company).
<b>Comments</b>	Obsolete Stocks disposal operations of government owned stocks are multistakeholder projects, as this example shows. The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.

#### **GCPF**

<b>Title</b>	Disposal of government owned obsolete crop protection products.
<b>Objective(s)</b>	Collection and disposal of 54 MT of obsolete dieldrin locust control stocks from Niger.(Note: The 54 MT of dieldrin locust control product was a formulation which contained around 10 MT of POPs (dieldrin active ingredient))
<b>Timeframe</b>	1991
<b>Status</b>	Finnished
<b>Responsible Organisation(s)</b>	Government of Niger (Department of Agriculture)

<b>Partner(s)(s)</b>	Shell Chemicals Limited, London (a GCPF associated company).USAID GTZ, Germany
<b>Data Source</b>	GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta, Shell Chemicals Limited (a GCPF associated company).
<b>Comments</b>	This was the first project for the disposal of obsolete government owned pesticide stocks using the multistakeholder approach and involving a public and private sector partnership.As a pioneering project, Shell (the original manufacturer of the dieldrin) undertook much of the technical work, USAID did most of the logistical and organisational work, and provided the funds for materials, shipping and incineration, and GTZ provided analytical support. The project showed how such work could be undertaken and many lessons were learnt, one of which was to facilitate the training and use of professional hazardous waste collection and disposal companies for doing this type of project more economically in future.The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.

### GCPF

<b>Title</b>	Disposal of government owned obsolete crop protection products.
<b>Objective(s)</b>	Collection and disposal of 200 MT of obsolete crop protection products, including 80 MT of POPs from Senegal.
<b>Timeframe</b>	2000 - 2001
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	Government of Senegal
<b>Partner(s)(s)</b>	Supported by member companies of GCPF.The Netherlands
<b>Data Source</b>	GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta, Shell Chemicals Limited (a GCPF associated company).
<b>Comments</b>	Obsolete Stocks disposal operations of government owned stocks are multistakeholder projects, as this examples show. The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.

### GCPF

<b>Title</b>	ChemCollect, an Australian national -once-off- collection of unused and unwanted chemicals, including pesticides.
<b>Objective(s)</b>	Collection and disposal of about 1200 MT of chemicals, including pesticides of which an estimated 300 MT are POPs pesticides in Australia
<b>Timeframe</b>	Started 2000, estimated completion 2002
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	Federal and State Governments of Australia, Environment Australia: Chemical Risk Management Section.Contact: Pamela Harris, pamelaharris@ea.gov.au
<b>Partner(s)(s)</b>	Supported by the National Association for Crop Protection and Animal Health, AVCARE (a member association of the Global Crop Protection Federation, GCPF) with the industry waste reduction stewardship program and its member companies. Contact: Claude Gauchat, at: clauddeg@avcare.org.au. and www.avcare.org.au



**Data Source** GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta.

**Comments** The GCPF member companies are willing to help find appropriate solutions for products they originally manufactured or supplied. For further information please consult the GCPF website under „industry positions“ obsolete stocks.

### **GCPF**

**Title** Disposal of government and farmer owned obsolete crop protection products.

**Objective(s)** Collection and disposal of 1 050 MT of obsolete crop protection products, including about 400 MT of POPs, from South Africa, Namibia and Swaziland.

**Timeframe** 1998 -1999

**Status** Finished

**Responsible Organisation(s)** Government of South Africa - National Department of Agriculture

**Partner(s)(s)** Coordinated under the leadership of AVCASA, the local member association of the Global Crop Protection Federation (GCPF) and its member companies  
Contact: Jan Kleynhans - jan@avcasa.co.za

**Data Source** GCPF, The GCPF member companies are: Aventis CropScience, BASF AG, Bayer AG, Dow AgroSciences, E.I. DuPont de Nemours & Co., FMC, Monsanto, Sumitomo, Syngenta.

**Comments** Obsolete Stocks disposal operations of government and farmer owned stocks are multistakeholder projects, as this example shows.

### **IDEA**

**Title** We did not have a specific title as such, our objective, as outlined in B below, was one of several environmental objectives that our organization adopted.

**Objective(s)** The objective was to inform the Irish government of our concerns regarding POPs and to ask them to support the objectives of POPs INC4

**Timeframe** Jan 2000, continuing

**Status** Concurrent

**Partner(s)(s)** International Society of Doctor's for the Environment.

**Project funder(s)** Our funding comes mainly form our members, we receive a small amount of money from concerned pharmaceutical company.

**Comments** Our campaign consists of writing to both the medical and lay press, and government departments outlining our concerns regarding the adverse health effects of POPs both before and after the meeting in Bonn. We were successful in passing the following motion at the Annual General Meeting of the Irish Medical Organization in April of this year: "This organization fully supports and endorses the attempts currently being made by the international community under the auspices of WHO and the UN to minimize and ultimately to eliminate Persistent Organic Pollutants (POPs) in the environment globally and demands that the Irish government do likewise".

### **Japan International Coop**

**Title** "Characterization of Polychlorinated Byphenyls (PCBs) in urban atmosphere, within the Santiago Metropolitan Region, Chile".

**Objective(s)** To reliminary estimate the concentration levels of in th urban air, in order to contribute to decision makers toget an estimation about th presence and

	possible implication of the atmospheric PCBs within the Metropolitan Area.
<b>Timeframe</b>	2001-2001
<b>Status</b>	Finished
<b>Responsible Organisation(s)</b>	Japan International Cooperation Agency (JICA)
<b>Partner(s)(s)</b>	- Comision Nacional del Medio Ambiente, CONAMA (National Commission for the Environment)  - Centro Nacional del Medio Ambiente, CENMA (National Center for the Environment)
<b>Project funder(s)</b>	- Comision Nacional del Medio Ambiente, CONAMA (National Commission for the Environment) - Japan Cooperation Agency, JICA - Centro Nacional del Medio Ambiente, CENMA (National Center for the Environment)
<b>Data Source</b>	Informe Final Caracterización de Bifenilos Policlorados (PCBs) en Atmósfera Urbana de la Región Metropolitana de Chile"CONAMA Obispo Donoso 6, Providencia P.O. Box 265, Correo 55 Santiago, CHILE

### **Leefmilieu**

<b>Title</b>	Dioxine reduction project
<b>Objective(s)</b>	To reduce the dioxin emissions of industry in the region by evaluating permits and where necessary legal procedures.
<b>Timeframe</b>	Uncertain, probably more than five years.
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	Leefmilieu (This is a Dutch Environmental association)
<b>Partner(s)(s)</b>	Community groups: Association Dorpsbelang Hees, Foundation Weurt+; Foundation Frisse Lucht Lindenholt; Association Ons Waterkwartier  Technical assistance by a organisation: Mobilization for the Environment, environmental assistance by the Foundation Gelderse Milieufederatie.

### **Oekometric GmbH**

<b>Title</b>	Development of a quality criteria guideline for POPs-Monitoring (e.g. dioxin, PCB's) in international POPs-management
<b>Objective(s)</b>	Definition of quality criteria for monitoring (sampling and analysis) activities within POPs management. Publication of a "Quality Criteria Guideline" including minimum standards for such activities to be considered as valid, comparable etc.
<b>Timeframe</b>	1,5 to 2 years
<b>Responsible Organisation(s)</b>	Oekometric GmbH-the Bayreuth Institute of Environmental Research
<b>Partner(s)(s)</b>	World-wide experts on POPs ("Expert Forum"). (at present: compilation of a list of experts)
<b>Project funder(s)</b>	Application for project in preparation
<b>Data Source</b>	Session: "Global POPs treaty and quality criteria for international POPs management" at DIOXIN 2000. (Organochlorine compounds, Volume 47, 415-

428)

**Comments**

Preparatory work: Presentation criteria for an international POPs management: necessity and strategies for realization "and further presentations of selected experts to the topic at DIOXIN 2000 symposia, August 13-17, f2000, Monterey, USA

**Oekometric GmbH - The**

**Title**

POPs Monitoring in Fish

**Objective(s)**

Monitoring on POPs in Fish

**Timeframe**

1999 - ongoing

**Status**

Concurrent

**Responsible Organisation(s)**

Oekometric GmbH - The Bayreuth Institute of Environmental Research

**Data Source**

Preliminary results: Seifert. K, Hosseinpour. J. (2003): POPs monitoring in fish: monitoring design requirements for risk and damage assessment. Organohalogen Compounds. Submitted

**Oekometric GmbH - The**

**Title**

Dioxins and other POPs in by-products, recyclates and wastes and their potential to enter the food chain - stage II

**Objective(s)**

Continuation of a program to identify relevant pathways of by-products, recyclates and wastes into the food chain focusing on dioxins and furans (PCDD/PCDF) and PCBs.

**Timeframe**

2001-2002

**Status**

Finnished

**Responsible Organisation(s)**

Oekometric GmbH - The Bayreuth Institute of Environmental Research

**Partner(s)**

Co-ordination by the European Commissions Joint Research Centre, Environment Institute, Soil & Water Unit

**Project funder(s)**

European Commission

**Data Source**

Dioxins and other POPs in by-products, recyclates and other wastes and their potential to enter the food chain - stage II. Final report. European Commission, DG Environment, Brussels, September 2002.

**RAIPON**

**Title**

Persistent Toxic Substances (PTS), Food Security and Indigenous Peoples of the Russian North

**Objective(s)**

The overall objective of this project is to reduce the contamination of the Arctic environment by PTS. The project will include detailed dietary surveys, sampling and analyses of water, traditional food and humans living in Northern Russia. The application to GEF covers four regions of the Russian North; Kola Peninsula, Pechora Basin, Taimyr Peninsula/Lower Yenisey and Chukotka Peninsula.

**Timeframe**

2000-2003

**Status**

Concurrent

**Responsible Organisation(s)**

Russian Association Indigenous Peoples of the North (RAIPON)

<b>Partner(s)(s)</b>	AMAP
<b>Project funder(s)</b>	The project will be financed by the Global Environmental Facilities (GEF) and other international, national and private sources.

### **Swiss Federal Institute of**

<b>Title</b>	Investigating the Global Distribution Dynamics of POPs with Multi-Compartment Models
<b>Objective(s)</b>	The project is a modeling study that aims to clarify the mechanisms of POPs long-range transport, global fractionation etc. and to relate the observed distribution behavior of different POPs to their physicochemical properties. The overall objective is to evaluate the current POPs criteria of the Stockholm Convention and to support the identification of additional POPs.
<b>Timeframe</b>	200-ongoing
<b>Status</b>	Concurrent
<b>Responsible Organisation(s)</b>	Swiss Federal Institute of Technology Zürich
<b>Partner(s)(s)</b>	EMEP model intercomparison study for POPs models, conducted by the Meteorological Synthesizing Centre East (MSC-E), Moscow
<b>Project funder(s)</b>	Swiss Federal Institute of Technology; Swiss Federal Agency for the Environment, Forests and Landscape
<b>Data Source</b>	<a href="http://lrcmail.ethz.ch/hungerb/product/product.html">http://lrcmail.ethz.ch/hungerb/product/product.html</a>  A description of the global model can be found in the article by M. Scheringer et al., Investigation of the Cold Condensation of Persistent Organic Pollutants with a Global Multimedia Fate Model, Environ. Sci. Technol. 34, 1842-1850.  See also the overview by Scheringer, M., Wania, F. (2003). Multimedia Models of Global Transport and Fate of Persistent Organic Pollutants, in: Hutzinger, O., Fiedler, H. (Eds.) Handbook of Environmental Chemistry, Vol. 3, Part O. Springer, Berlin and Heidelberg, 237-269 and chapter 9 of the book by Scheringer, M. (2002), Persistence and Spatial Range of Environmental Chemicals. Wiley-VCH, Weinheim.
<b>Comments</b>	The project is part of ongoing research on the environmental distribution dynamics of POPs and on methods for chemicals assessment, conducted by the Safety and Environmental Technology Group at the Institute for Chemical and Bioengineering at the Swiss Federal Institute of Technology Zürich.







# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

### Annex 1 Assessment and Monitoring

This Annex update form can be found on the POPs Homepage at:  
<http://www.chem.unep.ch/pops/mastlist/mlistcover.htm>

<b>Country or Organization</b>	
Type of institution:	Name of institution:
<b>Contact Person</b>	
<b>Mr/Mrs/Ms</b>	
<b>First Name</b>	
<b>Last Name</b>	
<b>Title</b>	
<b>Address</b>	
<b>Phone</b>	
<b>Fax</b>	
<b>E-mail</b>	

<b>Assessment and Monitoring Projects of POPs chemicals</b>	
<b>A</b>	<b>Title of the Assessment or Monitoring Project:</b>
<b>B</b>	<b>Objective of the Project:</b>
	<b>Geographical Coverage:</b>



# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

<b>C</b>	<b>Responsible Organization(s): Lead Ministry, Agency or Organizational Unit:</b>	
<b>D</b>	<b>Partner (s) or Project Affiliate:</b>	
<b>E</b>	<b>Project Funder(s):</b>	
<b>F</b>	<b>Timeframe of the Assessment /Monitoring Project:</b>	
	Year the activity started or is planned to start	Year the activity was completed or planned to be completed (if completion date is not yet known then indicate “not specified” or “ongoing” below)
<b>Comments:</b>		
<b>Data Sources: website and/or publications (indicate the language of the sources and where possible, from where the publications can be obtained.)</b>		





# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

### **SUPPLEMENTAL INFORMATION**

The following information is specific to the Global Network for the Monitoring of Chemicals in the Environment. The information above serves both the POPs Master List of Activities and the Global Network.

<b>G</b>	<b>Frequency of the Monitoring Activity (e.g. executed once, once per year, once per month):</b>
<b>H</b>	<b>Number of Stations. Give also or, send separately the geographic information of the stations:</b>
<b>I</b>	<b>QA/QC. Give details for any general Quality Assurance/Quality Control guidelines within the programme:</b>
<b>J</b>	<b>Where is the Data Stored? Please refer how to retrieve data:</b>





# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

<b>N</b>	<b>Laboratories Related to the Project/Programme:</b>
	<b>Name:</b>
	<b>Address:</b>
	<b>Phone:</b>
	<b>Fax:</b>
	<b>E-mail:</b>
	<b>Internet site:</b>
	<b>POPs and Matrices Analysed:</b>
	<b>Laboratory Cooperative Institutions:</b>
<b>O</b>	<b>Laboratory Contact Person:</b>
	<b>First Name:</b>
	<b>Last Name:</b>
	<b>Address (if different from above):</b>
	<b>Phone:</b>
	<b>Fax:</b>
	<b>E-mail:</b>



# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

### Annex 2

Activities to eliminate and/or reduce the releases of POPs Chemicals

This Annex update form can be found on the POPs Homepage at:  
<http://www.chem.unep.ch/pops/mastlist/mlistcover.htm>

<b>Country or organization submitting information</b>	
Type of institution: <b>Country</b> <input type="checkbox"/> <b>Intergovernmental Organization</b> <input type="checkbox"/> <b>Non-Governmental Organization</b> <input type="checkbox"/>	Name of institution:
<b>Contact Person</b>	
<b>Mrs/Ms/Mr</b>	
<b>First Name</b>	
<b>Last Name</b>	
<b>Title</b>	
<b>Address</b>	
<b>Phone</b>	
<b>Fax</b>	
<b>E-mail</b>	

<b>Activities focussing on the replacement and/or the reduction of the releases of POPs chemicals</b>	
<b>A</b>	<b>Title of the Project:</b>
<b>B</b>	<b>Objectives of the Project:</b>
	<b>Geographical Coverage:</b>
<b>C</b>	<b>Responsible Organization(s): lead Ministry, Agency or Organizational Unit:</b>



# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

<b>D</b>	<b>Partner(s) or Project Affiliate:</b>	
<b>E</b>	<b>Project funder(s):</b>	
<b>F</b>	<b>Time frame of the Project:</b>	
	Year the activity started or is planned to start	Year the activity was completed or planned to be completed (if completion date is not yet known then indicate "not specified" below)
<b>Comments:</b>		
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<b>Data Source:</b>		
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# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

### Annex 3 Regulatory Actions

This Annex update form can be found on the POPs Homepage at:  
<http://www.chem.unep.ch/pops/mastlist/mlistcover.htm>

<b>Country or organization submitting information</b>	
Type of institution: <i>Country</i> <input type="checkbox"/> <i>Intergovernmental Organization</i> <input type="checkbox"/> <i>Non-Governmental Organization</i> <input type="checkbox"/>	Name of institution:
<b>Contact Person</b>	
<i>Mrs/Ms/Mr</i>	
<i>First Name</i>	
<i>Last Name</i>	
<i>Title</i>	
<i>Address</i>	
<i>Phone</i>	
<i>Fax</i>	
<i>E-mail</i>	

### Regulatory Actions Taken To Control the Use, Production and Releases of the POPs

Aldrin	Regulatory status (choose one)	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Use is restricted <input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)
	If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.	
Comments: ----- ----- -----		



# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

Data Source:  
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<b>Chlordane</b>	<b>Regulatory status (choose one)</b>	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Use is restricted <input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)
	<b>If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.</b>	

Comments:  
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Data Source:  
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<b>DDT</b>	<b>Regulatory status (choose one)</b>	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Use is restricted <input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)



# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

	<p><b>If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.</b></p>
<p><u>Comments:</u></p> <p>-----</p> <p>-----</p> <p>-----</p>	
<p><u>Data Source:</u></p> <p>-----</p> <p>-----</p> <p>-----</p>	

<p><b>Dieldrin</b></p>	<p><b>Regulatory status (choose one)</b></p>	<p><input type="checkbox"/> No action taken (unregulated)</p> <p><input type="checkbox"/> Use is restricted</p> <p><input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)</p>
	<p><b>If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.</b></p>	
<p><u>Comments:</u></p> <p>-----</p> <p>-----</p> <p>-----</p>		
<p><u>Data Source:</u></p> <p>-----</p> <p>-----</p> <p>-----</p>		





# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

<b>Endrin</b>	<b>Regulatory status (choose one)</b>	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Use is restricted <input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)
	<b>If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.</b>	
<u>Comments:</u> ----- ----- -----		
<u>Data Source:</u> ----- ----- -----		

<b>Hexachloro- benzene</b>	<b>Regulatory status (choose one)</b>	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Use is restricted <input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)
	<b>If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.</b>	



# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

<u>Comments:</u> <hr/> <hr/> <hr/> <hr/>
<u>Data Source:</u> <hr/> <hr/> <hr/> <hr/>

<b>Heptachlor</b>	<b>Regulatory status (choose one)</b>	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Use is restricted <input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)
<b>If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.</b>		
<u>Comments:</u> <hr/> <hr/> <hr/> <hr/>		
<u>Data Source:</u> <hr/> <hr/> <hr/> <hr/>		

<b>Mirex</b>	<b>Regulatory status (choose one)</b>	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Use is restricted <input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)
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# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

	<b>If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.</b>
<b>Comments:</b> ----- ----- -----	
<b>Data Source:</b> ----- ----- -----	

<b>Toxaphene</b>	<b>Regulatory status (choose one)</b>	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Use is restricted <input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)
	<b>If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.</b>	
<b>Comments:</b> ----- ----- -----		



# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

Data Source:

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<b>PCBs (poly-chlorinated biphenyls)</b>	<b>Regulatory status (choose one)</b>	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Use is restricted <input type="checkbox"/> Use is banned or otherwise not allowed (e.g., unregistered pesticide)
	<b>If use is restricted, banned or otherwise not allowed, briefly specify the action(s) taken and the date(s) on which the action (s) took effect.</b>	
<u>Comments:</u> ----- ----- -----		
<u>Data Source:</u> ----- ----- -----		

<b>Dioxins and Furans</b>	<b>Regulatory status (choose one)</b>	<input type="checkbox"/> No action taken (unregulated) <input type="checkbox"/> Regulatory and/or non-regulatory actions taken
	(This section is currently blank)	



# POPs Master list of Activities

## Global Network for the Monitoring of Chemicals in the Environment

	<p><b>If regulatory or non-regulatory , briefly describe the action(s) taken and the date(s) on which the action (s) took effect.</b></p>
<p><u>Comments:</u></p> <p>-----</p> <p>-----</p> <p>-----</p>	
<p><u>Data Source:</u></p> <p>-----</p> <p>-----</p> <p>-----</p>	