MASTER LIST OF ACTIONS

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

Second Edition

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UNEP Chemicals

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Introduction

Background

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 for POPs, UNEP has initiated a number of activities dealing with persistent organic pollutants (POPs). There are also numerous activities undertaken by Governments and Organizations at the national, regional and international levels. It has become clear that there is a need to co-ordinate work being done to eliminate emissions and discharges of POPs in order to help ensure effective and efficient use of resources. To facilitate such co-ordination, UNEP has developed this master list of actions that address POPs and their releases.

The first complete Masterlist of Actions on the Reduction and/or Elimination of Releases of POPs was distributed at the third session of Intergovernmental Negotiating Committee for an International Legally Binding Instrument for Implementing International Action on Certain POPs (POPs INC) in September 1999 (reference: UNEP/POPS/INC.3/INF/9). The Master List is to be updated prior to each subsequent session of the POPs INC.

To collect information for this second edition of the Master List, a letter was sent on 8 October 1999 from UNEP Chemicals to UNEP POPs Focal Points and UNEP Official Contact Points in countries that have not yet established UNEP POPs Focal Points. A copy of this letter is contained in Annex 4. This first revision of the Master List is based on Government submissions received by 31 December 1999.

Objective

This master list consists of actions aiming at reducing and/or eliminating of releases of POPs. The master list should facilitate co-ordination and co-operation between and among activities at the national, regional and international levels in countries and organizations and thereby helping to avoid duplication of efforts and ensuring the efficient use of resources. This document will become an evolving list of relevant POPs actions, including those already taken, being conducted, or planned. With the active participation of all countries and organizations, the master list can become a dynamic tool for ensuring co-ordinated and complementary actions on POPs.

Organization and Structure of the Tables of the Master List

The information collected from both international and regional organizations as well as from Governments is organized in table format in five sections.

- Section 1: Information on global actions aiming at the reduction and/or elimination of releases of POPs.
- Section 2: Information on regional and/or sub-regional actions aiming at the reduction and/or elimination of the releases of POPs.
- Section 3: Country contributions: Assessment and monitoring projects of POPs chemicals.
- Section 4: Country contributions: Information on POPs National Action Plans aiming at the reduction and/or elimination of the releases of POPs.
- Section 5: Country contributions: Information on the regulatory status of POPs; bans, restrictions, and/or other legal permitted uses.

The first two sections include contributions received from international organizations. Section 1 covers global actions and Section 2 covers regional and sub-regional actions aimed at the reduction and /or elimination of the releases of POPs chemicals. The tables include information on six categories:

- A. Title of the Project;
- B. Objective of the Project;
- C. Responsible Organization(s);
- D. Partner(s);
- E. Project Funder(s); and
- F. Timeframe for the project.

The only deviation from these categories is under projects of the Global Environment Facility (GEF), where item C becomes “Implementing Agency” and D becomes “Executing Agency,” to be consistent with the terminology used within the GEF.

Where information for a category was not provided, the category is not listed. For example, in some cases only the project title was provided so this title is all that is listed.

Sections 3, 4 and 5 are compiled from submissions of the POPs Focal Points. Sections 3 and 4 are organized by country in the same manner as Sections 1 and 2. Section 5 is also organized by country, and includes the following categories: no action; restricted use; and banned. However, where nothing is reported for a particular category, the category is not shown. Consequently, the tables for each country vary according to the information provided.

Section 1 Information on *global activities* aiming at the reduction and/or elimination of releases of POPs.

1. UNEP Chemicals

1A	**Title of the Project:**
	Intergovernmental Negotiating Committee for an International Legally Binding Instrument for Implementing International Action on Certain POPs
B	**Objective of the Project:**
	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.
C	**Responsible Organisation(s)**
	UNEP
F	**Timeframe of the project**
	1997-2001
Data Source: UNEP Chemicals	

2A	**Title of the Project:**
	Regional and Sub-regional Awareness Raising Workshops
B	**Objective of the Project:**
	To alert national contact points to the key scientific and policy issues relating to POPs, to help countries and national officials prepare for the upcoming negotiations on a global POPs convention, and to assist them in determining what immediate national and/or regional actions may be appropriate to protect against the risks of POPs.
C	**Responsible Organisation(s)**
	UNEP and IFCS
F	**Timeframe of the project**
	July 1997-June 1998 (Eight workshops)
Data Source: UNEP Chemicals	

3A	**Title of the Project:**
	Regional and Sub-regional POPs Management Workshops
B	**Objective of the Project:**
	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 focals to UNEP, in implementing immediate national and/or regional actions determined to protect againts the risks of POPs and to prepare countries for technical implementation of a future global convention on POPs.
C	**Responsible Organisation(s)**
	UNEP
F	**Timeframe of the project**
	Undetermined (Only two workshops held thus far in Hanoi, Vietnam for Asia and the Pacific in March 1999 and in Lusaka, Zambia for the Southern African Development Community , SADC in February 2000)
Data Source: UNEP Chemicals	

4A	**Title of the Project:**
	Information Exchange
B	**Objective of the Project:**
	To facilitate information, on both POPs themselves as well as on altematives and techniques that may represent options for replacing or reducing/eliminating releases of POPs.
C	**Responsible Organisation(s)**
	UNEP-Chemicals
F	**Timeframe of the project**
	Ongoing
Data Source: UNEP Chemicals	

5A	**Title of the Project:**
	Alternatives Approaches (Chemical and Non-Chemical) to POPs pesticides
B	**Objective of the Project:**
	• To facilitate information, on alternatives and techniques that may represent options for replacing or reducing/eliminating releases of POPs. It should be noted that not only chemical substitutes are covered but also biological, environmental and other alternative approaches, as well as experiences in using these. A number of these information products are developed in collaboration with, or based on work made by other organizations, including those with specialization in certain fields like WHO and FAO. • To develop and implement a Training and Capacity Building Programme to assist countries to replace POPs and preventing/reducing their releases
C	**Responsible Organisation(s)**
	UNEP-Chemicals
D	**Partner(s):**
	WHO and FAO
E	**Project Funder(s):**
	The United States of America, The Inuit Circumpolar Conference (ICC)
F	**Timeframe of the project**
	Ongoing Workshop held in Bangkok, Thailand March 6-10, 2000 on sustainable approaches for pest and vector management and opportunities for collaboration in replacing POPs pesticides
Data Source: UNEP Chemicals	

6A	**Title of the Project:**
	PCB identification and management training
B	**Objective of the Project:**
	To provide information and training on identifying and managing PCBs and materials containing PCBs
C	**Responsible Organisation(s)**
	UNEP Chemicals and the Secretariat for the Basel Convention (SBC)
E	**Project Funder(s)**
	Germany, Norway, US

F	**Timeframe of the project**	
	Planned:	
	Cameroon (Yaoundé)	17-21 APR 2000
	Iran (city not yet determined)	24-28 JUN 2000
	Uruguay (Montevideo or Punta del Este)	18-22 SEP 2000
	Tanzania (Arusha)	9 -13 OCT 2000
Comments:		
Data Source: UNEP Chemicals		

7A	**Title of the Project:**
	Dioxins and furans information collection and management training
B	**Objective of the Project:**
	To facilitate the generation and collection of information to identy and quantify sources of dioxins and furans. The activities will cover process that may generate dioxins and furans, help to identify products and residues potentially contaminated with these compounds, and give guidance on what techniques and technologies have been successfully applied to reduce release of dioxins and furans. Guidance and information documents will be produced and made available to all interested countries.
C	**Responsible Organisation(s)**
	UNEP Chemicals
F	**Timeframe of the project**
	Planned:
	Cameroon (Yaoundé) 17-21 APR 2000
	Iran (city not yet determined) 24-28 JUN 2000
	Uruguay (Montevideo or Punta del Este) 18-22 SEP 2000
	Tanzania (Arusha) 9 -13 OCT 2000
Comments:	
Data Source: UNEP Chemicals	

2. FAO, UNEP and SBC

1A	**Title of the Project:**
	Unwanted stocks of pesticides and other chemicals, including POPs
B	**Objective of the Project:**
	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.
C	**Responsible Organisation(s)**
	FAO, UNEP and SBC
D	**Partner(s):**
	Bilateral and other donors of financial and technical assistance
F	**Timeframe of the project**
	Ongoing
Comments: FAO will continue to serve as the lead for this work with UNEP Chemicals and SBC providing expertise and other resources in support.	
Data Source: UNEP Chemicals	

3. UNEP/GEF

1A	**Title of the Project:**
	Regionally-based Assessment of Persistent Toxic Substances
B	**Objective of the Project:**
	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 prioritising issues and areas for future GEF interventions.
C	**Implementing Agency**
	UNEP
D	**Executing Agency:**
	UNEP

E	**Project Funder(s)**
	GEF, UNEP, SBC Canada, France, Germany, Switzerland and the United States of America
F	**Timeframe of the project**
	24 scheduled to begin in April 2000

Comments: 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 complimentary to, and supportive of, the Global International Waters Assessment, giving special in-depth consideration to the issue of persistent toxic substances, and will be conducted through a regional approach. The objectives are to: (i) demonstrate the transboundary nature of persistent toxic substances; (ii) analyze the major transport mechanisms; (iii) identify major sources and production of the concerned substances; (iv) characterize the exposure of humans and the ecological implications; (v) analyze the socio-economic implications of the problems; and (vi) identify alternatives to the use of chemicals and alternative management methods.

The project will be executed with the collaboration of a number of partners including the World Bank, the Food and Agriculture Organization of the United Nations (FAO), UNDP, the United Nations Industrial Development Organization (UNIDO), the United Nations Institute for Training and Research (UNITAR) and the Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP), NGO's, donors and others.

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

2A	**Title of the Project:**
	Persistent Toxic Substances (PTS)- Assessment of National Management Needs of PTS (PDF-B)
B	**Objective of the Project:**
	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
C	**Implementing Agency**
	UNEP
D	**Executing Agency:**
	UNEP
E	**Project Funder (s)**
	PDF-B funding (GEF, UNEP and other UN-Agencies)
F	**Timeframe of the project**
	10 months (December 1999- september 2000)

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 Organisation for Economic Co-operation and Development (OECD).
Data Source: Persistent Toxic Substances and UNEP, in the Global Environment Facility

4. UNITAR

1A	**Title of the Project:**
	Preparation of a Thought Starter on Developing a National Action Plan for Addressing POPs: No5 in the Pilot Series of Thought Starters in Support of National Capacity Building Initiatives for the Sound Management of Chemicals

5. WHO/WHO-IPCS

1A	**Title of the Project:**
	Environmental Health Criteria Monographs (EHCs).
B	**Objective of the Project :**
	- 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
C	**Responsible Organization(s):**
	IPCS
D	**Partner (s)**
	UNEP, ILO and IPCS Participating Institutions.
F	**Timeframe of the project**
	Ongoing
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).	

2A	**Title of the Project:**
	Joint FAO/WHO Meeting on Pesticide Residues
B	**Objective of the Project :**
	Assessment of risks to human health from exposure to pesticides, mostly through food. Substances covered: Aldrin; Dieldrin; Endrin; Heptachlor; Hexachlorobenzene; Mirex; DDT; Chlordane, Toxaphene.

C	**Responsible Organization(s):**
	IPCS
D	**Partner (s)**
	FAO
F	**Timeframe of the project**
	Ongoing.

Section 2 Information on *regional and/or sub-regional activities* aiming at the reduction and/or elimination of releases of POPs.

1. UNEP

1A	**Title of the Project:**
	Mediterranean Action Plan, 1975 - Land-Based Sources Protocol - Barcelona Convention, 1976 - The LBS Protocol, 1996

2A	**Title of the Project:**
	Strategic Action Programme to Address Pollution from Landbased Activities (SAP); Adopted by the Barcelona Convention in Tunis,1997

3A	**Title of the Project:**
	Strengthening National Chemicals Management in countries of the Commonwealth of Independent States
B	**Objective of the Project and Geographical Coverage:**
	Strengthening National Chemicals Management Geographical Coverage: The Commonwealth of Independent States
C	**Responsible Organization(s):**
	UNEP

4A	**Title of the Project:**
	Protection of the Marine Environment from Land-based activities in the Eastern African Region (regional) component of the Programme of Action

2. UNEP/GEF

1A	**Title of the Project:**
	Reducing Pesticide Runoff to the Caribbean Sea (PDF-B)
B	**Objective of the Project and Geographical Coverage:**
	The project will assist Colombia, Costa Rica, Nicaragua and Panama 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.
C	**Implementing Agency:**
	UNEP
D	**Executing Agencies**
	The Secretariat of the Cartagena Convention (CAR/RCU), Colombia, Costa Rica, Nicaragua, Panama
E	**Project Funder (s)**
	PDF-B funding (GEF, UNEP, Governments, Counterparts)
F	**Timeframe of the Project**
	15 months (April 1999- June 2000)
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.	
Data Source: Persistent Toxic Substances and UNEP, in the Global Environment Facility	

2A	**Title of the Project:**
	Persistent Organic Pollutants, Food Security, and Indigenous Peoples in Arctic Russia (PDF-A)
B	**Objective of the Project and Geographical Coverage:**
	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 Geographical coverage: Russian Federation
C	**Implementing Agency:**
	UNEP

D	**Executing Agency:**
	Inuit Circumpolar Conference (ICC)
E	**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))
F	**Timeframe of the project**
	4 months (January 1999- April 2000)
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.	
Data Source: Persistent Toxic Substances and UNEP, in the Global Environment Facility	

3A	**Title of the Project:**
	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)
B	**Objective of the Project and Geographical Coverage:**
	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. Geographical coverage: Russian Federation
C	**Implementing Agency**
	UNEP (in collaboration with the World Bank)
D	**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."
E	**Project Funder (s)**
	GEF, ACOPS, Canada, Denmark, Russian Federation, Sweden and the U.S.A.
F	**Timeframe of the Project**
	17 Months (July 1999 – January 2001)

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

4A	**Title of the Project**
	Comprehensive Action Program to phase out the Use of DDT and reduce the Long-term Effects of exposure in Mexico and Central America (PDF-B proposal)
B	**Objective of the Project and Geographical Coverage:**
	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. Geographical coverage: Regional: Mexico and Central America (Mexico, Guatemala, Honduras, Nicaragua, El Salvador, Costa Rica, Belize and Panama)
C	**Implementing Agency:**
	UNEP
D	**Executing Agencies**
	Regional: Pan American Health Organization (PAHO) National: Institutions that are Focal points of the Program on Health and Environment in the Central American Isthmus (MASICA) and the Occupational and Environmental Aspects of Pesticides in the Central American Isthmus Project (PLAGSALUD)
E	**Project Funder (s)**
	PDF-B funding: (GEF, PAHO, Commission for Environmental Cooperation (CEC))
F	**Timeframe of the Project**
	12 Months (September 1999 – August 2000)
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.	
Data Source: Persistent Toxic Substances and UNEP, in the Global Environment Facility	

5A	**Title of the Project:**
	GEF PDF-B/WIO, Preparation of Transboundary Diagnostic Analysis (TDA) of the Western Indian Ocean (WIO) and related Strategic Action Programme

3. UN-ECE

A	**Title of the Project:**
	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

4. CEC-NAFTA

A	**Title of the Project:**
	North American Regional Action Plan on DDT, Chlordane, and PCB Regional Action Plans 1997, under the Sound Management of Chemicals Project, December 1996

5. OSPAR

A	**Title of the Project:**
	The 1992 OSPAR Convention, 1998: OSPAR Strategy with the regard to Hazardous Substances, 1999

6. WHO (EURO, ECEH) and WHO/IPCS

A	**Title of the Project:**
	Assessment of Exposure to dioxins and PCBs
B	**Objective of the Project and Geographical coverage :**
	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.
C	**Responsible Organization(s):**
	IPCS
D	**Partner (s)**
	FAO

F	**Timeframe of the project**
	1999-2000.

7. UNIDO

5A	**Title of the Project:**
	Regional Network on Safe Pesticide Production and Information
B	**Objective of the Project:**
	Promote safety in production and use of pesticides in order to protect farmers, producers, consumers and the environment in Afghanistan, Bangladesh, People's Republic of China, India, Indonesia, Iran, Republic of Korea, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Viet Nam
C	**Responsible Organisation(s)**
	UNIDO
E	**Project Funder(s)**
	UNDP, US$ 15,400,000
F	**Timeframe of the project**
	1993-1999

Comments:
Strategy: The Regional Network on Safe Pesticide Production and Information for Asia and Pacific (RENPAP) was established as a forum for industry, agriculture, health and labour interests in pesticides. Ten Technical Coordination Units were set up in China, India, Indonesia, Malaysia, Pakistan, the Philippines, Republic of Korea and Thailand. They organize workshops and provide training and services in specialized areas of pesticides such as data collection and dissemination, pesticide formulation technology, integrated safety, eco-toxicology and industrial hygiene for all 15 RENPAP member countries.
Results: 500 senior personnel from industry and government was trained in the scientific and managerial aspects of safer and cleaner pesticide production. 300,000 tonnes of hexachlorobenzene pesticides were eliminated from use in India since 1996. They represent 30 per cent of the country's total pesticide consumption. 30 per cent of chemical pesticides in India, Myanmar and Thailand have been substituted by a natural pesticide alternative derived from the neem tree. China's Huhan manufacturing company has become the second largest producer of bio-pesticides in the RENPAP region and is transferring technology to other countries such as Thailand. The number and quality of cleaner and user-friendly crop protection agents has increased, including bio-botanical pesticides.

Data Source: Internet: http://www.unido.org/doc/100449.htmls

Section 3. Country contributions: assessment and monitoring projects of POPs chemicals

The following countries reported not having any ongoing assessment and/or monitoring projects:

Albania, Algeria, Belarus, Benin, Brunei Darussalam, Bulgaria, Burkina Faso, China, Croatia, Denmark, Djibouti, Guinea, Greece, Jordan, Kuwait, Lithuania, Luxembourg, Macedonia, Madagascar, Malaysia, Mongolia, Paraguay, Rwanda, St. Kitts and Nevis, Seychelles, Syria, Ukraine, Uzbekistan, Vietnam, Western Samoa

1. Argentina

1A	**Title of the Main Assessment or Monitoring Project:**
	Contaminación de Plaguicidas Organoclorados en muestras de Leche Materna de mujeres de Santa Fé. (Organochlorine Pesticide Contamination in Human milk samples from women living in Santa Fé).
B	**Objective of the Project and Geographical Coverage:**
	Determinar la concentración de heptacloro, aldrin, DDE, gamma-HCH, alfa-HCH, HCB, endosulfan, clordano, dieldrin, endrin, DDT en leche materna e identificar fuentes probables de contaminación. El área de estudio fue la Provincia de Santa Fé.
C	**Responsible Organization(s):**
	Instituto de Tecnología para la Industria Química- INTEC. Universidad nacional del Litoral- UNL Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET)
D	**Partner (s)**
	Lenardón A.; Maitre M.J.; Lorenzatti E.; Enrique S.
E	**Project Funder (s)**
	UNL- Universidad del Litoral
F	**Timeframe of the Assessment /Monitoring project**
	1994- 1995.
Comments: El 66% de las muestras presentan residuos de plaguicidas. Los más frecuentemente detectados fueron Heptacloror, Endosulfan, Clordano y gamma_HCH. Las concentraciones más elevadass fueron de DDE, Endosulfan, Clordano y gamma-HCH. Otros compuestos, tales como HCB, alfa-HCH, Heptacloro, Aldrin, Dieldrin, Endrin, y DDT fueron detectados en menos del 20% de las muestras.	
Data Source: Proceedings 1° Jornadas Científicas sobre Medio Ambiente/ Asociación Universidades Grupo-Montevideo-PNUMA/ OrPALC (1995).	

2A	**Title of the Main Assessment or Monitoring Project:**
	Pesticidas Organoclorados y Organofosforados en el Río Paraná. (Organochlorine and Organophosphorous pesticides in the Paraná river).
B	**Objective of the Project and Geographical Coverage:**
	Establecer niveles, transporte, persistencia y dispersión de plaguicidas en agua y material suspendido. El área de estudio fue el Río Paraná a la altura del kilómetro 600, cercana a las ciudades de sabta Fé (pcia. De Santa Fé) y Paraná (Pcia. De Entre Ríos)
C	**Responsible Organization(s):**
	Instituto de Tecnología para la industria Química- INTEC. Universidad Nacional del Litoral- UNL Consejo Nacional de Investigaciones Científicas y Técnicas- CONICET
D	**Partner (s)**
	Lenardón A.; Levia M.I.M de; Fusé J.; Nochetto C.; Depetris P.
E	**Project Funder (s)**
	Universidad Nacional del Litoral- UNL Consejo Nacional de Investigaciones científicas y Técnicas- CONICET
F	**Timeframe of the Assessment /Monitoring project**
	1995- 1996
Comments: Los Plaguicidas estudiados son usados en la zona, presentan probada toxicidad y valores de Kow<6 (baja solubilidad en agua, persistencia y liposolubilidad). Los valores más elevados en agua corresponden al período verano/otoño, en material suspendido al período invierno/primavera, y en tejido graso en el período otoño/invierno. Los valores más altos correspondiron a heptacloro; heptacloro-epoxi; y alfa- y gamma- clordano. La relevencia, tanto trófica como comercial, en ríos de América del Sur el Sabalo ofrece la posibilidad de utilizarlo como especie "centinela" con referencia al posiblemovimiento y distribución de Plaguicidas en un ecosistema acuático.	
Data Source: Universidad Nacional dl Litoral.- UNL, Consejo de Investigaciones Científicas y Técnicas- CONICET	

3A	**Title of the Main Assessment or Monitoring Project:**
	Insecticidas organoclorados en Fauna Ictica perteneciente a la cuenca del Río Paraná.
B	**Objective of the Project and Geographical Coverage:**
	Estudiar los niveles de plaguicidas organoclorados en muestras de agua, material suspendido y tejido graso del Prochilodus lineatus (sábalo). Se analizaron heptacloro; heptacloro-epoxi; clordano alfa y gamma; dieldrin; DDE; DDT. Zona de estudio: Cuenca del Río Paraná, kilómetro 600, áreas cercanas a las ciudades de Santa Fé (Provincia de Santa Fé) y Paraná (Provincia de Entre Ríos)
C	**Responsible Organization(s):**
	Instituto de Tecnología para la Industria Química- INTEC. Universidad Nacional del Litoral- UNL Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET)

D	**Partner (s)**
	Lenardón A.; Maitre M.J.; Enrique S.
E	**Project Funder (s)**
	UNL- Universidad del Litoral
F	**Timeframe of the Assessment /Monitoring project**
	1982- 1984.
Comments: En general no se sobrepasan los límites establecidos a nivel internacional para agua cruda a fin de ser potabilizaa, pero las concentraciones detectadas pondrían en estado de alerta , respecto al desarrollo y conservación de la fauna íctica de la zona.	
Data Source: The Science of Total Environment p.289-297- 1984., Ciencia y Tecnología del Agua, vol.1, n°2, p14-20- 1987, Proceedings- First World Congress on Engineering and Environment- 1983.	

4A	**Title of the Main Assessment or Monitoring Project:**
	Hidrocarburos clorados en agua de mar y sedimentos de superficie de Bahía Blanca, Argentina
B	**Objective of the Project and Geographical Coverage:**
	Medición de la concentración de hidrocarburos clorados: alfa-BHC, lindano, heptacloro, gamma-BHC, aldrin, heptacloro-epoxi, dieldrin, o-p DDD, p-p DDD, o-p DDT y p-p DDT en agua de mar y sedimentos de superficie. Los estudios se realizaron en distintos puntos de monitoreo localizados en Bahía Blanca.
C	**Responsible Organization(s):**
	Aboratorio de Química Marina- Instituto Argentino de Ocenanografía (IADO)
D	**Partner (s)**
	Sericano J.L.; Pucci A.E.
E	**Project Funder (s)**
	Consejo Nacional de Investigaciones Científicas y técnicas (CONICET)
F	**Timeframe of the Assessment /Monitoring project**
	1980- 1981.
Comments: El estudio realizado mostró que en agua de mar se detectaron: alfa-BHC, lindano, heptacloro, gamma-BHC, aldrin, o-p DDT y p-p DDT. Mientras que en sedimentos se encontraron: alfa-BHC, lindano y heptacloro. Las concentraciones de dieldrin, heptacloro-epoxi, o-p DDD y p-p DDD estuvieron por debajo de los límites de detección. En la interfase agua–aire se detectaron 18 veces más compuestos organoclorados que en la zona más profunda /aproximadamente 12 m). Las concentraciones de lindano, heptacloro y gamma-BHC decrecen en aquellas muestras conteniendo pequeña cantidad de material particulado, y alfa-BHC y aldrin no presentaron cambios. No se encontró una correlación significativa entre las concentraciones de compuestos organoclorados y la cantidad de material orgánico particulado en las muestras de agua de mar.	
Data Source: Estuarine coastal and shelf science. Academic Press Inc. (London). Vol.19 (pág.27-51), 1984.	

5A	**Title of the Main Assessment or Monitoring Project:**
	Calidad de las aguas de la Franja Costera Sur del Río de la Plata.
B	**Objective of the Project and Geographical Coverage:**
	Realizar un diagnóstico actualizado de la calidad del agua, tanto en relación a los aportes costeros como al destino final de aquellas especies consideradas indicadoras de contaminación (física, química y biológica) que pudieran llegar a dificultar y/o impedir los usos legítimos del recurso agua, y en relación a los fenómenos meteológicos, hidrológicos y mareológicos. Entre los 47 parámetros analizados se determinaron los siguientes plaguicidas organoclorados: alfa, beta y gamma-HCH, aldrin, heptacloro epoxi, dieldrin, o-p'DDE, p-p'DDE, endrin, o-p'DDT, p-p'DDD y Mirex. El áerea de estudio fue la Franja Costera Sur del Río de la Plata, desde San Isidro hasta Magdalena (Pcia. De Buenos Aires).
C	**Responsible Organization(s):**
	Obras Sanitarias de la Pcia. De Buenos Aires (AGOSBA). Obras Sanitarias de la Nación (OSN). Servicio de Hidrografía Naval de la Armada Argentina (SIHN).
D	**Partner (s)**
	Personal científico-técnico de las instituciones mencionadas anteriormente.
E	**Project Funder (s)**
	Consejo Permanente para el Monitoreo de la Calidad de las aguas de la Franja Costera Sur del Río de la Plata.
F	**Timeframe of the Assessment /Monitoring project**
	Noviembre 1989- Junio 1990.
Comments: Con referencia a los plaguicidas organoclorados se efectuaron análisis de multiresiduos sobre muestras de agua no filtradas, y por lo tanto las concentraciones encontradas pueden ser vinculadas al tipo y cantidad de material en suspensión. Los plaguicidsa se agruparon en tres grupos: isómeros del HCH, clorodienos (aldrin, dieldrin, endrin, heptacloro y heptacloro epoxi) e isomeros del DDT, DDE y DDD. Durante el muestro de noviembre d 1989 no se encontraron aldrin, endrin, o-p'DDE ni Mirex, y en junio de 1990 no se detecto o-p'DDE, o-p'DDD, Mirex y endrin, peo si se detectaron aldrin y dieldrin. En la estación Riachuelo (a 500 y 1500m de la costa) se detectaron las mayores concentraciones del grupo DDT durante la campaña de Noviembre de 1989, y en la estación de Punta Colorada (a 500, 1500 y 3000m de la costa) se detectaron las mayores concentraciones del grupo DDT y clorodienos, durante la campaña de junio de 1990. Las concentraciones estuvieron en el orden de los ng/l.	
Data Source: Consejo Permanente para el Monitoreo de la Calidad de las Aguas de la Franja Costera Sur del Río de la Plata (1997)	

2. Armenia

A	**Title of the Main Assessment or Monitoring Project:**
	Exposure and meaasuring of POPs sources on the Territory of the Republic of Armenia and risks of impact on health and the environment.
B	**Objective of the Project and Geographical Coverage:**
	Identify POPs sources in industry, agriculture, to analyse POPs residues in soil samples, surface water (in the rivers Hrazdan, Sevdjur, Arpa, Kasakh), Lake Sevan, breast milk samples of rural population.
C	**Responsible Organization(s):**
	Ministry of Nature Protection of the Republic of Armenia, Department of Hazardous Substances and Waste Management
D	**Partner (s)**
	1- Scient. Research Institute of Environment, Hygiene and Preventive Toxicology. 2- Scient. Research Institute of General Hygiene and Occupational Diseases 3- Institute of Hydroecology and Ichthology 4- Plant Protection Research Institute 5- Soil Sciences and Agrochemistry Institute
E	**Project Funder (s)**
	UNEP chemicals
F	**Timeframe of the Assessment /Monitoring project**
	From December 1st, 1999 to April 1st, 2000.
Data source: Anahit Aleksandryan. Email: analeks@freenet.am. Tel: (3742)53 88 38 / Fax: (3742) 15 19 38.	

3. Austria

1A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of the soil condition.
B	**Objective of the Project and Geographical Coverage:**
	The federal province of Upper Austria carries out a very extensive monitoring of the soil condition. Samples of 280 locations were analyzed also for aldrin. Since recently the federal environment agency is building up a nation-wide soil condition survey.
Data Source: Soil condition Surveys, published by several federal provinces, basing on the provincial soil conservation regulations; upper Austrian Soil Condition Survey 1993; Landesverlag, Linz 1993.	

2A	**Title of the Main Assessment or Monitoring Project:**
	Periodic checking of groundwater.
B	**Objective of the Project and Geographical Coverage:**
	Check for residues of pesticides. Between 1991 and 1996, 3747 samples were analyzed for Aldrin and Dieldrin, 32 of them were found to be positive, but none of them contained more than 0,1 µg/l.
Data Source: Wassergüte in Österreich (Quality of the Austrian waters. Report 1996, Ministry of Agriculture and Forestry.	

3A	**Title of the Main Assessment or Monitoring Project:**
	Periodic checking of food for pesticides residues
B	**Objective of the Project and Geographical Coverage:**
	From 1985 to 1991, 482 samples of raw milk from all over Austria were analyzed for 17 pesticides and PCB.
Data Source: Federal Law Gazette n°747/1995 concerning maximum values of residues of pest control agents in and on food products. Internal compilation of food samples examinations 1996 by the Federal Ministry of Health and Consumer Protection Federal Law Gazette n°448/1991 concerning the content of pesticides in drinking water. K. Fuchs et al: Automatisiertes Monitoring der Rohmilch auf Rückstände an Schädlingsbekämpfungsmitteln (monitoring of untreated milk 1985-1991), Joanneum Research/Federal Ministry for Agriculture and Forestry, 1992. K. Fuchs: Pestiziddrückstände in Fleisch (Pesticide residues in Meat), Wiener Tierärztliche Monatsschrift, annual set 81/p.33-36/94.	

4. Australia

1A	**Title of the Main Assessment or Monitoring Project:**
	The quantity and Quality of Run-off to Darwin Harbour
B	**Objective of the Project and Geographical Coverage:**
	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) Geographical coverage: The Darwin Harbour Catchment
C	**Responsible Organization(s):**
	Northern Territory Department of Lands, Planning and Environment, Natural Resource Division
D	**Partner (s)**
	The Commonwealth Government
E	**Project Funder (s)**
	50% the Commonwealth Government 50% The NT Government
F	**Timeframe of the Assessment /Monitoring project**

	Monitoring took place over 1995/96 and 1996/97 wet seasons, final report due this year
Comments: Mirex has not been detected in water sediment compartments	
Data Source: Armando Padovan, Project leader, Personal Communication	

2A	**Title of the Main Assessment or Monitoring Project:**
	Characterization and estimation of Dioxin & Furan Emissions from Waste Incineration & Metal Processing Facilities
B	**Objective of the Project and Geographical Coverage:**
	To characterize waste incineration and metal processing facilities and to estimate dioxin/furan emissions, relying wherever possible on local data Geographical Coverage: National
C	**Responsible Organization(s):**
	Environment Australia (EA)
E	**Project Funder (s)**
	EA, Australian government
F	**Timeframe of the Assessment /Monitoring project**
	Covers last decade, in particular, although some earlier data is included, due to be completed, August 1999.
Comments: Relevant website: www.environment.gov.au/epg/chemicals.html	
Data Source: Publicly available test data, Contact Pamela Harris at pamela.harris@ea.gov.au	

3A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of PCBs in Australia
B	**Objective of the Project and Geographical Coverage:**
	To collate data that already exists (published and unpublished) on levels of PCBs in the Australian environment, and to identify gaps in current monitoring data collection. The report also makes recommendations for future monitoring reports. Coverage is of Australia, and in particular its foodshifts and breast milk of nursing mothers; sewage treatment plants; landfills and wildlife
C	**Responsible Organization(s):**
	The National Advisory Body on Scheduled Wastes. That body reports to ANZECC- the Australia and New Zealand Environment and Conservation Council, which comprises representatives of the NZ, Australian federal and Australian state and territory governments. The Secretariat for the National Advisory Body is located in EA
E	**Project Funder (s)**
	Waste Secretariat of EA
F	**Timeframe of the Assessment /Monitoring project**

	Conducted in 1998, reports data from sources generally published in 80's and 90's
Comments: Reports available at: http://www.environment.gov.au/epg/pubs/word/pcbman.doc	
Data Source: Various monitoring programmes run by state and federal agencies	

4A	**Title of the Main Assessment or Monitoring Project:**
	Report on Organo chlorine pesticide levels in Australia
B	**Objective of the Project and Geographical Coverage:**
	To report the data and identify gaps in data on levels of OCPs in the Australian environment. Covers air, coastal and inland waters, land, wildlife, foods, humans wastes Geographical coverage: Includes some limited coverage of Southern Ocean/ Antarctica
C	**Responsible Organization(s):**
	Prepared by Envirotest for EA, with some of the funding being contributed by Australian states and territories
E	**Project Funder (s)**
	Commonwealth of Australia, and the states and territories, through the Scheduled Waste Secretariat
F	**Timeframe of the Assessment /Monitoring project**
	This report collates historical and recent data (from the 60's to 1998)
Comments: This report is expected to be completed and published by August 1999	
Data Source: Various monitoring programs which have published their results.	

5A	**Title of the Main Assessment or Monitoring Project:**
	- Persistent Lipophilic Contaminants and other Chemical Residues in the Southern Hemisphere. Connell et al; to be published in Critical Review of Environmental Science and Technology, 1998. - Technical report relating to processes involved in the production and emission of dioxins and furans
Data source: these reports are available on the Environmental Australian Homepage under "International Chemicals" (www.environment.gov.au/ic.html#pops).	

5. Barbados, W.I.

A	**Title of the Main Assessment or Monitoring Project:**
	Pops Research Proposal: the Status of Persistent Organic Pollutants (POPs) in Barbados, W.I.
B	**Objective of the Project and Geographical Coverage:**
	To assess the status of POPs in Barbados. This would include an island-wide inventory of POPs stockpiles, as well as monitoring of air, soil and water habitats to quantify levels of POPs in the environment.

C	**Responsible Organization(s):**
	Ministry of the Environment, Energy and Natural resources, in collaboration with the University of the West Indies, Cave Hill Campus.
D	**Partner (s)**
	Ministry of the Environment, Energy and Natural resources, in collaboration with the University of the West Indies, Cave Hill Campus.
E	**Project Funder (s)**
	Currently seeking GEF funding.
F	**Timeframe of the Assessment /Monitoring project**
	Two years.
Comments: This project proposal was put together in preparation for POPs INC 2. Since that time, we have received notification of GEF PDF-B proposal "Persistent Toxic Substances- Country Case Studies" which will likely generate a generic set of assessment guidelines.	
Data Source: Ministry of Environment, Energy and Natural Resources.	

6. Belgium

1A	**Title of the Main Assessment or Monitoring Project:**
	For PCB' at regional level: implementation of European directive 96/59 on the disposal of PCB-PCT. For PCBs at the federal level: inventory of uncontrolled PCB-containing products. For Pesticides, there is information for surface water in annex 1. For dioxins and furans at regional level: deposition, emission (companies e.g. waste incineration, they are obliged to report (via annual emission report) when the emission is above certain level.
B	**Objective of the Project and Geographical Coverage:**
	For PCBs at regional level: phasing out on the base of two parameters: the concentration (50 PPM) and the volume (5 liters) of PCB (transformers, condensers,…) For PCBs at federal level: phasing out via action regulatory or voluntary agreements.
C	**Responsible Organization(s):**
	For PCBs at regional level: WALLOON REGION- DGRNE- Avenue Prince de Liège 15- 5100 JAMBES FLEMISH REGION- OVAM- Kan. DE deckerstraat 22-26- 28 MECHELEN BRUSSELS- IBGE- Guledelle 100- 1200 BRUXELLES For PCBs at federal level: Federal Department for Environment- CAE Vesalius Building- Pachcolaan 19 box 5- 1010 BRUSSELS
D	**Partner (s)**
	For PCBs at federal level: TAW CONSULTING- Leuvensesteenweg 542- 1930 ZAVENTEM
E	**Project Funder (s)**
	For PCBs at regional level: technical working groups For PCBs at federal level: Federal Department for Environment, Service Etudes et co-ordination.

F	**Timeframe of the Assessment /Monitoring project**
	For PCBs at regional level: end 1999 For PCBs at federal level: June 1999

7. Brazil

1A	**Title of the Main Assessment or Monitoring Project:**
	Malaria Control
B	**Objective of the Project and Geographical Coverage:**
	The main objective of this activity is to control contaminants in foodstuffs for consumption. Area of action: all the country.
C	**Responsible Organization(s):**
	Ministry of Health.
D	**Partner (s)**
	Local Governments.

8. Canada

1A	**Title of the Main Assessment or Monitoring Project**
	Assessments of Priority Substances under the *Canadian Environmental Protection Act* (CEPA)
B	**Objective of the Project and Geographical Coverage:**
	CEPA 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. Substances to be assessed are identified primarily through the work of multi-stakeholder Expert Advisory Panels. The first Priority Substances List was published in the Canada Gazette in February 1989 and contained 44 substances. Assessments of these substances were completed by February 1994, and are documented in the Canada Gazette and in individual assessment reports. In December 1995, 25 other substances were added to the PSL for assessment, and these are currently being assessed. The assessment and management of priority substances under CEPA occurs in two distinct phases. Scientists must first determine whether a substance is "toxic" as defined under Section 11 of CEPA. Under CEPA, 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 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 proposed for the global UNEP Pops Agreement, which have been assessed as toxic under CEPA PSL including: **hexachlorobenzene, polychlorinated dibenzodioxins and polychlorinated dibenzofurans**.
C	**Responsible Organization(s):**
	Environment Canada and Health Canada

F	**Timeframe of the Assessment /Monitoring project**
	ongoing
Data Source: http://www.ec.gc.ca/cceb1/eng/psap.htm - web site for PSL assessments	

2A	**Title of the Main Assessment or Monitoring Project:**
	Ecological Monitoring and Assessment Network (EMAN)
B	**Objective of the Project and Geographical Coverage:**
	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. 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.
C	**Responsible Organization(s):**
	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.

D	**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.
E	**Project Funder (s) for EMAN sites:**
	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.
F	**Timeframe of the Assessment /Monitoring project**
	Ongoing
Comments: The EMAN website is: www.cciw.ca/eman/	

3A	**Title of the Main Assessment or Monitoring Project:**
	The Great Lakes Binational Toxics Strategy (GLBTS)

B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Canada and the United States
D	**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.
	Timeframe of the Assessment /Monitoring project
F	Challenge milestones to be met between 1997 and 2006 with ongoing options for assessment and renewal.
Comments: The GLBTS website is: www.epa.gov/bns/	

4A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring under the Integrated Atmospheric Deposition Network (IADN)
B	**Objective of the Project and Geographical Coverage:**
	The Integrated Atmospheric Deposition Network (IADN) was established by the US and Canada for conducting air and precipitation monitoring in the Great Lakes Basin. IADN was established because it was recognized in the 1980's that atmospheric deposition plays a large role in determining the water quality of the Great Lakes. IADN was created as part of the 1987 amendments to the Great Lakes Water Quality Agreement through the adoption of Annex 15. The first implementation plan for IADN was signed by the two governments in 1990. In the early 1990's the Great Waters Program in the US provided further support for IADN and IADN has been written into US law [Section 112m] of the United States Clean Air Act. IADN consists of five Master Stations and 14 Satellite Stations designed to measure wet deposition and the air concentrations of gas and particulate organics and trace elements. IADN began operation at the Point Petre Master Station site in 1988 and full IADN operation was in place by early 1992. Many toxic substances are measured in air and precipitation at IADN sites. These include: • Banned pesticides such as DDT • • Combustion products such as benzo[a]pyrene, a commonly measured polycyclic aromatic hydrocarbon (PAH) • Industrial chemicals such as PCBs The need for information is constantly evolving, and substances that are proposed as additions to the regular IADN roster of chemicals include: • Toxaphene, an organochlorine pesticide • • Dioxins and furans • An expanded PAH list
C	**Responsible Organization(s):**
	Environment Canada
D	**Partner (s)**:
	Canada and the United States operate IADN through five cooperating agencies (Environment Canada's Atmospheric Environment Service, National Water Research Institute, Ecosystem Health Division of Ontario Region, the Ontario Ministry of Environment, and the U.S. Environmental Protection Agency).
F	**Timeframe of the Assessment /Monitoring project**
	Ongoing, First Implementation Plan of IADN - 1990-1996 Second Implementation Plan of IADN - 1998-2004
Comments: The IADN website is: airquality.tor.ec.gc.ca/IADN/	

5A	**Title of the Main Assessment or Monitoring Project:**		
	Northern Contaminants Program (NCP)		
B	**Objective of the Project and Geographical Coverage:**		
	The Northern Contaminants Program was initiated in 1991 to examine POPs and other contaminants in northern Canada focussing upon: (i) human health; (ii) ecosystem uptake and effects; (iii) sources, pathways, and fate; and (iv) education and communications. 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 narwhal), freshwater and anadromous fish, and terrestrial mammals. Another comprehensive assessment is planned for the Year 2002. The geographic focus of the NCP is the Yukon, Northwest Territories and Nunavut, and in some instances Northern Quebec and Labrador. The NCP comprises the Canadian implementation of the contaminant monitoring and assessment activities of the Arctic Monitoring and Assessment Programme (AMAP).		
C	**Responsible Organization(s):**		
	Northern Contaminants Program (Northern Science and Contaminants Research Directorate, Department of Indian Affairs and Northern Development)		
D	**Partner (s)**		
	Aboriginal Organizations Council of Yukon First Nation Dene Nation Inuit Circumpolar Conference Inuit Tapirisat of Canada Métis Nation - NWT	**Federal Govt. Departments** Environment Canada Fisheries and Oceans Health Canada	**Territorial Govt. Departments** GNWT Health & Social Services Board NWT Dept. of Resources, Wildlife & Economic Development Yukon Health & Social Services Board Yukon Environmental Protection & Assessment Branch
E	**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)		
F	**Timeframe of the Assessment /Monitoring project**		
	NCP Phase I: (completed) 1991-1997 NCP Phase II: (ongoing) 1998-2003		

6A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring under the National Pollutant Release Inventory (NPRI)
B	**Objective of the Project and Geographical Coverage:**
	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 their 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. The NPRI report currently provides information on 176 listed substances, specifically on their on-site 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. Seventy-three additional substances have been identified for inclusion on the NPRI starting in the 1999 reporting year. The NPRI does not currently list pesticides but they have not been specifically exempted from reporting. The NPRI initiative involves facilities from companies all across Canada. Although none of the substances proposed for the global UNEP POPs Agreement are currently reported under the NPRI, the NPRI Work Group on Substances (a multistakeholder committee) has recommended that Polychlorinated dibenzo-p-dioxins and Polychlorinated dibenzofurans, Hexachlorobenzene and Polycyclic Aromatic Hydrocarbons be added at lower reporting thresholds starting in the 2000 reporting year.
C	**Responsible Organization(s):**
	Environment Canada
F	**Timeframe of the Assessment /Monitoring project**
	April 1995 - Release of first summary report of the NPRI for the 1993 reporting year. Annual reporting is ongoing.
Comments: The NPRI website is: www.ec.gc.ca/pdb/npri/	

7A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring activities under the Residual Discharge Information System (RDIS)
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Environment Canada

8A	**Title of the Main Assessment or Monitoring Project:**
	Identification of POPs under the Toxic Substances Management Policy (TSMP)
B	**Objective of the Project and Geographical Coverage:**
	The federal Toxic Substances Management Policy puts forward a preventive 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 world community. The key management objectives are: virtual elimination from the environment of toxic substances that result predominantly from human activity and that are persistent and bioaccumulative (referred to in the policy as Track 1 substances); and 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 re-mediation 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 as meeting the criteria under Track 1 in July 1998, 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.
C	**Responsible Organization(s):**
	Government of Canada
D	**Partner (s)**
	Other Canadian Federal Government Departments
Data Source: http://www.ec.gc.ca/toxics/toxic1_e.html - web site with text of TSMP and http://www.ec.gc.ca/cceb1/eng/track1.htm - web site with the Scientific Justifications	

9A	**Title of the Main Assessment or Monitoring Project:**
	Assessments under the *Pest Control Products Act* (PCPA).
B	**Objective of the Project and Geographical Coverage:**
	The *Pest Control Products Act* (PCPA) and Regulations is the primary federal legislation for the regulation of pesticides in Canada and is 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 regulated under both federal and provincial/territorial legislation. At the provincial/territorial level, pest management and pesticide regulation are typically within the mandate of agriculture and/or environment departments. 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 proposed for the global UNEP POPs Agreement are regulated under the PCPA and are not currently registered for use in Canada.
C	**Responsible Organization(s):**
	Health Canada.
F	**Timeframe of the Assessment /Monitoring project**
	On going

10A	**Title of the Main Assessment or Monitoring Project:**
	The Sound Management of Chemicals (SMOC) initiative under the North American Agreement on Environmental Cooperation (NAAEC) - North American Regional Action Plans (NARAPs)
B	**Objective of the Project and Geographical Coverage:**
	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. 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 forums primarily because they are persistent, bioaccumulative and toxic and are transported across national boundaries through air and 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 next phase of the NARAP on mercury is to be completed in June 1999. Work on NARAP implementation has started or is in the process of starting. 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.
C	**Responsible Organization(s):**
	Canada, the United States and Mexico
F	**Timeframe of the Assessment /Monitoring project**
	On going
Comments: The NARAPs website is: www.cec.org	

11A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring under the Accelerated Reduction/Elimination of Toxics (ARET)
B	**Objective of the Project and Geographical Coverage:**
	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. Environmental Leaders 3 is the third progress report issued by the ARET Stakeholders Committee since the ARET challenge was launched in March 1994. An update to Environmental Leaders 2 was also issued in January 1998. Environmental Leaders 3 details the results of pollution prevention activities of 303 facilities from across Canada during 1997. These facilities, representing 162 companies and government organizations, are using ARET to publicly demonstrate their environmental responsibility. The ARET initiative involves facilities from companies all across Canada. There are three substances proposed for 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.
C	**Responsible Organization(s):**
	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). Environment Canada chairs the Stakeholders Committee and provides the secretariat functions.
F	**Timeframe of the Assessment /Monitoring project**
	1994 - PRESENT
Comments: The ARET website is located at: www.ec.gc.ca/aret	

12A	**Title of the Main Assessment or Monitoring Project:**
	Toxic Substances Research Initiative
B	**Objective of the Project and Geographical Coverage:**
	The Toxic Substances Research Initiative was designed to implement the commitment in Securing Our Future Together to enhance Canadian environmental and health science capacity by providing new funding for research on toxic substances for the fiscal years 1998-2002, inclusive. The objective of the TSRI is to enhance and accelerate the development of Canada's environmental and health science capacity needed to define and reduce the ecosystem and human health effects of toxic substances in the Canadian environment.

Priority knowledge needs contributing to this result in 1999/2000 were:

1. Determining and linking the ecosystem and human health effects of known and emerging issue POPs such as endosulfan; pentachlorophenol and pentachloranisole; short-chain chlorinated paraffins; triazines, chlordane and toxaphene.

2. Determining the degree to which domestic and international sources are contributing to observed levels of POPs in Canada.

3. Understanding the impacts of POPs on human health outcomes (e.g. fetal development, the relationship between POPs and cancer in children and Aboriginal peoples, etc.).

4. Determining and linking the ecosystem and human health effects of known and emerging issue POPs such as endosulfan; pentachlorophenol and pentachloranisole; short-chain chlorinated paraffins; triazines, chlordane and toxaphene.

5. Determining the degree to which domestic and international sources are contributing to observed levels of POPs in Canada.

6. Understanding the impacts of POPs on human health outcomes (e.g. fetal development, the relationship between POPs and cancer in children and Aboriginal peoples, etc.).

7. Developing the data necessary to determine ecosystem and human health risks associated with known priority POPs.

8. Determining the long-range transport characteristics of known and emerging POPs.

9. Completing the research needed for the development of new human tissue guidelines, blood guidelines, acceptable daily intakes, and health based advisories especially for at-risk populations such as children, pregnant women and Aboriginal peoples.

10. Identifying mechanisms of action for toxic effects seen in ecosystems and humans exposed to POPs where policy and/or regulatory decisions are required.

11. Improving understanding of pharmacokinetic and pharmacodynamic characteristics of POPs where regulatory decisions are required.

For the upcoming funding year (2000/2001) priority knowledge needs contributing to this result are more limited but strategically fill gaps in research areas from the 1999/2000 call for proposals. They are:

12. Developing the data necessary to determine ecosystem and human health risks associated with known priority POPs from domestic and international sources, particularly in relation to the development of new human tissue guidelines, blood guidelines, acceptable daily intakes, and health based advisories especially for at-risk populations such as children, pregnant women and Aboriginal peoples.

13. Developing approaches to study the transport of POPs, particularly in relation to determining the degree to which domestic and international sources are contributing to observed levels of POPs in Canada and, in the case of international sources, their countries of origin.

Seventeen POPs projects were funded this fiscal year ($2.32 Million). The following is a short synopsis of each project:

1999/2000 Persistent Organic Pollutants (POPs) Projects

TSRI #11Sources of Agrochemicals to the Atmosphere and Delivery to the Canadian Environment

This study will examine whether the continuing input of banned pesticides into the Canadian environment is due to recycling from existing contaminated soil and water, or due to atmospheric migration from use of these pesticides in countries other than Canada. The study will determine the source of airborne pesticides through surveying the agricultural soils in selected areas of Canada and the U.S. This project will provide a better understanding of where airborne pesticides some from and how they are transported to Canadian ecosystems.

TSRI #20Food Chain Bioaccumulation of Phthalate Esters

Phthalate esters are widely used in the manufacture of plastics and other polymers and the information available to date is inconclusive with respect to bioaccumulation. This study will utilize a combination of field studies involving west coast marine food chains and laboratory studies to investigate the ability of phthalate esters to accumulate in ecological food chains.

TSRI #27Characterizing the Origin and LRT Behaviour of POPs in Canada Using Passive Samplers

TSRI #31Modeling the Sustainable Use of Organic Chemicals in a Healthy Continental Environment

This study will develop and integrate mass balance models to describe the sources and behaviour of contaminants in the North American environment. Additional process-specific models will be developed to assess a variety of chemicals, including POPs for their potential for persistence, long-range transport, bioaccumulation tendencies, and human exposure.

TSRI #:46 Validation of an Amphibian Model to Assess the Effects of Persistent Organic Pollutants on Amphibian Physiology

This study will assess the use of amphibians as bioindicators of the environmental effects of POPs. This will be measured through a combination of field studies of native wild amphibians in the St. Lawrence River region and laboratory exposures of lab-reared amphibians and amphibian cell lines.

TSRI #:121 Multiple Stressors: Effects on Native Amphibian Species of Forested Environments

This project combines field and laboratory studies. The field studies will monitor the water quality and biological characteristics of wetlands in forested areas to determine the biology of wild native amphibians. The laboratory exposure studies will use native wetland amphibian species to determine the ecological effects of selected herbicides on these species.

TSRI #:152 Effects of In Utero Exposure to Persistent Organic Pollutants on Development and Reproduction

This study will examine the fetal, gonadal and reproductive development in the offspring of rats exposed to environmentally-relevant mixtures of POPs, which will reflect the mixtures found in some fish and game consumed by Aboriginal peoples. This study will also include an examination of the gonads and thyroid function of the exposed adult rats. The data will be used to analyze the risks of maternal exposure to a mixture of POPs on the development, reproduction, and thyroid function of humans.

TSRI #157 Risk Assessment for Hexachlorobenzene: Mechanism of Gender Related Rat Tumour Promotion

The objective of this study is to examine why female rats exposed to this POP of emerging interest have a greater susceptibility to the development of liver tumors than exposed male rats.

TSRI #200 Occurrence, Fate, and Effects of Fluorinated Surfactants in the Canadian Environment

The objective of this study is to examine the environmental concentrations, distribution, toxicology and fate of fluorinated surfactants. These compounds have been observed in human blood but have, to date, received limited research attention They are used in a variety of industrial and consumer applications.

TSRI #206 Sources, Long Range Transport and Impacts of New and Old POPs Inferred from Dated Lake Core Sediments

This study will extract information on current and past inputs of known and emerging POPs through collecting sediment cores from lakes along a north-south transect from southeastern-Ontario to Ellesmere Island in the Arctic and along an east west transect from Ontario to New Brunswick. This data will be applied to understand the extent of long range transport of POPs in North America, and their extent of degradation in water sediments, through POPs fate and distribution models.

IRST #207 Toxaphene in the Marine Ecosystem of the Saint Lawrence River; State of Contamination, Ecotoxicology and Human Health

This study will utilize a combination of field studies to evaluate the levels of toxaphene contamination of the organisms and sediments of the St. Lawrence River system. Laboratory studies will expose the St. Lawrence estuary fish and human cell cultures to toxaphene, to allow a better evaluation of the risks to fish and human health from the presence of toxaphene in this system.

	TSRI #217 Assessment of Contaminants in Beluga Whales' and Polar Bears' Reproductive Systems This study will draw on the traditional knowledge of the northern peoples including local hunters and trappers regarding the abnormalities in these important wildlife species. A comprehensive survey among the elders of the northern aboriginal communities will compile knowledge of the previous and current abnormalities occurring in this type of wildlife. TSRI #224 Factors Influencing Domestic and International Sources of Chlorinated Hydrocarbons to Fish and Osprey in British Columbia This study will examine the toxin levels and accumulation in fish from high alpine lakes in British Columbia and the transfer of organochlorines to osprey, which have recently been recognized as having significant exposure to these chemicals because of their migratory patterns. Comparisons will be made to levels in lakes and fish in osprey wintering areas in Central America. TSRI #236 Biomagnification of POPs and Mercury in Canadian Freshwater Subsistence Fisheries and Food Webs This study will examine the levels of new and emerging POPs and mercury in top predator fishes in lake systems with subsistence fisheries. The areas of study will span from northern Alberta to Labrador areas, which have previously received less attention than the Great Lakes and the Arctic lake systems. TSRI #237 Impact of Polybrominated Diphenyl Ethers on the Canadian Environment and Health of Canadians This study will examine mother's milk, foods, bird eggs, native fish and marine mammals for the presence of these emerging POPs. Historical trends in environmental concentrations and their potential toxic effects on growth levels in the environment and in humans will also be examined. TSRI #239 Follow-up of Preschool Aged Children Exposed to PCBs and MeHg Through Fish Consumption This study will follow-up on previously conducted studies of the measurement of PCBs and MeHg in cord blood at birth among Nunavik Inuit mothers. The long-term consequences of exposure to these contaminants will be examined through a comparison of neuromotor and neurophysiological performance among children of low and high PCB exposure. TSRI #245 Reproductive/Developmental Effects of an Environmentally Relevant Organochlorine Mixture The first part of this study will use pigs to examine the possible effects of these contaminants on the male reproduction system, which may be induced by exposure during pregnancy and early life to a mixture of environmental pollutants. These pollutants are similar to those found in Arctic food chains and in the blood of people consuming Arctic sea mammals. The second part of the study will involve laboratory testing of these environmentally-relevant contaminant mixtures through the use of laboratory cultures of mammalian cells, sperm, oocytes and embryos.
C	**Responsible Organization(s):**
	Health Canada, Environment Canada
D	**Partner (s)**
	Department of Fisheries and Oceans, Agriculture and Agri-Foods Canada, Natural Resources Canada, Indian and Northern Affairs Canada, National Research Council, Universities.
E	**Project Funder (s)**
	Health Canada

	Timeframe of the Assessment/Monitoring Project
	April 1, 1998 - March 31, 2002
Comments: The TSRI website is: http://www.hc-sc.gc.ca/tsri	

13A	**Title of the Main Assessment or Monitoring Project:**
	Management/control of Dioxins/Furans and Hexachlorobenzene releases, from identified priority sectors
B	**Objective of the Project and Geographical Coverage:**

	• Dioxins/Furans and Hexachlorobenzene have been identified as toxic under the Canadian Environmental Protection Act (CEPA) and have been assessed for virtual elimination under the federal Toxic Substances Management Policy (TSMP1).
	• Toxic substances that meet specific criteria for persistence and bioaccumulation and are predominantly resulting from human activity are categorized as Track 1 substances, i.e.: those that have a long term objective of virtual elimination from the environment.
	• The most recent inventory2 report of sources of releases of Dioxins/Furans and Hexachlorobenzene has identified priority sectors, that need to be addressed in Canada.
	• Under a Harmonization Accord between the federal government and the provinces, Canada-Wide Standards are currently being developed for the following priority sectors for Dioxins/Furans:
	  • Teepee burners (solid waste)
	  • Residential Wood Combustion
	  • Iron sintering and Steel manufacturing sector
	  • Municipal incineration
	  • Combustion of Salt Laden Wood

C	**Responsible Organization(s):**
	Canadian Council of Ministers of the Environment (CCME). Note: The Canada-Wide Standards3 (CWS) are expected to be presented to Ministers in spring 2000
D	**Partner (s)**
	• Stakeholders including industry, environmental groups and governments are participating in priority sectors working groups 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 sectors.
E	**Project Funder (s)**
	• For the development of the Canada-Wide Standards, all stakeholders are contributing time and or money, with the major contribution coming from the federal government.
	Timeframe of the Assessment/Monitoring Project
	• The Canada-Wide Standards are expected to be submitted to Ministers for their approval in spring 2000.
Comments: 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.	

Data Source:

1 Toxic Substances Management Policy : http://www.ec.gc.ca/toxics/toxic1_e.html

2 Dioxins and Furans Inventory Report: http://www.ec.gc.ca/dioxin/english/index.htm

3 Canada-Wide Standards for Dioxins and Furans:

http://www.ccme.ca/3e_priorities/3ea_harmonization/3ea2_cws/3ea2e_priorities/3ea2e2_dioxins/update.html

4 Additional Information: http://www.ccme.ca/3e_priorities/3ea_harmonization/3ea2_cws/3ea2.html

14A	**Title of the Main Assessment or Monitoring Project:**
	Historical International PCB-Laden Products exported to Canada and subsequent waste generation in Canada.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Environment Canada
E	**Project Funder (s)**
	Environment Canada
F	**Timeframe of the Assessment /Monitoring project**
	February, 2000. Subsequent protocol to be completed later in 2000 (Fall).

15A	**Title of the Main Assessment or Monitoring Project:**
	Develop Level of Quantification (LOQ) for PCBs in stack emissions
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Environment Canada
E	**Project Funder (s)**
	Environment Canada
F	**Timeframe of the Assessment /Monitoring project**
	To be completed by March, 2000.
16A	**Title of the Main Assessment or Monitoring Project:**

	Historical uses of PCBs in Products Made and Waste Generated in North America.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Environment Canada
E	**Project Funder (s)**
	Environment Canada
F	**Timeframe of the Assessment /Monitoring project**
	February, 2000. Subsequent Protocol to be completed in Fall of 2000

17A	**Title of the Main Assessment or Monitoring Project:**
	Long term health effects of neonatal exposure to breast milk contaminants, using the female rat as animal model.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Health Canada, Environmental and Occupational Toxicology Division
D	**Partner (s)**
	1) Health Canada 2) University of Ottawa, The Loeb Research Institute 3) University of Québec, INRS-Santé/IAF
E	**Project Funder (s)**
	1) Health Canada 2) Toxic Substances Research Initiative (TSRI)

F	**Timeframe of the Assessment /Monitoring project**
	March 2002 (end of TSRI).

18A	**Title of the Main Assessment or Monitoring Project:**
	Ongoing evaluation of POPs and Heavy metals in Canada's Northern Peoples
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Health Canada, Departments of Health and Social Services in the Northwest Territories, Nunavut, and Nunavik.
D	**Partner (s)**
	Health agencies in Northwest Territories, Nunavut, Nunavik, Yukon, Centre for Indigenous Peoples Nutrition and Environment at McGill University
E	**Project Funder (s)**
	Multiple agencies.
F	**Timeframe of the Assessment /Monitoring project**
	Ongoing.

9. Chile

Data source: Comisión Nacional del Medio Ambiente (CONAMA)

A	**Title of the Main Assessment or Monitoring Project:**
	Diagnóstico Nacional de Contaminantes Orgánicos Persistentes: Etapa I: Diagnóstico de PCBs en Región Metropolitana y II Región Etapa II: Diagnóstico Nacional de los 12 Contaminantes Orgánicos Persistentes
B	**Objective of the Project and Geographical Coverage:**
	Etapa I: Realizar un catastro de las fuentes y almacenamientos de PCBs en la Región Metropolitana y II Región del país. Etapa II: Realizar un catastro de las fuentes y almacenamientos de Contaminantes Orgánicos Persistentes e ntodo el país.
C	**Responsible Organization(s):**
	Comisión Nacional del Medio Ambiente, CONAMA
D	**Partner (s)**

	Comisión Nacional del Medio Ambiente, Región Metropolitana. Ministerio de la Salud, Servicio de Salud Metropolitano del Ambiente Ministerio de Agricultura, Servicio Agrícola y Ganadero
E	**Project Funder (s)**
	Comisión Nacional del Medio Ambiente, CONAMA
F	**Timeframe of the Assessment /Monitoring project**
	Etapa I: 4 meses Etapa II: 12 meses

10. Congo

A	**Title of the Main Assessment or Monitoring Project:**
	Projet: Inventaire de Polluants Organiques Persistants au Congo
B	**Objective of the Project and Geographical Coverage:**
	Mise en place d'un recueil de données statistiques des différents POPs (pesticides, fongicides, herbicides,…) utilisés au Congo.
C	**Responsible Organization(s):**
	Ministère chargé de l'Environnement
D	**Partner (s)**
	Nous sommes à la recherche de partenaires pour le financement du projet.
E	**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.
F	**Timeframe of the Assessment /Monitoring project**
	Est assujetti à l'obtention de cette aide financière.
Comments: Nous n'avons pas encore obtenu de financement. Nous avons néanmoins introduit une requête au sein de l'Union européenne pour obtenir un financement.	
Data Source: Michel Kouka-Mapengo	

11. Costa Rica

1A	**Title of the Main Assessment or Monitoring Project:**
	Desarollo e Implementación de un Sistema de Vigilancia de las Intoxicaciones con Plaguicidas. Experiencia en Costa Rica.
B	**Objective of the Project and Geographical Coverage:**
	El objetivo del presente plan es evaluar y monitorear los casos de intoxicaciones por plaguicidas en Costa Rica.
C	**Responsible Organization(s):**
	Ministerio de Salud.
D	**Partner (s)**

	MASICA (OPS).
E	**Project Funder (s)**
	MASICA (OPS).
F	**Timeframe of the Assessment /Monitoring project**
	Indefinido.
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.	
Data Source: Literatura adjunta.	

2A	**Title of the Main Project:**
	Control de Intoxicaciones por Plaguicidas
B	**Objective of the Project and Geographical Coverage:**
	Costa Rica
C	**Responsible Organization(s):**
	Dr. Rogelio Pardo Evans, Ministro de Salud
D	**Partner (s)**
	MASICA
E	**Project Funder (s)**
	(Dr. Roberto Castro Grobbo) Departamento de Sustancias Toxicas y Indicina del Trabajo
F	**Timeframe of the Assessment /Monitoring project**
	5 años
Comments: En el oficio no se consideró este proyecto ni un proyecto de control de todo producion chimicas	
Data Source: Direción Protección al Ambiente Humano.	

12. Cuba

Data Source: G. Dierksmeier, Instituto de Sanidad Vegetal, Ministerio de la Agricultura, CUBA

A	**Title of the Main Assessment or Monitoring Project:**
	1- Estudio sobre la contaminación por plaguicidas y medidas para su control en la Ciénaga de Zapata y su zona costera. 2- Distribución, destino y efectos de plaguicidas en el biota ambiente Tropical-marino. Utilisación de radiotracers.
B	**Objective of the Project and Geographical Coverage:**
	1- Evaluar los niveles de plaguicidas persistentes en sedimento y biota en los canales de drenaje de la arrocera de Amarillas, en la Ciénaga de Zapata, sur de la Provincia de Matanzas, Cuba. 2- Monitorear durante tres años los niveles de plaguicidaas persistentes y PCBs en sedimento y biota costeras al sur de la arrocera de los Palacios en Pinar del Río, Cuba con vistas a restringir y manejar adecuadamente los plaguicidas mencionados, tratando de reducir el impacto ambiental.
C	**Responsible Organization(s):**
	Instituto de investigaciones de sanidad vegetal, Ministerio de la Agricultura.
D	**Partner (s)**
	Instituto de Investigaciones del Transporte y COMARNA.
E	**Project Funder (s)**
	1- Estudio piloto sobre plaguicidas CEPPOL, financiado por UNEP-RCU, Jamaica 2- Estudio Internacional financiado por IAEA (Vienna) y el SIDA de Suecia.
F	**Timeframe of the Assessment /Monitoring project**
	1- 1994-1996 2- 1996-1998

13. Cyprus

1A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of the Xenobiotics in the Food Chains, Research Project, Ministry of the environment 1995-1998.

14. Czech Republic

5A	**Title of the Main Project:**
	Monitoring of Pops Chemicals in Breast Milk & Assessment of Related Health Risk for Breast Fed Children
B	**Objective of the Project and Geographical Coverage:**
	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.

C	**Responsible Organization(s):**
	Institute of Hygiene & Epidemiology First Faculty of Medicine Charles University of Prague CZ 12800 PRAHA2 , VODICKOVA 7 CZECH REPUBLIC
D	**Partner (s)**
	Axis Varilab s.r.o. CZ 252 46 VRANE n/VLTAVOU, VLTAVSKA 13 CZECH REPUBLIC
E	**Project Funder (s)**
	Ministry of Environment of the Czech Republic
F	**Timeframe of the Assessment /Monitoring project**
	3 year project 1999-2001
Comments: 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.	
Data Source: Principal researcher of the project.	
2A	**Title of the Main Project:**
	Environmental Way into common Europe
B	**Objective of the Project and Geographical Coverage:**
	Increase the environmental awareness
C	**Responsible Organization(s):**
	Agentura GAIA Lublaviska' 18 120 00 PRAHA 2
D	**Partner (s)**
	Schools, journalists, state institutions
E	**Project Funder (s)**
	NROS Foundation (PHARE) Ministry of Foreign Affairs

F	**Timeframe of the Assessment /Monitoring project**
	1.9.1999 – 30.6.2000
Comments: The goal of our project is to teach causes of all EARTH problems. Is DNA the solution?	
Data Source: UNEP, UNIDO, Diverse Women for Diversity, A SEED, IPEN	

15. Ecuador

1A	Title of the Main Assessment or Monitoring Project:
	Implementación del Regimen Nacional para la Gestión de Productos químios peligrosos.
B	Objective of the Project and Geographical Coverage:
	Ambito- Nacional - Incrementar la seguridad química en el país sin obstaculizar el desarollo de las actividades productivas. - Controlar la importación, formulación, fabricación, transporte, almacenamiento, comercialización, utilización y disposición final de los productos químicos peligrosos. - Disponer de un registro actualizado de los productos químicos (en este régimen están incluidos los POPs)
C	Responsible Organization(s):
	Ministerio del Ambiente
D	Partner (s)
	Ministerio de Salud Ministerio de Agricultura, Ganadería.
E	Project Funder (s)
	El estado a través del apoyo logístico y el trabajo de profesionales del área.
F	Timeframe of the Assessment /Monitoring project
	Permanente
Comments: - El Régimen con sus actividades contempla a los POPs. - El cumplimiento de los objetivos con el financiamiento del estado será a muy largo plazo. - Es importante la asistencia técnica internacional para obtener un resultado eficiente.	

Data Source:

Secretaría técnica del Comité nacional de Productos Químicos Peligrosos

Ministerio del Ambiente

Av. Amazonas y Eloy Alfaro

Edif. MAG, piso 8

FAX: (593-2) 565-809

Email: lba@inefan.gov.ec/ lsuarez@inefan.gov.ec

16. Ethiopia

1A	**Title of the Main Assessment or Monitoring Project:**
	Preparation of National Profile on the Management of Chemicals.
B	**Objective of the Project and Geographical Coverage:**
	To assess national infrastructures for the management of chemicals. Geographical coverage in country-wide.
C	**Responsible Organization(s):**
	Environmental Protection Authority.
D	**Partner (s)**
	Experts from various institutions organized under national committee.
E	**Project Funder (s)**
	The Royal Netherlands Embassy.
F	**Timeframe of the Assessment /Monitoring project**
	12 months for preparation of national profile. The project is expected to terminate at the end of August 1999.

17. Fiji

1A	**Title of the Main Assessment or Monitoring Project:**
	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
B	**Objective of the Project and Geographical Coverage:**
	Management of chemicals in order to eliminate the threat posed by toxic chemicals (agricultural/industrial) towards the environment and human health.
C	**Responsible Organization(s):**
	Department of Environment, MAFF, Ministry of Health (Pharmacy)
D	**Partner (s)**
	SPREP. Looking for potential partners for setting up a proper assessment and monitoring of Pesticide residues and other toxic chemicals.
E	**Project Funder (s)**
	Government of Fiji; AUSAID
F	**Timeframe of the Assessment /Monitoring project**
	4- 5 years. For new projects, it depends on securing the funds.
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.	
Data Source: Project papers submitted to donors.	

18. Finland

1A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of PCBs in fish Northern pike (Esox lucius, L.), roach (Rutilus rutilus, L.) and vendace (Coregonus albula, L.) in inland waters and from Northern pike cod (Cadus morhua, L.) and Baltic herring (Clupea Harengus, L.) in the coastal areas since the end of the 1970's. Since the 1980's coastal monitoring has included Baltic mussel (Macoma baltica) and isoped crustacean (Mysis relicta). The reduction of the PCBs loading is generally observed as decreasing concentrations in environmental indicator species. The decreasing trend of PCB concentrations is also detected in marine environment.

2A	**Title of the Main Assessment or Monitoring Project:**
	Safety and nutritional quality of Finnish food (See Annex 1).
B	**Objective of the Project and Geographical Coverage:**
	The aim of the project was to obtain the most accurate picture of the contaminant levels of various Finnish foods.
C	**Responsible Organization(s):**
	Agricultural Research Centre of Finland; Food Research / Chemistry Laboratory. FIN-31600 JOKIOINEN
D	**Partner (s)**
	Ministry of Agriculture and Forestry; Finnish Food Industry.
E	**Project Funder (s)**
	Ministry of Agriculture and Forestry; Finnish Food Industry; Agricultural Research centre of Finland.
F	**Timeframe of the Assessment /Monitoring project**
	Two projects under the same general topic: One project began 1990/1991 and finished in 1995 and the other began in 1995/1996 and it is still going on.

3A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of bioaccumulating compounds (Chlordane; HCB; DDT; PCBs) in the aquatic environment.
B	**Objective of the Project and Geographical Coverage:**
	To study the levels and trends of bioaccumulating compounds in the aquatic environment (mainly in animals).
C	**Responsible Organization(s):**
	Finnish Environmental Institute (FEI).
E	**Project Funder (s)**
	FEI
F	**Timeframe of the Assessment /Monitoring project**
	1978- (in every third year)

4A	**Title of the Main Assessment or Monitoring Project:**
	Determination of organohalogen compounds from the foodstuffs of animal origin (meat, milk, egg, fish)

B	**Objective of the Project and Geographical Coverage:**
	The objective is to monitor the levels of residues in food of animal origin. Samples are collected all over Finland.
C	**Responsible Organization(s):**
	National Veterinary and Food Research Institute; P.O.Box 368 (Hämeentie 57); 00231 Helsinki, Finland.
E	**Project Funder (s)**
	Finnish government.
F	**Timeframe of the Assessment /Monitoring project**
	The national residue monitoring programme is carried out annually according to our national legislation and to the legislation of the European Community.

5A	**Title of the Main Assessment or Monitoring Project:**
	Effects of environmental toxicants on reproduction of Baltic salmon (the M74 syndrome)
B	**Objective of the Project and Geographical Coverage:**
	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 bee collected from the Arctic R. Tenojoki.
C	**Responsible Organization(s):**
	Finnish Game and Fisheries Research Institute; P.O.Box 6; FIN-00721 Helsinki/ Finland
D	**Partner (s)**
	National Public Health Institute (in Kuopio); Department of Chemistry; University of Jyväskylä.
E	**Project Funder (s)**
	Finnish Game and Fisheries Research Institute Ministry of Agriculture and Forestry Academy of Finland, Nordic Council of Ministers.
F	**Timeframe of the Assessment /Monitoring project**
	1982.
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.	
Data Source: Scientific publications.	

19. France

1A	**Title of the Main Assessment or Monitoring Project:**
	Mesure des concentrations de dioxines dans le lait maternel: campagne nationale. Mesure des concentrations de dioxines dans les produits laitiers et produits laitiers transformés.
B	**Objective of the Project and Geographical Coverage:**
	Objectif: compléter les travaux déjà menés sur ce thème en France.
C	**Responsible Organization(s):**
	Ministère de l'Environnement et de l'Aménagement du territoire, et l'ADEME Ministère de l'Agriculture, de la Pêche et de l'Alimentation.
Data Source: Site internet: www.environnement.gouv.fr	

2A	**Title of the Main Assessment or Monitoring Project:**
	Circulaire du 30 mai 1997: Mesures de dioxines à l'émission des usines d'incinération d'ordures ménagères de plus de 6tonnes/heures, 71 sites concernés. Circulaire du 7 novembre 1997: Mesures des émissions de dioxines sur l'ensemble des gros émetteurs de la sidérurgie et de la métallurgie: 80 sites concernés. Circulaire du 12 mai 1998: Mesures des émissions de dioxines dans le domaine de la papeterie, 10 sites concernés. Aide financière pour la réduction des émissions de dioxines des usines d'incinération d'ordures ménagères existantes.
C	**Responsible Organization(s):**
	Ministère de l'Environnement et de l'Aménagement du territoire, ADEME
Data Source: L'ensemble des résultats des mesures sont disponibles sur le site internet du Ministéere de l'Environnemnt: www.environnement.gouv.fr	

3A	**Title of the Main Assessment or Monitoring Project:**
	Réseau National de Bassin (RNB) Réseaux des eaux souterraines Réseaux des Agences de l'Eau.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	6 Agences de l'Eau françaises. Ministère de l'Environnement et de l'Aménagement de Territoire.
Comments: Ces réseaux existent depuis de nombreuses années, les mesures sont réalisées périodiquement. Réseaux pérennes.	
Data Source: Sites internet: www.eau_rhin-meuse.fr / www.rnde.tm.fr / www.rdb.eaurmc.fr / www.eau-artois-picardie.fr	

20. The Gambia

1A	**Title of the Main Project:**
	1) Case Study on Inventory of PCBs 2) A mission on the Preliminary Inventory of Hazardous Wastes (including POPS) in Gambia
B	**Objective of the Project and Geographical Coverage:**
	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. Geographical coverage for both projects: Countrywide.
C	**Responsible Organization(s):**
	National Environment Agency
D	**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.
E	**Project Funder (s)**
	1) UNEP Chemicals 2) Basel Secretariat
F	**Timeframe of the Assessment /Monitoring project**

	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.
Data Source: National Environment Agency, 5 Fitzgerald St., PMB. 48, Banjul Tel: (220) 228056/224867/224868. Fax: (220) 229701. E-mail: nea@gamtel.gm	

21. Germany

1A	**Title of the Main Assessment or Monitoring Project:**
	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)
B	**Objective of the Project and Geographical Coverage:**
	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 generally very low and mostly in the range of the detection limit (0,02ng/l). Yearly publications of the Input-Groups of HELCOM and OSPAR. PCB congeners 18; 26; 28; 44; 52; 101; 118; 138; 149; 153; 170; 180.

2A	**Title of the Main Assessment or Monitoring Project:**
	Surface water: "Emission monitoring" Water Resources management in Germany- Responsible organism: Federal Ministry for the environment, Nature Conservation and Nuclear Safety (BMU), Bonn, February 1998. The following Pesticides POPs are included: Aldrin; Dieldrin; Endrin; Heptachlor; DDT (*) and Hexachlorobenzene. (*) Due to the ban, measured concentrations of these 5 pesticides decreased significantly and the quality criteria for surface waters are fulfilled. Therefore, the substances have already been excluded from some of the monitoring programmes. Hazard Ranking of Substances Relevant for the aquatic Environment for 1993/94- Herrchen et al., UBA-Text 41/97, Berlin 1997. The following pesticides POPs are included: Aldrin; Dieldrin; Endrin; heptachlor; DDT and Hexachlorobenzene.

22. Ghana

1A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of pesticides in cocoa beans.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**

	Ghana cocoa board (quality control division).
D	**Partner (s)**
	University of Ghana, Legon, Accra.
E	**Project Funder (s)**
	Ghana cocoa board.
F	**Timeframe of the Assessment /Monitoring project**
	1987-2001
Comments: 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.	

2A	**Title of the Main Assessment or Monitoring Project:**
	Evaluation of Dieldrin under treated foundation of building.
B	**Objective of the Project and Geographical Coverage:**
	To determine residual Dieldrin in the soil, about 25 years after treatment. To determine whether there has been movement through the soil into the intermediate environment of the building.
C	**Responsible Organization(s):**
	Chemistry department, University of Science and Technology.
D	**Partner (s)**
	Building and Road research Institute.
E	**Project Funder (s)**
	Chemistry department, University of Science and Technology.
F	**Timeframe of the Assessment /Monitoring project**
	One year

3A	**Title of the Main Assessment or Monitoring Project:**
	Persistence of pesticides (lindane and endosulfan) and their effects on maize growth in two soil ecosystems.
B	**Objective of the Project and Geographical Coverage:**

	To determine the physical, chemical and biological properties of soil which could influence the degradation of lindane and endosulfan in the forest and savanna ecosystems. To study the persistence of lindane and endosulfan in two soils. To investigate the effect of rate of application on total bacterial population in soils. To assess possible phytotoxic effects of lindane and endosulfan growth of the maize as affected by application rate.
C	**Responsible Organization(s):**
	Department of Soil Sciences, Department of Chemistry and Ecological Laboratory, University of Ghana and Botany Department, University of Ghana.
D	**Partner (s)**
	University of Copenhagen.
E	**Project Funder (s)**
	Ecological Laboratory (University of Ghana/ University of Copenhagen, Danida).
F	**Timeframe of the Assessment /Monitoring project**
	Two years.
Comments: The work provided a basic approach in monitoring the environmental impact of chlorinated insecticides in Ghanaian soils. The pesticides did not persist much in tropical soils as compared to what pertains in the temperate climates.	

4A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of pesticides.
B	**Objective of the Project and Geographical Coverage:**
	To review current usage patterns of pesticides. To identify and quantify levels of organochlorines residues in environmental samples. Locations: Akomadan- Ashanti Region (tomato growing area), Cocoa Growing areas of Ashanti and eastern regions of Ghana, Lower Volta Basin and some lagoons in the western region.
C	**Responsible Organization(s):**
	Water Research Institute (CSIR) University of Ghana.
D	**Partner (s)**
	Water research Institute University of Ghana.
E	**Project Funder (s)**
	Government of Ghana.
F	**Timeframe of the Assessment /Monitoring project**
	1998-2005

Comments: 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.

5A	**Title of the Main Assessment or Monitoring Project:**
	Validation of TLC methodology for screening pesticide residues and application of the methodology to pesticide residue analysis in some agro-ecosystems.
B	**Objective of the Project and Geographical Coverage:**
	To investigate the possibility of applying TLC detection in combination with the recently introduced micro-extraction and clean-up method for providing an alternative cost effective analytical procedure for screening pesticide residues in selected commodities and some agro-ecosystems (New Tafo and Amasaman)
C	**Responsible Organization(s):**
	Ghana Atomic Energy Commission.
D	**Partner (s)**
	University of Ghana (Department of Chemistry)
E	**Project Funder (s)**
	International Atomic Energy (IAEA)
F	**Timeframe of the Assessment /Monitoring project**
	One year.

6A	**Title of the Main Assessment or Monitoring Project:**
	Residues of Lindane and Endosulfan in water and fish samples from rivers, farms in Besease, Agogo and Akomadan in the Ashanti region of Ghana.
B	**Objective of the Project and Geographical Coverage:**
	Studies on the effects of organochlorine pesticide residues in water, fish in the forest zone of Ghana, as part of joint FAO/IAEA coordinated research programme on “adverse effects on flora and fauna from the use of organochlorine pesticides on the African continent.
C	**Responsible Organization(s):**
	Department of Chemistry, University of Science and Technology, Kumasi- Ghana.
D	**Partner (s)**
	Joint FAO/ IAEA Division.
E	**Project Funder (s)**
	International Atomic Energy (IAEA)
F	**Timeframe of the Assessment /Monitoring project**

	1990-1995
Comments: Residues of Lindane and Endosulfan were found in water and fish. Lindane residues varied between the years and months in the year but were in the range of 0.3- 15 ng/l (1993-94) and 87- 32 ng/l (1995)	
Data Source: Organochlorine insecticides in African agroecosystems. IAEA- TECDOC- 931 IAEA March 1997.	

23. Hungary

1A	**Title of the Main Assessment or Monitoring Project:**
	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.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(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.
D	**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.
E	**Project Funder (s)**
	National Environmental health action Programme.
F	**Timeframe of the Assessment /Monitoring project**
	1999-2002. Annual.
Comments: Hungary has no actual programme on pesticides, as preparations are banned.	
Data Source: Fodor József National Centre for Public health and its Institutes, Ministry of Environmental Protection, Ministry of Agriculture and Regional Development.	

24. Iceland

1A	**Title of the Main Project:**
	National Assessment and Monitoring Programme
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Environmental and Food Agency of Iceland
D	**Partner (s)**
	Marine Research Institute University of Iceland, department of Pharmacology The Icelandic Fisheries Laboratories The Icelandic Meteorological office
E	**Project Funder (s)**
	Governmental funding
F	**Timeframe of the Assessment /Monitoring project**
	Ongoing monitoring with periodic assessment every three to five years.

2A	**Title of the Main Project:**
	Contaminants in fish products and the marine ecosystem
B	**Objective of the Project and Geographical Coverage:**
	To obtain information on, and assess the levels of organic and inorganic contaminants in the marine environment with particular emphasis on the requirements of the fishery industries.
C	**Responsible Organization(s):**
	The Icelandic Ministry of Fisheries
D	**Partner (s)**
	Marine Research Institute, The Icelandic Fisheries Laboratories and industry representatives.
E	**Project Funder (s)**
	The Icelandic Ministry of Fisheries
F	**Timeframe of the Assessment /Monitoring project**

	Initial phase: 1999 – 2000

3A	**Title of the Main Project:**
	Development of organochlorine pollution in Iceland
B	**Objective of the Project and Geographical Coverage:**
	To assess time trends in organochlorine pollution in Black Guillemots caught between 1975 and 1995, in Breiðafjörður Iceland.
C	**Responsible Organization(s):**
	Dept. of Pharmacol. Toxicol., University of Iceland and Icelandic Inst. Nat. History
D	**Partner (s)**
	Marine Research Institute, The Icelandic Fisheries Laboratories and industry representatives.
E	**Project Funder (s)**
	Icelandic Science Fund
F	**Timeframe of the Assessment /Monitoring project**
	1999 - 2001

4A	**Title of the Main Project:**
	The effect of organochlorines on the fertility of Icelandic males
B	**Objective of the Project and Geographical Coverage:**
	To find relationships between xenoestrogens and the fertility of men in Iceland.
C	**Responsible Organization(s):**
	Dept. of Pharmacol. Toxicol., University of Iceland and The fertility clinic of the National Hospital, Reykjavík.
E	**Project Funder (s)**
	University of Iceland Science fund
F	**Timeframe of the Assessment /Monitoring project**
	1999 –

5A	**Title of the Main Project:**
	PCB contamination at dumpsites in Iceland
B	**Objective of the Project and Geographical Coverage:**
	To assess local PCB leakage from 4 different dumpsites in Iceland
C	**Responsible Organization(s):**
	Dept. Pharmacol.Toxicol., Univ. Iceland and Icelandic Inst. Nat History.
E	**Project Funder (s)**
	Ministry for the environment
F	**Timeframe of the Assessment /Monitoring project**
	1999 - 2000

6A	**Title of the Main Project:**
	Persistent organochlorines in air and precipitation
B	**Objective of the Project and Geographical Coverage:**
	To monitor organochlorine transport to Vestmannaeyjar, Iceland
C	**Responsible Organization(s):**
	Dept. Pharmacol.Toxicol., Univ. Iceland and The Icelandic meterological Inst.
E	**Project Funder (s)**
	Ministry for the environment
F	**Timeframe of the Assessment /Monitoring project**
	1995 - ongoing

7A	**Title of the Main Project:**
	Persistent organochlorines in prey species of the Icelandic gyrfalcon.
B	**Objective of the Project and Geographical Coverage:**
	To elucidate the route of organochlorine contaminants to the gyrfalcon in Iceland.
C	**Responsible Organization(s):**
	Dept. Pharmacol.Toxicol., Univ. Iceland and Icelandic Inst. Nat. History

E	**Project Funder (s)**
	University of Iceland Science fund, Icelandic Science Fund, The ministry for the environment.
F	**Timeframe of the Assessment /Monitoring project**
	1996 - 1998

8A	**Title of the Main Project:**
	Seasonal fluctuations in organochlorine levels in the eider duck in Iceland
B	**Objective of the Project and Geographical Coverage:**
	To assess seasonal changes in organochlorine levels in the eider duck, caugt at 4 different times in 1993. Álftanes, Iceland
C	**Responsible Organization(s):**
	Dept. Pharmacol.Toxicol., Univ. Iceland and Inst. Exp. Pathol., Keldur, Univ. Iceland
E	**Project Funder (s)**
	University of Iceland Science fund and the Ministry for the environment
F	**Timeframe of the Assessment /Monitoring project**
	1993 - 1995

9A	**Title of the Main Project:**
	Persistent organochlorines in reindeers in Iceland.
B	**Objective of the Project and Geographical Coverage:**
	To monitor organochlorine levels in reindeers. East Iceland.
C	**Responsible Organization(s):**
	Dept. Pharmacol.Toxicol., Univ. Iceland
E	**Project Funder (s)**
	Ministry for the environment.
F	**Timeframe of the Assessment /Monitoring project**
	1998

25. Indonesia

Comments: Residue level of POPs in the environment are occasionally detected by researchers and not by routine monitoring activities.

26. Ireland

1A	**Title of the Main Assessment or Monitoring Project:**
	"Dioxins in the Irish environment" an assessment based on levels in cow's milk. This survey was carried out in 1985 and the report was published in 1996.
B	**Objective of the Project and Geographical Coverage:**
	A Nation-wide study on dioxins based on levels found in cow's milk. A total of 32 samples were taken in the grazing season which was representative of the entire country.
C	**Responsible Organization(s):**
	Environmental Protection Agency, P.O.Box 3000, Johnstown Castle, Co.Wexford.
E	**Project Funder (s)**
	Environmental Protection Agency.
F	**Timeframe of the Assessment /Monitoring project**
	The timeframe for the project was one month. It is intended to repeat the project at five-year intervals. As the levels found were very low, it is felt that an interval of this duration is acceptable.
Comments: In addition to the national survey, a number of companies with a "Dioxin potential" have undertaken local dioxin milk surveys. While some of these surveys were undertaken on a voluntary basis, others were part of Integrated Pollution Control Licensed Conditions.	

27. Italy

1A	**Title of the Main Project:**
	Feasibility study on reduction of atmospheric emission of PCDD/F, PAH and HCB from industrial sources.
B	**Objective of the Project and Geographical Coverage:**
	Evaluation of emissions of Dioxins and Furans from selected metal working plants and determination of Country-specific emission factors, North-Italy
C	**Responsible Organization(s):**
	ENEA (National Agency for New Technology, Energy and Environment)
D	**Partner (s)**
	Associazione Industriali Bresciana

E	**Project Funder (s)**
	Ministry of Environment
F	**Timeframe of the Assessment /Monitoring project**
	Three year project – Monitoring programme starting in 2000.

2A	**Title of the Main Project:**
	Evaluation of the PCB and Dioxin levels in the Venice Lagoon and of the related environmental and health risk
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Instituto Superiore di Sanita (National Public Health Research Institute), Viale Regina Elena 299-00161, Rome
D	**Partner (s)**
	Ministry of Environment
E	**Project Funder (s)**
	Instituto Superiore di Sanita & Ministry of Environment
F	**Timeframe of the Assessment /Monitoring project**
	Three year project

3A	**Title of the Main Project:**
	Monitoring of the PCB and Dioxin levels in food stuffs.
B	**Objective of the Project and Geographical Coverage:**
	Characterization of the exposure of population associated to the PCB and dioxin intake.
C	**Responsible Organization(s):**
	Instituto Superiore di Sanita (National Public Health Research Institute), Viale Regina Elena 299-00161, Rome
D	**Partner (s)**
	Ministry of Health
E	**Project Funder (s)**
	Instituto Superiore di Sanita & Ministry of Health

F	**Timeframe of the Assessment /Monitoring project**
	Endless.

28. Japan

1A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of hazardous air pollutants (dioxins and furans are included)
B	**Objective of the Project and Geographical Coverage:**
	To grasp the state of air pollution by hazardous chemicals including dioxins, furans, volatile organic compounds, aldehydes, heavy metal compounds and polycyclic aromatic hydrocarbons in big cities, middle-sized cities, rural areas etc. chosen from the whole country**.**
C	**Responsible Organization(s):**
	Environment Agency**.**
E	**Project Funder (s)**
	Environment Agency**.**
F	**Timeframe of the Assessment /Monitoring project**
	1986 - continuing

2A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of hazardous water pollutants (PCBs are included)
B	**Objective of the Project and Geographical Coverage:**
	To grasp the state of public water pollution by hazardous chemicals including PCBs at a number of monitoring points throughout the country**.**
C	**Responsible Organization(s):**
	Environment Agency, Local governments**.**
D	**Partner (s)**
	Local governments**.**
E	**Project Funder (s)**
	Local governments (partly funded by the Environment Agency).
F	**Timeframe of the Assessment /Monitoring project**
	1974 – continuing**.**

3A	**Title of the Main Assessment or Monitoring Project:**
	Surveillance of Persistent Chemicals in the Environment
B	**Objective of the Project and Geographical Coverage:**
	To grasp the state of persistent chemicals concentration in the air, surface water, sediment and aquatic life throughout the country.
C	**Responsible Organization(s):**
	Environment Agency**.**
D	**Partner (s)**
	Local governments.
E	**Project Funder (s)**
	Environment Agency.
F	**Timeframe of the Assessment /Monitoring project**
	1985 – continuing.

4A	**Title of the Main Assessment or Monitoring Project:**
	Urgent and Comprehensive Environmental Monitoring of Dioxins, etc.
B	**Objective of the Project and Geographical Coverage:**
	To grasp the state of air, surface water, underground water, sediments, land and aquatic life pollution by dioxins, furans and co-planer PCBs throughout the country.
C	**Responsible Organization(s):**
	Environment Agency.
E	**Project Funder (s)**
	Environment Agency.
F	**Timeframe of the Assessment /Monitoring project**
	1998-1999

5A	**Title of the Main Assessment or Monitoring Project:**
	Source Monitoring of Dioxins, etc. Water Quality Monitoring for Public Waters (POPs are PCBs) Environmental Survey and Wildlife Monitoring of Chemicals Environmental Monitoring of Dioxins and Furans.
B	**Objective of the Project and Geographical Coverage:**

	To grasp the state of dioxins, furans and co-planer PCBs concentrations in the emission gas and water discharge from the facilities known to release these substances into the environment
C	**Responsible Organization(s):**
	Environment Agency.
E	**Project Funder (s)**
	Environment Agency.
F	**Timeframe of the Assessment /Monitoring project**
	1998-1999

6A	**Title of the Main Assessment or Monitoring Project:**
	Surveillance of the amount of dioxins and furans emitted from waste incinerators.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Ministry of Health and Welfare.
E	**Project Funder (s)**
	Ministry of Health and Welfare.
F	**Timeframe of the Assessment /Monitoring project**
	Each year from 1997.

7A	**Title of the Main Assessment or Monitoring Project:**
	Fishermen's Oceanic and Atmospheric Monitoring.
B	**Objective of the Project and Geographical Coverage:**
	In order to conserve the marine ecosystem, a series of surveys was conducted over the world major ocean. For this purpose, Japanese fishing boats collected air and sea samples for grasping the distributions of substances like organochloride compounds, plastic particles and so on.
C	**Responsible Organization(s):**
	Fisheries Agency of Japan.
D	**Partner (s)**
	Japan Marine Fishery resources Research Centre.

E	**Project Funder (s)**
	Fisheries Agency of Japan.
F	**Timeframe of the Assessment /Monitoring project**
	1992-1996.

8A	**Title of the Main Project:**
	Pollutant Release and Transfer Register (Requirement of reporting for the amount of releases to the environment of chemical substances)
B	**Objective of the Project and Geographical Coverage:**
	To grasp the state of quantities of chemical substances both released to the environment and transferred in the waste in the whole country.
C	**Responsible Organization(s):**
	Environment Agency Ministry of International Trade and Industry
D	**Partner (s)**
	Local governments Other ministries / Agencies
E	**Project Funder (s)**
	Environment Agency Ministry of International Trade and Industry
F	**Timeframe of the Assessment /Monitoring project**
	The Law was promulgated in July 1999. Report will be submitted each year from 2002.
Comments: 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. At the moment, chemical substances subject to the system are being selected. It is assumed that all of 12 POPs will not be included.	

29. Kazakhstan

1A	**Title of the Main Project:**
	" Identification and Hygienic Assessment of Dioxins Distribution"
B	**Objective of the Project and Geographical Coverage:**
	Objective of the project: Dioxins pollution control and prevention / Geographical Coverage: Territory of the Republic of Kazakhstan

C	**Responsible Organization(s):**
	Institute of Chemical Sciences of the Republic of the Kazakhstan
D	**Partner (s)**
	Republican Station of Sanitary and Epidemic, Ministry of Natural Resources and Environmental Protection of the Republic of Kazakhstan
E	**Project Funder (s)**
	State Budget funds
F	**Timeframe of the Assessment /Monitoring project**
	3 Years
Comments: Work on the project was started in August 1997, but was stopped in October 1997 due to absence of state budget funds.	

30. Republic of Korea

1A	**Title of the Main Assessment or Monitoring Project:**
	Preliminary Environmental survey on POPs (1998).
B	**Objective of the Project and Geographical Coverage:**
	Objectives: To establish analytical techniques that can be employed in future monitoring of POPs residual levels in various environmental media. To conduct case study on POPs residues in water, soil, food, sediment and fish. Geographical coverage:- Sampling was conducted based on the existing water and soil monitoring sites in Korea.
C	**Responsible Organization(s):**
	Ministry of Environment, National Institute of Environmental Research
D	**Partner (s)**
	Korea Food and Drug Administration, Korea Institute of Science and Technology, National Institute of Agricultural Science and Technology, Korea Ocean Research and Development Institute, Korea Research Institute of Chemical Technology, Jeonbuk National University and the Yosu University
E	**Project Funder (s)**
	National institute of Environmental Research
F	**Timeframe of the Assessment /Monitoring project**
	Concluded in 1998
Comments: The final report will be available in 1999	

2A	**Title of the Main Assessment or Monitoring Project:**
	National Research Project on Endocrine Disrupters including POPs (1999-2008)

B	**Objective of the Project and Geographical Coverage:**
	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. Geographical coverage; - Republic of Korea.
C	**Responsible Organization(s):**
	Ministry of Environment and the National Institute of Environmental Research
D	**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
E	**Project Funder (s)**
	Government
F	**Timeframe of the Assessment /Monitoring project**
	The detailed timeframe will be finalized in 1999.
Data Source: The draft medium and long term plan on EDs (1999-2008) (prepared by Ministry of Environment.	

3A	**Title of the Main Assessment or Monitoring Project:**
	Preliminary Environmental survey on POPs (1998) monitoring of POPs in the coastal area of Korea.
B	**Objective of the Project and Geographical Coverage:**
	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. Geographical coverage - coastal areas of Korea between 125 00 00 W and 132 00 00 W, 27 50 00 N and 33 87 00 N.
C	**Responsible Organization(s):**
	Korea Ocean research and Development Institute (KORDI)
D	**Partner (s)**
	Cheju National University and the Seoul National University

E	**Project Funder (s)**
	Ministry of Maritime Affairs and Fisheries (MOMAF) and the Republic of Korea
F	**Timeframe of the Assessment /Monitoring project**
	April- December 1999 (1st Year) Monitoring of POPs in bivalves and sediment Histopathology of bivalves January- December 2000 (2nd Year) Monitoring of POPs in fish, bivalves and sediment Intensive survey of POPs in the polluted areas Histopathology of bivalves and fish After January 2001 Same as 2nd Year.
Comments: Target POPs are UNEP designated 12 POPs, PAHs, other organochlorine pesticides and organotins.	
Data Source: Report will be published at the end of each year by KORDI.	
4A	**Title of the Main Project:**
	National Marine Environment Monitoring
B	**Objective of the Project and Geographical Coverage:**
	1. 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. 2. Geographical Coverage: Korean coastal areas (66 sites)
C	**Responsible Organization(s):**
	National Fisheries Research & Development Institute
D	**Partner (s)**
	- East Sea Regional Fisheries Research Institute - West Sea Regional Fisheries Research Institute - South Sea Regional Fisheries Research Institute
E	**Project Funder (s)**
	- Ministry of Maritime Affairs & Fisheries (MOMAF) - Republic of Korea
F	**Timeframe of the Assessment /Monitoring project**

	- Annual survey for POPs (1997 ~) - February – April: Field survey - May – September: Analysis - October – December: Preparation of Report
Comments: PCB is being studied. Additionally, PAHs and organochlorine pesticides will be studied starting in 2000. (Korean coastal areas: 20 sites.)	

31. Lao People's Democratic Republic

A	**Title of the Main Assessment or Monitoring Project:**
	POPs chemical survey and data collection within Lao P.D.R.
B	**Objective of the Project and Geographical Coverage:**
	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
C	**Responsible Organization(s):**
	Science Technology and Environment Agency.
D	**Partner (s)**
	- Science Technology and Environment Agency - Ministry of Agriculture and Forestry - Ministry of Industry and Handicraft - Ministry of Trade - Ministry of Health
E	**Project Funder (s)**
	Will be asking from UNEP Chemicals
F	**Timeframe of the Assessment /Monitoring project**
	Duration 2 months. From Beginning of May to the end of June 2000.
Comments: This project is the first priority of persistent organic pollutants activities in Lao PDR. We would be grateful for your positive consideration in supporting this project.	

32. Latvia

1A	**Title of the Main Assessment or Monitoring Project:**
	Stable Organic Pollutants in Latvia.

B	**Objective of the Project and Geographical Coverage:**
	Identification of main sources of POPs chemicals in Latvia. To frame plan for reduction of pollution of POPs chemicals.
C	**Responsible Organization(s):**
	University of Latvia.
D	**Partner (s)**
	Environmental State Inspectorate.
E	**Project Funder (s)**
	Environmental Protection fund of Latvia.
F	**Timeframe of the Assessment /Monitoring project**
	01.01.99- 01.07.99

33. Lebanon

1A	**Title of the Main Assessment or Monitoring Project:**
	Addressing Dioxins in Solid Matrices in some suspected Industries.
B	**Objective of the Project and Geographical Coverage:**
	getting statistical data to adopt future remedial actions (randon sample of 10 suspected industries covering the most critical Industrial areas in the country)
C	**Responsible Organization(s):**
	Ministry of Environment
E	**Project Funder (s)**
	UNEP
F	**Timeframe of the Assessment /Monitoring project**
	For technical reasons, we faced some delay in finishing the study. However, we expect to be done by the end of October 1999.
Data Source: Ministry of Environment.	

34. Malaysia

1A	**Title of the Main Project:**
	Nil
Comments:	
However, a minor project entitled The Development of National Programme to Control POPs was initiated by the Department of Environment. The study was carried out by consultants from the National University of Malaysia and was funded by the Government. This small study was intended to assess the status of POPs in a few selected areas of the country.	

35. Mexico

1A	**Title of the Main Project:**
	Monitoreo para determinar la presencia de dioxinas y dibenzofuranos, en la empresa Agricultura Nacional de Veracruz S.A. (ANAVERSA) y en la zona aledaña, producidas por la explosión de una planta de pesticidas de la misma empresa en 1991, en el que se perdieron las siguientes cantidades de las sustancias a continuación citadas: *Paratión de Metilo 80%: 1,700 Kg. *Paratión de Metilo 50%: 15,140 L. *Acido 2,4-D: 1,525 Kg. *2,4-D 40%: 1,180 L. *Paraquat: 11,000 L.
B	**Objective of the Project and Geographical Coverage:**
	Determinar la concentración de dioxinas y dibenzofuranos, 6 años después de la explosión de la planta de pesticidas de ANAVERSA, en Córdoba, Veracruz, México
C	**Responsible Organization(s):**
	SECRETARÍA DE SALUD DEL GOBIERNO FEDERAL: Dirección General de Salud Ambiental y Dirección de Control Sanitario de Riesgos Ambientales.
D	**Partner (s)**
	Laboratiorio Midwest Research Institute realizó el monitoreo, con la posterior respectiva interpretación de la Agencia de Protección al Ambiente de Estados Unidos de Norteamérica.
E	**Project Funder (s)**
	SECRETARÍA DE SALUD DEL GOBIERNO FEDERAL.
F	**Timeframe of the Assessment /Monitoring project**

	Del 26 al 28 de agosto de 1997. Actualmente aún se llevan a cabo monitoreos en la zona del inmueble y zona aledaña. NOTA: La presente solicitud de UNEP arrivó a DASSUR aproximadamente hace un mes, por lo que por falta de tiempo nos es imposible rendirles la información más actual. DASSUR está solicitando por los medios legales establecidos, información sobre los últimos monitoreos del caso ANAVERSA, por lo que dicha información nos será enviada en un mes aproximadamente . Si la información resultare de su interés, podremos proporcionárselas.

Comments:

La SECRETARÍA DE SALUD DEL GOBIERNO FEDERAL determinó que el riesgo fue mínimo, ya que ninguna de las muestras, a excepción de una, rebasó los niveles de acción recomendados por la USEPA. Por lo anterior la SECRETARÍA DE SALUD DEL GOBIERNO FEDERAL declaró, que no era necesario llevar acabo medidas de remediación, sin embargo si se dictaron medidas de remediación, ya que el reporte de la muestra de suelo dentro del inmueble rebasa el máximo permisible por la USEPA para el caso de que se pretenda utilizar el predio con fines residenciales o habitacionales.

Las medidas de remediación dictadas consisten en lo siguiente: descontaminación de muros a base de baño a presión con arena, para remover la capa superficial de dicho sitio, aplicando posteriormente pintura base aceite con vinílica, lavado del piso del inmueble a bajo volúmen de agua a presión.

A pesar de la declaración como reporte final del monitoreo por parte de la SECRETARÍA DE SALUD DEL GOBIERNO FEDERAL, sabemos que el inmueble ANAVERSA y la zona aledaña no se encuentran completamente limpios, ya que al tratarse de grandes cantidades de plaguicidas y por lo tanto gran producción de dioxinas, sabemos que permanecerán en el ambiente por varios años, por no sufrir procesos normales de degradación.

NOTA: Actualmente en DASSUR nos encontramos trabajando e investigando en materia de POPs, por lo que es de nuestro interés seguir participando con ustedes en cualquier proyecto referente al tema.

Data Source:

Procuraduría Federal de Protección al Ambiente.

36. Federated States of Micronesia

1A	**Title of the Main Assessment or Monitoring Project:**
	The SPREP Persistent Organic Pollutants Project helped assess the chemicals that are currently stockpiled in the four States comprising the FSM.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(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.
D	**Partner (s)**
	South Pacific Regional Environmental Programme (SPREP).

E	**Project Funder (s)**
	AusAid.
F	**Timeframe of the Assessment /Monitoring project**
	Phase 2 was meant to start September last year.
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.	
Data Source: FSM POPs Survey document finalized in 1999.	

37. Nepal

1A	**Title of the Main Project:**
	Case study report about POPs in use in agriculture and industry in Nepal
B	**Objective of the Project and Geographical Coverage:**
	(a) Identify POPs in use throughout Nepal (b) To document use patterns and quantities (c) Evaluate needs for future works, awareness raising, health and environmental pollution evaluation, actions needed at national level for reduction and elimination of these problems
C	**Responsible Organization(s):**
	Nepal Bureau of Standards and Metrology Balaju, Kathmandu, Nepal. Fax: 977-1-350-689 Email: nbsm@ccsl.com.np
D	**Partner (s)**
	Pesticide Registrar Pesticide Registration Office Plant Protection Division Dept. of Agriculture
E	**Project Funder (s)**
	UNEP
F	**Timeframe of the Assessment /Monitoring project**
	Six months from date of commencement
Comments:	

Survey has already been completed and the draft report of the survey has been submitted to UNEP chemicals
Data Source: **NBSM's Field Survey (door to door)** **(Case Study Report on POPs in use in Nepal)**

38. New Zealand

1A	**Title of the Main Project:**
	NZ Organochlorines Programme
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Ministry for the Environment in association with other relevant Government Departments
E	**Project Funder (s)**
	NZ Government
F	**Timeframe of the Assessment /Monitoring project**
	1999 -

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

Data Source: refer

- "A strategy for Managing PCBs, Ministry for the Environment, June1988;
- "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

39. Nicaragua

1A	**Title of the Main Assessment or Monitoring Project:**
	Estudios de contaminación (Mrex)Cuencas Hídricas por plaguicidas y estudio sobre la contamincaión 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 resulatados finales, solamente informes técnicos preliminares. Los estudios están siendo financiados por un aporte del Banco Mundial al Gobierno de Nicaragua. PROMAP/MARENA **Fuente de datos:** Información sacada de los cuestionarios.

40. Niger

1A	**Title of the Main Assessment or Monitoring Project:**
	Coordination technique interministérielle chargée des polluants organiques persistants au Niger.
B	**Objective of the Project and Geographical Coverage:**
	Surveillance et gestion rationnelle des produits chimiques et des POPs en particulier sur l'ensemble de la République du Niger.
C	**Responsible Organization(s):**
	Service législation et Règlementation phytosanitaire. Direction de la Protection des Végétaux MAG/EL- BP 323 Niamey- NIGER.
D	**Partner (s)**
	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.
E	**Project Funder (s)**
	Service de législation et de Règlementation phytosanitaire. Direstion de la Protection des Végétaux.
F	**Timeframe of the Assessment /Monitoring project**
	5 ans renouvelables.
Comments:	
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.	
Data Source: Niamey, le 19/10/1999.	

41. Norway

1A	**Title of the Main Assessment or Monitoring Project:**
	Joint Assessment and Monitoring Programme in Norway- Contaminants
B	**Objective of the Project and Geographical Coverage:**

	Monitoring and assessment of trends and spatial distribution of contaminants in sediments and biota along the whole Norwegian coast.
C	**Responsible Organization(s):**
	Norwegian Pollution Control Authority (SFT), PO Box, 8100, N0032, Oslo, Norway
D	**Partner (s)**
	Norwegian Institute for Water Research, PO Box 173, Kjelsås, N0411, Oslo, Norway
E	**Project Funder (s)**
	Norwegian State (SFT)
F	**Timeframe of the Assessment /Monitoring project**
	Monitoring each year (biota), every 10 years (sediments) , the Assessment biota every 5 years

2A	**Title of the Main Project:**
	Arctic Monitoring and Assessment Programme – Norwegian Implementation Plan
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Norwegian Pollution Control Authority (SFT) P.O. Box 8100 Dep., N-0032 OSLO,Norway
D	**Partner (s)**
	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 Agency, Oslo
E	**Project Funder (s)**
	Norwegain government – SFT
F	**Timeframe of the Assessment /Monitoring project**
	Monitoring each year. Status report on POPs in 2002, next in 2006.

3A	**Title of the Main Project:**
	Annual report on direct and riverine inputs to Norwegian coastal waters (OSPAR-RIO)
B	**Objective of the Project and Geographical Coverage:**
	Assess waterborne inputs to the maritime area of the OSPAR Convention
C	**Responsible Organization(s):**
	Norwegian Pollution Control Authority P.O. Box 8100 Dep. N-0032 Oslo, Norway
D	**Partner (s)**
	Norsk Vannteknologis Seuteras P.O. Box 6875 Rodeløkka N-0504 Oslo
E	**Project Funder (s)**
	Norwegian Pollution Control Authority
F	**Timeframe of the Assessment /Monitoring project**
	Long term monitoring- Annual reports
Comments: Includes selected metals, gamma HCH, PCB (until 1999), nutrients, and organic material.	

42. Panama

1A	**Title of the Main Assessment or Monitoring Project:**
	Determinación de la actividad eritocítica y macrofágica ocasionada por DDT. Control de Calidad de Alimentos presumiblemente contaminados por COPs. Evaluación de riesgo de exposición a COPs en áreas específicas. Estudios de la actividad disruptora endocrina y su asociasión a los COPs. Establecer doe estaciones de monitoreo en Aguadulce, David, Volcán, Cerro Punta, Chiltré, Santiago, Penonomé por que están lejos del mar que monitoree las concentraciones de contaminantes emitidos o descargados específicos en tiempo exacto y por lugar de ocurrencia con el equipamiento de cromatógrafos de gases específicos para la determinación de los Plaguicidas COPs con detecdores Kit Fid Yipc 1HPLC otros orgánicos que tenga una bomba cuaternaria en vegetales, en alimentos, preferiblemente de las marcas acreditadas y conocidas en nuestro país. Capacitación de los inspectores técnicos de saneamiento ambiental e inspectores antivectoriales a nivel regional con relación a la vigilancia de los COPs en 9 Regiones de Salud del país. Auditoría de los desechos o residuos de PCBs procedentes de transformadores, interruptores y capacitadores eléctricos así como de los fluídos hidráulicos. Equipamiento de instrumentos analíticos de monitoreo. Equipamiento de equipo de protección personal completo para los trabajadores capacitados en el manejo y el monitoreo de PCBs en las subestaciones hidroélectricas. Auditoría Ambiental de la estructura de almacén o depósito (Centro de Acopio del IRHE en Río Hato). Aplicar métodos alternos de destrucción o de biodegradación controlada de PCBs.
B	**Objective of the Project and Geographical Coverage:**
	Crear un plan de mitigación del almacenamiento temporal, auditoría ambiental, manejo, transporte y devolución al país de origen de DDT para todo el país. Monitoreo del espesor de la cáscara de huevos en aves en todo el país. Actualización de un programa de capcitación en bioseguridad, manejo y uso de equipos de monitoreo ambiental de los COPs. Tratamiento por bioremediación de transformadores eléctricos que contienen PCBs en la Caja de seguro Social. Determinación de la Contaminación de DDT en leche materna. Determinación de dodecacloro en río Hato en la leche materna. Plan de mitigación del almacenamiento temporal, auditoría ambiental, manejo, transporte y devolución al país de origen de dodecacloro.
C	**Responsible Organization(s):**
	Subdirección General de Salud Ambiental del Ministerio de Salud (MINSA); Directores Regionales de Salud.
D	**Partner (s)**
	ANCON / ANAM / Caja de Seguro Social / MIDA / Empresas privadas hidroélectricas / Fundación NATURA / Smith Sonians Institute / SIBUP / SENACYT.

43. Peru

1A	**Title of the Main Assessment or Monitoring Project:**
	Obsolete pesticides inventory
B	**Objective of the Project and Geographical Coverage:**
	To inventorize the quantities of obsolete pesticides in the country and the POPs especially.
C	**Responsible Organization(s):**
	Servicio Nacional de Sanidad Agraria-SENASA. As a national organism.
D	**Partner (s)**
	No partner, in some cases Ministry of Health.
E	**Project Funder (s)**
	SENASA.
F	**Timeframe of the Assessment /Monitoring project**
	All year 1999.
Data Source: SENASA	

2A	**Title of the Main Project:**
	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
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(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.
D	**Partner (s)**
	No partner.

E	**Project Funder (s)**
	SENASA.
F	**Timeframe of the Assessment /Monitoring project**
	Permanent
Comments: Its not a project, it is an specific action in order to obtain a preliminary diagnostic, our principal problem is to determinate the mechanisms for eliminate obsolete pesticides. SENASA. DIGESA : This project require the multisectorial participation of those involved in management of the PBC's In Peru, there is not available destruction of POP's and obsolete pesticides capacity, really we have large amount of obsolete pesticides from our control work.	
Data Source: SENASA	

3A	**Title of the Main Assessment or Monitoring Project:**
	Polychlorobiphenyls Source Inventory
B	**Objective of the Project and Geographical Coverage:**
	Identify the products that contain PCBs; users' locations, PCB volume, origin and final disposition – in order to establish a National Management Program for this kind of waste.
C	**Responsible Organization(s):**
	General Direction of Environmental Health of the Health Ministry DIGESA
D	**Partner (s)**
	No partner
E	**Project Funder (s)**
	DIGESA and others
F	**Timeframe of the Assessment /Monitoring project**
	8 months
Comments: This project requires multisectorial participation of those involved with the management of the PCBs (Energy and Mine Ministry, Industry and Commerce Ministry, Private Institutions, etc.)	
Data Source: DIGESA	

44. Philippines

1A	**Title of the Main Assessment or Monitoring Project:**
	Implementation of Republic Act 6969 or Toxic & Hazardous & Nuclear Waste Act.
B	**Objective of the Project and Geographical Coverage:**

	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. The objective is to assess their presence and quantity of their imports & production, to evaluate which chemicals should be regulated, restricted or banned, strictly enforce compliance to RA 6969
C	**Responsible Organization(s):**
	EMB
D	**Partner (s)**
	DOH, PNRI, DND, DOLE, DOST, DFA
E	**Project Funder (s)**
	RA 6969- WHO & DENR (EMB)
F	**Timeframe of the Assessment /Monitoring project**
	Continuing activity. The PCL and PICCS are scheduled for updating every five years.
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.	
Data Source: RA 6969 and DAO 38, 39, 29, 58.	

2A	**Title of the Main Project:**
	Pesticide Monitoring System Development Project (PMDP) - To develop a comprehensive system for monitoring pesticide residues and pesticide formulations.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Department of Agriculture Bureau of Plant Industry (BPI) Fertilizer and Pesticide Authority (FPA)
D	**Partner (s)**
	Japan International Cooperation Agency (JICA)
E	**Project Funder (s)**
	Philippine Government JICA
F	**Timeframe of the Assessment /Monitoring project**

	March 1997-March 2002
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.	
Data Source: National Pesticide Analytical Laboratory (NPAL) Laboratory Services Division Bureau of Plant Industry	

45. Romania

1A	**Title of the Main Project:**
	Organochlorine insecticides levels in Danube River - Source of Drinking Water
B	**Objective of the Project and Geographical Coverage:**
	Study regarding genotoxicity and carcinogenity of organic burden of drinking water. • investigation of organochlorine insecticides (α, β, γ - HCH, Aldrin, DDE, Dieldrin, DDT) levels at Water Works of riparian localities; • inventory and location of the main pollution sources. 8 Riparian Districts, 14 Riparian Towns, 1.3 mill. inhabitants.
C	**Responsible Organization(s):**
	Institute of Public Health Bucharest
D	**Partner (s)**
	Inspectorates of Sanitary Police and Preventive Medicine of Riparian Districts: Braila, Calarasi, Constanta, Dolj, Galati, Mehedinti, Teleorman, Tulcea.
E	**Project Funder (s)**
	Ministry of Health
F	**Timeframe of the Assessment /Monitoring project**
	1988-1996
Comments: Danube River is polluted by organochlorine insecticides and their presence influences the quality of drinking water. The levels of insecticides exceeded Maximum Admissible Concentration (MAC = 0.5 g/l) in 86% of samples; The concentrations are similar for row water and drinking water, due to the low efficiency of water treatment processes. The main sources of pollution are: agricultural practices and obsolite stockpiles.	

Data Source: Drinking Water Laboratory, Environmental Health Department, Institute of Public Health Bucharest

Str. Dr. Leonte 1-3, 76256 Bucharest, Romania, Tel: 40-1-6384010 ext. 206, Fax: 40-1-3123426,

e-mail: iacobi@mail.sdnp.ro

2A	**Title of the Main Project:**
	Levels of pesticides in tap water of towns located in Southern Romania
B	**Objective of the Project and Geographical Coverage:**
	• To establish the levels of organochlorine pesticides (α, β, γ - HCH, Aldrin, DDE, Dieldrin, DDT) in tap water samples from all towns of Southern Romania. • To identify risk areas in order to estimate health risks. 18 Districts, 80 Towns.
C	**Responsible Organization(s):**
	Institute of Public Health Bucharest
D	**Partner (s)**
	Districtual Inspectorates of Public Health (18 districts)
E	**Project Funder (s)**
	Ministry of Health
F	**Timeframe of the Assessment /Monitoring project**
	1991
Comments: Organochlorine pesticides' levels in sources of drinking water and tap water, exceeded Maximum Admissible Concentration (MAC = 0.5 g/l) in 73% of the samples.	

Data Source:

Drinking Water Laboratory, Environmental Health Department, Institute of Public Health Bucharest

Str. Dr. Leonte 1-3, 76256 Bucharest, Romania, Tel: 40-1-6384010 ext. 206, Fax: 40-1-3123426,

e-mail: iacobi@mail.sdnp.ro

3A	**Title of the Main Project:**
	Tap water quality in Bucharest and risk for human health
B	**Objective of the Project and Geographical Coverage:**
	To investigate the quality of drinking water in relation to risk for human health. • To identify the levels of exposure to substances with carcinogenic potential (Pesticides: α, β, γ - HCH, Aldrin, DDE, Dieldrin, DDT and disinfection by products); • To assess the chemical versus microbial risk; • To establish a new health surveillance program of drinking water supply in Bucharest Bucharest, 2 mill inhabitants.
C	**Responsible Organization(s):**
	Institute of Public Health Bucharest
D	**Partner (s)**
	Inspectorate of Public Health Bucharest Water Company Bucharest
E	**Project Funder (s)**
	Ministry of Health
F	**Timeframe of the Assessment /Monitoring project**
	1995
Comments: According to the values and frequency of occurrence in tap water, the organic pollution by naturally and/or synthetic compounds is on the first place, as a risk factor for human health and, disinfection by products on the second place.	
Data Source: Drinking Water Laboratory, Environmental Health Department, Institute of Public Health Bucharest Str. Dr. Leonte 1-3, 76256 Bucharest, Romania, Tel: 40-1-6384010 ext. 206, Fax: 40-1-3123426, e-mail: iacobi@mail.sdnp.ro	

4A	**Title of the Main Project:**
	Drinking water supply, water quality and sanitation in rural areas.
B	**Objective of the Project and Geographical Coverage:**
	To establish the national sample size and methodology for the nationwide study. • To evaluate the condition of wells' hygiene and sanitation; • To measure the levels of nitrates, organochlorine insecticides (α, β, γ - HCH, Aldrin, DDE, Dieldrin, DDT), triazinic herbicides (Atrazine, Simazine, Propazine), Faecal coliforms and helmints eggs in well water; • To describe the quality of aquifer used for drinking purpose; • To describe the risk for health. Pilot Study, 300 private and public wells, 938 inhabitants.
C	**Responsible Organization(s):**
	Institute of Public Health Bucharest
D	**Partner (s)**
	European Centre for Environment and Health Bilthoven, The Netherlands. European Centre for Environment and Health Rome, Italy.
E	**Project Funder (s)**
	Ministry of Health Ministry of Environment, Health, Housing and Welfare of Netherlands
F	**Timeframe of the Assessment /Monitoring project**
	1995
Comments: Freatic stratum used for drinking purposes (11 - 25 m depth) is heavy chemically polluted, due to improper agricultural practices and location of kitchen garden.	
Data Source: Drinking Water Laboratory, Environmental Health Department, Institute of Public Health Bucharest Str. Dr. Leonte 1-3, 76256 Bucharest, Romania, Tel: 40-1-6384010 ext. 206, Fax: 40-1-3123426, e-mail: iacobi@mail.sdnp.ro	

5A	**Title of the Main Project:**
	Danube Regional Pesticide Study PHARE: ZZ9111/0106
B	**Objective of the Project and Geographical Coverage:**
	The main objective of the project was to evaluate the risk of the pesticides application in the region for the human and aquatic life and to recommend legal, policy and management framework which will lead to the elimination of this risk. 3 phases; 14 tasks.
C	**Responsible Organization(s):**
	Centre of Hygiene, Sofia, Bulgaria Bul. Dim. Nestorov 15, Sofia 1431, Bulgaria Project Manager: Ass. Prof. M. Tasheva Principal Coordinator: Prof. F. Kaloyanova
D	**Partner (s)**
	11 Danube Countries
E	**Project Funder (s)**
	PHARE
F	**Timeframe of the Assessment /Monitoring project**
	1990 - 1995

Comments: Institute of Public Health Bucharest provided the following data:

Pesticides concentrations in water

Water Quality Standards

List of pesticides for use in Romania.

Data Source:

Drinking Water Laboratory, Environmental Health Department, Institute of Public Health Bucharest

Str. Dr. Leonte 1-3, 76256 Bucharest, Romania, Tel: 40-1-6384010 ext. 206, Fax: 40-1-3123426,

e-mail: iacobi@mail.sdnp.ro

6A	**Title of the Main Project:**
	Monitoring of food chemical contaminants.
B	**Objective of the Project and Geographical Coverage:**
	Identification, measuring and surveillance of chemical contamination of environment (water and soil) and food by organochlorine pesticides (DDT, HCH and metabolites), herbicides (Atrazin, Simazin, Propazin) and PCBs. 5 districts located in the region of Moldavia.
C	**Responsible Organization(s):**
	Institute of Public Health Iasi
D	**Partner (s)**
	Districtual Inspectorates of Public Health (5 districts - Bacau, Vaslui, Vrancea, Neamt, Galati).
E	**Project Funder (s)**
	Ministry of Health
F	**Timeframe of the Assessment /Monitoring project**
	1980-1998 1999-2001
Comments: Food (vegetables, milk, meat, fish and cooked meal) is contaminated by chemical pollutants. Human body is also burden with these substances. The levels of contamination seem to remain constant in time.	
Data Source: Environmental Chemistry Laboratory, Environmental Health Department, Institute of Public Health Iasi Str. V. Babes nr. 14, 6600 Iasi, Romania, Tel: 40-32-141520, Fax: 40-32-210399	

7A	**Title of the Main Project:**
	Quality of drinking water supplied by public network, in rural areas.
B	**Objective of the Project and Geographical Coverage:**
	Identification of health risks. 8 districts located in the region of Moldavia.
C	**Responsible Organization(s):**

	Institute of Public Health Iasi
D	**Partner (s)**
	Districtual Inspectorates of Public Health (8 districts)
E	**Project Funder (s)**
	Ministry of Health
F	**Timeframe of the Assessment /Monitoring project**
	1999-2001
Comments:	
Preliminary results showed that water supplied to population from rural areas has a low but constant contamination by organic pollutants: organochlorine pesticides (DDT, HCH and metabolites), herbicides (Atrazin, Simazin, Propazin) and PCBs.	
Data Source:	
Environmental Chemistry Laboratory, Environmental Health Department, Institute of Public Health Iasi Str. V. Babes nr. 14, 6600 Iasi, Romania, Tel: 40-32-141520, Fax: 40-32-210399	

8A	**Title of the Main Project:**
	Sanitary surveillance of River Prut, a source of drinking water for riparian localities.
B	**Objective of the Project and Geographical Coverage:**
	Assessment of drinking water quality and health related risks. 4 Riparian Districts: Botosani, Iasi, Vaslui, Galati.
C	**Responsible Organization(s):**
	Institute of Public Health Iasi
D	**Partner (s)**
	Districtual Inspectorates of Public Health National Centre of Preventive Medicine Chisinau, Republic of Moldavia.
E	**Project Funder (s)**
	Ministry of Health
F	**Timeframe of the Assessment /Monitoring project**
	1993-1998; 1999-2001
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.
Data Source: Environmental Chemistry Laboratory, Environmental Health Department, Institute of Public Health Iasi Str. V. Babes nr. 14, 6600 Iasi, Romania, Tel: 40-32-141520, Fax: 40-32-210399.

9A	**Title of the Main Project:**
	Assessment of pollution levels of soil, water and vegetables by nitrates and pesticides, in Moldavia.
B	**Objective of the Project and Geographical Coverage:**
	To measure the concentrations of nitrates and organochlorine pesticides in soil, water and vegetables. 8 Districts located in the region of Moldavia.
C	**Responsible Organization(s):**
	Institute of Public Health Iasi.
D	**Partner (s)**
	Districtual Inspectorates of Public Health
E	**Project Funder (s)**
	Ministry of Health
F	**Timeframe of the Assessment /Monitoring project**
	1996-1998; 1999-2001
Comments: Nitrates and organochlorine pesticides were found in all investigated samples, sometimes at concentrations exceeding the Maximum Admissible Concentrations.	
Data Source: Environmental Chemistry Laboratory, Environmental Health Department, Institute of Public Health Iasi Str. V. Babes nr. 14, 6600 Iasi, Romania, Tel: 40-32-141520, Fax: 40-32-210399.	

10A	**Title of the Main Project:**
	Surveillance of environmental and food quality in Transilvania County.
B	**Objective of the Project and Geographical Coverage:**
	Assessment of health risk.
C	**Responsible Organization(s):**

	Institute of Public Health Cluj-Napoca Transilvania County
D	**Partner (s)**
	Districtual Inspectorates of Public Health
E	**Project Funder (s)**
	Ministry of Health
F	**Timeframe of the Assessment /Monitoring project**
	1987-1999
Comments: Number of samples = 2600; Type of samples: water, soil, food; Chemical compounds: (- HCH, Aldrin, DDE, Dieldrin, DDT).	
Data Source: Environmental Health Department, Institute of Public Health Cluj-Napoca Str. Pasteur nr. 6, 3400 Cluj-Napoca, Romania, Tel: 40-64-194252, Fax: 40-64-193112.	

11A	**Title of the Main Project:**
	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 of the Project and Geographical Coverage:**
	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; - Geographical area: West area of Romania (Half West Area).
C	**Responsible Organization(s):**
	1. Ministry of Waters, Forests and Environment Protection 2. Ministry of Industry and Trade - Directorate for Products Quality Improvement and Environmental Protection

D	**Partner (s)**
	1. Institute for Chemical Researches - Bucharest 2. National Research - Developing Institute for Industrial Ecology - Bucharest
E	**Project Funder (s)**
	1. Ministry of Waters, Forest and Environment Protection 2. National Agency for Science, Technology and Innovation
F	**Timeframe of the Assessment /Monitoring project**
	1. 1999 - 2000 2. 1999 - 2001

Comments:

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.

46. Saudi Arabia

1A	**Title of the Main Project:**
	Monitoring of obsolete and banned Agrochemicals in the Kingdom of Saudi Arabia Project
B	**Objective of the Project and Geographical Coverage:**
	To ban the use and introduction of the 10 mentioned pesticides in the Kingdom of Saudi Arabia
C	**Responsible Organization(s):**
	Ministry of Agriculture and Water, Research Department
D	**Partner (s)**
	Ministry of Commerce, "SACO"
E	**Project Funder (s)**
	Saudi Arabia
F	**Timeframe of the Assessment /Monitoring project**
	Continuous

47. Singapore

1A	**Title of the Main Project:**
	a) Programme to phase out import and use of PCB. b) Programme to phase out PCB-contaminated transformers.
B	**Objective of the Project and Geographical Coverage:**
	Transformers which contain PCBs have already been banned for use in Singapore since 1980. However, there are still some existing PCB-contaminated transformers
C	**Responsible Organization(s):**
	Pollution Control Department Ministry of Environment
F	**Timeframe of the Assessment /Monitoring project**
	Programme (a) completed in 1980 Programme (b) scheduled to be completed by Apr 2001

48. Slovakia

1A	**Title of the Main Project:**
	The burden of the environment and human population in an area contaminated by polychlorinated biphenyls.
B	**Objective of the Project and Geographical Coverage:**
	To estimate an amount of PCB manufactured, used, in use, disposed and released into the environment in Slovakia. To summarise all data available on PCB levels in environmental, food and human samples taken in Slovakia. To know environmental (ambient air, surface water, sediment, soil, biota), food and human levels of PCBs in a polluted area (Michalovce District) in comparison with a control one (Stropkov District). To evaluate of the exposure of the general human population to PCBs in those two districts. To assess the influence of the PCB exposure on the health of the human population.
C	**Responsible Organization(s):**
	Institute of Preventive and Clinical Medicine, Department of Toxic Organic Pollutants, Limbova 14, 833 01 Bratislava, Slovakia
E	**Project Funder (s)**
	Ministry of the Environment of the Slovak Republic, Ministry of Health of the Slovak Republic
F	**Timeframe of the Assessment /Monitoring project**

	01/1999-12/1997: PCB inventory estimation in Slovakia; Summarising data on PCB levels. 01/1998-12/1998: PCB monitoring in environmental, food and human samples collected in eastern Slovakia; Monitoring of some health markers in the human population.
Comments: The project has been planned for years 1997-1999 (stage I) and 2000-2002 (stage II, assessing trends). There have been no funds available from the project funders for continuation in 1999. A prognosis for next years is also gloomy.	
Data Source: Kocan A. et al.: The burden of the environment and human population in an area contaminated by PCBs (1st year report), MOE SR, Bratislava, Feb. 1998, 113 pp. (in Slovak). Kocan A. et al.: The burden of the environment and human population in an area contaminated by PCBs (2nd year report), MOE SR, Bratislava, Feb. 1999, 206 pp. (in Slovak). Kocan A. et al.: Environmental contamination following PCB manufacture in eastern Slovakia. Organohalogen Compounds 43, 1999, 105-109.	

2A	**Title of the Main Assessment or Monitoring Project:**
	Evaluation of the exposure of the selected population sub-group to POPs.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Institute of Preventive and Clinical Medicine, National Reference Centre for Pesticide Residues, Limbová 14, 833 01 Bratislava- Slovak Republic.
D	**Partner (s)**
	Bilateral co-operation: Institute for Ecological Chemistry, GSF, Neuherberg, Germany.
E	**Project Funder (s)**
	Health Ministry of the Slovak Republic.
F	**Timeframe of the Assessment /Monitoring project**
	01-01-1997/ 12-31-2000
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.	

49. Slovenia

1A	**Title of the Main Project:**
	- PHARE programm 1999 Twinning component: Chemical Safety - Monitoring of certain POPs pesticides (e.g. aldrin, endrin, dieldrin, DDT, heptachlor) in food
B	**Objective of the Project and Geographical Coverage:**
	Scope of twinning assignment: • Development and implementation of integrated and harmonised chemicals management legislation. • Monitoring of chemicals pollution. Project covers Republic of Slovenia.
C	**Responsible Organization(s):**
	• Ministry of the Health • Ministry of the Environment and Spatial Planning • Ministry of the Agriculture, Food and Forestry
D	**Partner (s)**
	Germany and Belgium Austria
E	**Project Funder (s)**
	Republic of Slovenia, PHARE
F	**Timeframe of the Assessment /Monitoring project**
	4/1999 - 2002 Monitoring for pesticide residues is in continuously monitoring
Comments: New legislation in Republic of Slovenia: Low on Chemicals (1999), Monitoring of pesticides in food and agricultural products OJ No. 13/99 On the way; Monitoring of pesticides in drinking water and drinking water springs	
Data Source: Standard TwinningProject Fiche, Twinning Proposal (Germany Belgium)	

50. Sudan

A	**Title of the Main Assessment or Monitoring Project:**
	Disposal of obsolete pesticides
B	**Objective of the Project and Geographical Coverage:**
	- Safe disposal of obsolete pesticides - Integrated schemes- Central Sudan and the rural & seasonal camps of PDD all over Sudan.
C	**Responsible Organization(s):**
	Federal Ministry of Agriculture & Forestry- Khartoum National Pesticide Council (NPC)- Khartoum North PO Box 14 Federal Plant Protection Directorate (PPD)- Khartoum North PO Box 14
D	**Partner (s)**
	Agricultural Research Corporation (ARC) Wad/Medani PO Box 126 Sudanese Agrochemicals Association (SAGA)
E	**Project Funder (s)**
	Not determined yet
F	**Timeframe of the Assessment /Monitoring project**
	Twelve months
Data Source: Review of the status of obsolete pesticides stocks in the Sudan. A paper submitted by Dr B. El Tegani to the National Workshop on the disposal of obsolete pesticides stocks in Sudan- 6th May 1998, Khartoum.	

51. Sweden

1A	**Title of the Main Assessment or Monitoring Project:**
	National Environmental Monitoring Programme. Programme area: POPs chemicals.
B	**Objective of the Project and Geographical Coverage:**
	National area: the aim is to cover the whole country. Time trends for selected POPs and metals in different media. Inventory of "new chemicals".
C	**Responsible Organization(s):**
	Swedish Environmental Protection Agency.
E	**Project Funder (s)**
	The Swedish Government.

F	**Timeframe of the Assessment /Monitoring project**
	Measurements on a yearly basis. No limit set for the monitoring programme.

52. Switzerland

1A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans in cow's milk from Switzerland.
B	**Objective of the Project and Geographical Coverage:**
	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 alpines areas without industry.
C	**Responsible Organization(s):**
	Swiss Agency for the Environment, Forests and Landscape. Substances, Soil and Biotechnology Division, 3003 Bern.
D	**Partner (s)**
	Swiss Federal Laboratories for Materials Testing and Research- Ueberlandstrasse 129- CH 8600 Dübendorf.
E	**Project Funder (s)**
	Swiss Agency for the Environment, Forests and Landscape (SAEFL)
F	**Timeframe of the Assessment /Monitoring project**
	1990-2001.
Comments: The data from 1990/91 are already published.	
Data Source: 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.	

2A	**Title of the Main Assessment or Monitoring Project:**
	Persistent Organic Pollutants in Switzerland: Bio-monitoring with lichens.
B	**Objective of the Project and Geographical Coverage:**
	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.

C	**Responsible Organization(s):**
	Swiss Agency for the Environment, Forests and Landscape. Air Pollution Control Division, 3003 Bern.
D	**Partner (s)**
	Arbeitsgemeinschaft für Bioindikation (AGB), Quartiergasse 12, CH 3013 Bern
E	**Project Funder (s)**
	Swiss Agency for the Environment, Forests and Landscape (SAEFL)
F	**Timeframe of the Assessment /Monitoring project**
	1996-2000.
Comments: Ubiquitous occurrence of POPs demonstrated despite national prohibitions since more than ten years.	
Data Source: Report and scientific publication in preparation.	

53. Thailand

1A	**Title of the Main Assessment or Monitoring Project:**
	Monitoring Programme for Polychlorinated Dibenzodioxins and Dibenzofurans (PCDD/PCDF)

2A	**Title of the Main Project:**
	- National Inventory of Sources of Dioxins and Furans Emissions in Thailand, Project on Chemicals Management.

3A	**Title of the Main Project:**
	Monitoring Programme for organochlorine pesticides and polychlorinated biphenyls (PCBs)
B	**Objective of the Project and Geographical Coverage:**
	• to examine the significance of organochlorine pesticides and polychlorinated biphenyls contaminant in the environment • to apply measures to reduce and / or eliminate the environmental concentrations of organochlorine pesticides and polychlorinated biphenyls • to support the establishment of the national environmental standards and guildlines as a basic information for the protection of the environment
C	**Responsible Organization(s):**
	• Pollution Control Department (PCD), Ministry of Science, Technology and Environment (MOSTE) • Department of Agriculture, Ministry of Agriculture and Cooperatives • Department of Medical Sciences, Ministry of Public Health • Environmental Research and Training Center, MOSTE

E	**Project Funder (s)**
	• Pollution Control Department (PCD), Ministry of Science, Technology and Environment (MOSTE) • Department of Agriculture, Ministry of Agriculture and Cooperatives • Department of Medical Sciences, Ministry of Public Health • Environmental Research and Training Center, MOSTE
F	**Timeframe of the Assessment /Monitoring project**
	routine assessment and monitoring activities
Data Source: Pollution Control Department (PCD), Ministry of Science, Technology and Environment (MOSTE) Department of Agriculture, Ministry of Agriculture and Cooperatives Department of Medical Sciences, Ministry of Public Health Environmental Research and Training Center, MOSTE	

4A	**Title of the Main Project:**
	National Inventory of Sources of Dioxins and Furans Emissions in Thailand
B	**Objective of the Project and Geographical Coverage:**
	• to establish a national inventory of dioxins and furans emission sources and releases • to identify and estimate potential sources of dioxins and furans from national activities • to gain a better understanding of the types of sources that form and emit dioxins and furans
C	**Responsible Organization(s):**
	Pollution Control Department (PCD), Ministry of Science, Technology and Environment (MOSTE)
D	**Partner (s)**
	• Department of Industrial Works, Ministry of Industry • Department of Science Service, Ministry of Science, Technology and Environment • Department of Agriculture, Ministry of Agriculture and Cooperatives • Department of Health, Ministry of Public Health • Bangkok Metropolitan Administration • The Industrial Estate Authority of Thailand, Ministry of Industry • The Federation of Thai Industries
E	**Project Funder (s)**
	• Pollution Control Department (PCD), Ministry of Science, Technology and Environment • German Technical Cooperation (GTZ), GmbH • UNEP Chemicals, UNEP
F	**Timeframe of the Assessment /Monitoring project**
	3 years (1998-2000)
Data Source: Pollution Control Department, MOSTE	

54. Togo

1A	**Title of the Main Project:**
	Information on the Risk of Exposure to Som POP Pesticides in Togo by the Routes of Food and Drinking Water
B	**Objective of the Project and Geographical Coverage:**
	Concentrations of pesticide residues: Cultivated Vegetables, Grain, Drinking water
C	**Responsible Organization(s):**
	Université du Bénin
Comments: This literature report clearly shows that in Togo the populations either in urban or in rural areas are dangerously exposed to the risk of contamination by pesticides of the POPs type through miscellaneous foodstuff or drinking water. In many cases the residual pesticide concentrations are much higher than the CODEX reference values. The main local source of release of the POPs pesticides is Agriculture… There is a strong need for technical and financial assistance for inventory, regulation and national action plan.	
Data Source: DJANEYE-BOUNDJOU et al. University of Benin, (Lome – Togo).	
Comments: Identification of major sources of PCB emission. Investigation in 1998 on the utilization of PCB transformers by the National Electric Power Service. This inquiry showed that only one PCB containing transformer is being used in Togo by the national phone company. Remark: The lack of funding prevents from doing more research. The preparation of a questionnaire is underway in order to collect information from the Togolese Services or companies that use electrical transformers and capacitors.	

55. Turkey

1A	**Title of the Main Project:**
	Monitoring of organochlorine pesticides and PCBs in biological and environmental material.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(s):**
	Refik Saydam Hygiene Center Poisons Research Directorate
E	**Project Funder (s)**
	Refik Saydam Hygiene Center
F	**Timeframe of the Assessment /Monitoring project**
	1998 – 2001

56. United Kingdom

1A	**Title of the Main Assessment or Monitoring Project:**
	Prevention and management of obsolete pesticides in developing countries.
B	**Objective of the Project and Geographical Coverage:**
	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.
C	**Responsible Organization(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
D	**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.
E	**Project Funder (s)**
	United Kingdom Foundations.
F	**Timeframe of the Assessment /Monitoring project**
	Part of our current Porgramme and on-going while the problem exists.
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.	

2A	**Title of the Main Assessment or Monitoring Project:**
	The UK Atmospheric POPs Monitoring Programme
B	**Objective of the Project and Geographical Coverage:**
	Programme to monitor POPs (and potential new POPs) in air in the UK, the chemicals include, $\alpha + \beta$ HCH; Pentachloronitrobenzene; Endosulfan; polybrominated diphenyl ethers (PBDEs); Polychlorinated Alkanes; DDT; Heptachlor; Chlordane; Cyclodiene.
C	**Responsible Organization(s):**
	AEA Technology Ltd., Harwell UK
D	**Partner (s)**
	Lancaster University
E	**Project Funder (s)**
	Department of the Environment, Transport + Regions

F	**Timeframe of the Assessment /Monitoring project**
	Began in 1997- ongoing
Comments: First report due soon.	

3A	**Title of the Main Assessment or Monitoring Project:**
	Various surveys for dioxins and PCB's in food, and dietary exposure of UK consumers to these chemicals, as part of programme of food chemical surveillance. Also statutory monitoring of PCB's to meet requirements of EC Directives.
B	**Objective of the Project and Geographical Coverage:**
	Joint Food Safety and Standards Group (JFSSG) surveys are primarily carried out to estimate the dietary exposure to dioxins and PCB's of UK consumers of various age groups and other critical groups. Current projects cover free range eggs, shellfish, infant formulae, cow's milk fats and oils used in food manufacture and samples representing the UK diet. Some surveys for PCB's are also carried out by the Northern Ireland, Scottish and Welsh Offices in those areas. Statutory monitoring covers a number of foodstuffs such as farmed fish and shellfish. A survey of dioxins and PCBs in fed binders and feed.
C	**Responsible Organization(s):**
	Joint Food Safety and Standards Group (JFSSG), MAFF, Veterinary Medicines Directorate (VMD; a MAFF agency); ADAS (feed only).
E	**Project Funder (s)**
	MAFF
F	**Timeframe of the Assessment /Monitoring project**
	JFSSG surveillance programme includes a number of surveys of various duration. Statutory monitoring is also of variable timescales, e.g. monitoring by VMD is annual. Feed binders and survey starts November 1999 and will last 6 months.

4A	**Title of the Main Assessment or Monitoring Project:**
	Working Party on Pesticide Residues annual surveillance of pesticide residues in food on sale in the UK.
B	**Objective of the Project and Geographical Coverage:**
	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 Coverage: 12 centres throughout the UK.
C	**Responsible Organization(s):**
	Pesticides Safety Directorate, Agency of the Ministry of Agriculture, Fisheries and Food.

D	**Partner(s)**
	Health and Safety Executive, Department of Health
E	**Project Funder (s)**
	PSD, Industry levy
F	**Timeframe of the Assessment /Monitoring project**
	Monitoring is an annual rolling programme. Results published on an annual basis, approximately 8 months after year-end.

5A	**Title of the Main Assessment or Monitoring Project:**
	Environment Agency Pesticide Monitoring Programme
B	**Objective of the Project and Geographical Coverage:**
	Monitoring covers England and Wales. The monitoring programme is strongly governed by statutory requirements, e.g., dangerous substance directives, surface water abstraction directive, groundwater directive, North Sea Conference. The Agency is also required to undertake non-statutory monitoring tailored to known or predicted local problems.
C	**Responsible Organization(s):**
	Environment Agency

57. Uruguay

1A	**Title of the Main Assessment or Monitoring Project:**
	Bifenilos policlorados en Uruguay.
B	**Objective of the Project and Geographical Coverage:**
	Conformar un baco de datos que reúna toda la información pertinente respecto a los PCB existentes en el país. Elaboración de un plan de gestión de PCB en operación y en forma de residuos. Este plan servirá de base para las recomandaciones que la Unidad Sustancias Peligrosas de la Dirección Nacional de Medio Ambiente hará a las industrias. Establecer un mecanismo de comunicación con las industrias reveladas que tengan PCB para la actualización permanente del banco de datos formulado. ALCANCE GEOGRAFICO. Republica Oriental de Uruguay.
C	**Responsible Organization(s):**

	Unidad Sustancias Peligrosas- Dirección Nacional de Medio Ambiente (DINAMA)- Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente (MVOTMA) Zabala 1427 CEP 11000 Montevideo, UNRUGUAY Tel: 598 2 916 8287 / FAX: 598 2 916 8288 / email: suspel@adinet.com.uy
D	**Partner (s)**
	Centro Internacional de Investigaciones para el Desarollo (CIID/IDRC) Plaza Caganchal 1335 Piso 9 Casilla de correo 6379 Montevideo, Uruguay Tel: 598 2 902 2037/44 / Fax: 598 2 9020223
E	**Project Funder (s)**
	Unidad Sustancias Peligrosas Dirección Nacional de Medio Ambiente Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente (MVOTMA) Zabala 1427 CEP 11000 Montevideo, UNRUGUAY Tel: 598 2 916 8287 / FAX: 598 2 916 8288 / email: suspel@adinet.com.uy
F	**Timeframe of the Assessment /Monitoring project**
	El proyecto tiene una duración de dos mese, habiéndose iniciado el mismo en mayo del presente año.
Comments: Este proyecto se desarolla en el marco de un Convenio de cooperación entre el Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente (MVOTMA) y el Centro Internacional de Investigaciones para el Desarollo (CIID/IDRC). Dicho convenio tiene como objetivo el fortalecimiento de la capacidad de gestión en el área de desechos y sustancias peligrosas.	
Data Source: Ng. Quim. Silvia Aguinaga- Unidad Sustancias Peligrosas- Dirección Nacional de Medio Ambiente. Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente (MVOTMA) Zabala 1427 CEP 11000 Montevideo, UNRUGUAY Tel: 598 2 916 8287 / FAX: 598 2 916 8288 / email: suspel@adinet.com.uy	

58. United States of America

1A	**Title of the Main Assessment or Monitoring Project:**
	Binational Strategy: In the 1996 Canada- United States Strategy for the virtual elimination of Persistent Toxic Substances in the Great Lakes, also known as the Great Lakes binational Toxics Strategy, Aldrin, Dieldrin, Chlordane, DDT, Hexachlorobenzene, Mirex, Toxaphene are level I substances identified for virtual elimination; Endrin and Heptachlor are level II substances. Level I substances represent the primary focus around which the governments will concentrate and lead actions and efforts. The two nations (Canada and the US) will share information regarding the Level II substances, and examine the substances to determine whether any Level II substances should be elevated to Level I list
B	**Objective of the Project and Geographical Coverage:**
	Virtual elimination of Persistent Toxic substances f resulting from human activity so as to protect and ensure the health and integrity of the Great Lakes ecosystem
C	**Responsible Organization(s):**
	USEPA, EC (Environment Canada)
D	**Partner (s)**
	Great Lakes States, Province of Ontario, Tribes, First Nations, public and private partners
Data Source: The Great Lakes binational Toxics Strategy. Canada- United States, Strategy for the virtual elimination of Persistent toxic substances in the Great Lakes.	

59. Yemen

1A	**Title of the Main Project:**
	UTF/YEM/025/YEM, "Disposal of Old Pesticides – Yemen"
B	**Objective of the Project and Geographical Coverage:**
	• Destroying of obsolete pesticides stock disposal in Yemen • The governorates where these pesticides existed
C	**Responsible Organization(s):**
	1) Ministry of Agriculture and Irrigation 2) Environment Protection Council
D	**Partner (s)**
	Food and Agriculture Organisation (FAO)
E	**Project Funder (s)**
	Food and Agriculture Organisation (FAO)

F	**Timeframe of the Assessment /Monitoring project**
	1990 – 1996
Comments: The entire quantity of pesticides found has been destroyed in England (please refer to the documents attached).	
Data Source: 1) Dr. Mohamed Y. Al-Ghashm DG/ General Department of Plant Protection P.O. Box 26 Sana'a – Yemen 2) Salem Baquhezel DG/ Directorate of Protection Environment Protection Council Sana'a P.O. Box 19719 Yemen	

60. Zambia

1A	**Title of the Main Assessment or Monitoring Project:**
	PCB Management Project.
B	**Objective of the Project and Geographical Coverage:**
	Develop Management tools for regulatory authorities. Develop database decommissioned PCB containing equipment. Securing of PCB in the Environment. Geographical coverage: through out Zambia.
C	**Responsible Organization(s):**
	Environmental Council of Zambia.
D	**Partner (s)**
	Zambia Electricity Supply Cooperation.
E	**Project Funder (s)**
	Canadian International Development Agency.
F	**Timeframe of the Assessment /Monitoring project**
	1997- 1999.
Comments: The inventory of PCBs in Zambia has been completed. Construction work on an interim storage facility has been initiated by Zambia Electricity Supply Corporation.	
Data Source: Nelson MANDA- PCB Project Manager Environmental Council of Zambia- PO Box 35131, LUSAKA. Fax: 260 1 25 41 64/ Tel: 25 41 30/1/ Email: necz@zamnet.zm	

Section 4: Country contributions: Information on *POPs National Action Plans* aiming at the reduction and/or elimination of the releases of POPs.

The following countries reported not having National Action Plans to reduce and/or eliminate POPs:

Albania, Barbados, Belarus, W.I., Ethiopia, Ireland, Republic of Lebanon, federated states of Micronesia, Mongolia, Peru, Romania, St. Kitts and Nevis, Syria, Ukraine and Vietnam,

1. Algeria

1A	**Title of the Project:**
	Mise au point d'un programme prioritaire de substitution d'équipements électriques à Askarels par d'autres types de transformateurs.
B	**Objective of the Project and Geographical Coverage:**
	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 trouvent 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.

2. Australia

1A	**Title of the Main Project:**
	Elimination of Organochlorines Termiticides: Alternative Strategies for Controlling Termites in Australia.

2A	**Title of the Main Project:**
	The Management and control of Mastotemes in Horticultural Situations
B	**Objective of the Project and Geographical Coverage:**
	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 de assessed. Communication with horticulturist on control techniques Geographical coverage: Darwin based and trial work conducted in the northern sector of the Northern Territory (the Top End). The problem areas include the Top End of the Northern Territory and the northern Western Australia
C	**Responsible Organization(s):**
	Lead Agency: The CSIRO Division of Entomology Researcher: Mr. Leigh Miller
D	**Partner (s)**
	The Northern Territory Department of Primary Industry and Fisheries (DPIF) and The Western Australia Department of Agriculture (WADA)
E	**Project Funder (s)**
	Funded under Rural Industry Research and Development Corporation (RIRDC) Project No. CSE-59A.
F	**Timeframe of the project**
	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.
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	
Data Source: RIRDC Report RIRDC Project No. CSE-59A	

3. Belgium

1A	**Title of the Main Project:**
	The POPs chemicals are banned for agricultural use and for non-agricultural use. All kinds of insecticides are used as alternatives e.g.: organophosphorus, carbamates, pyrethroids (see attached list of authorized active ingredients) For PCBs at federal level: two studies with the title "Compte-rendu des risques causés par le remplacement des PCB-PCT dans les équipements électriques".
B	**Objective of the Project and Geographical Coverage:**
	For PCBs at federal level: Risk assessment of the substitutes of PCBs in the electric equipment and in the environment. Geographical Coverage: Belgium.
C	**Responsible Organization(s):**
	I For PCBs at federal level: Federal Department for Environment- CAE Vesalius Building- Pachcolaan 19 box 5- 1010 BRUSSELS.
D	**Partner (s)**
	For PCBs at federal level: University of LIEGE- Faculté des Sciences- Laboratoire de Chimie Industrielle- Prof. Germain
F	**Timeframe of the project**
	Tome 1: 1994, Tome 2: 1995

4. Benin

1A	**Title of the Main Project:**
	Enquête sur les méthodes traditionnelles de lutte contre les organismes nuisibles des cultures. Projet Bénino-Allemand de la Protection des Végétaux, Porto-Novo, 1991.

2A	**Title of the Main Project:**
	National Action Plan Against Persistent Organic Pollutants in Benin.

5. Brazil

1A	**Title of the Main Project:**
	The use of DDT in Malaria Control Programs in Brazil.

6. Brunei Darussalam

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.
Data source: Department of Agriculture

7. Canada

1A	**Title of the Main Project:**
	Canada- United States Strategy for the Virtual Elimination of Persistent Toxic Substances in the Great Lakes, 1996 (The Great Lakes Binational Toxics Strategy)

2A	**Title of the Main Project:**
	The Sound Management of Chemicals (SMOC) initiative under the North American Agreement on Environmental Cooperation (NAAEC) - North American Regional Action Plans (NARAPs)
B	**Responsible Organization(s):**
	Canada, the United States and Mexico
D	**Field:** (e.g. Public Health; Occupational Health; Environmental Protection; Consumer Protection)
	Environmental Protection

E	**Objective(s):**
	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. 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. 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. 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. 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.
F	**Substance(s) covered:**
	Existing NARAPs- Chlordane, DDT and PCBs New NARAP - Dioxins/Furans and Hexachlorobenzene Nominated NARAP – Lindane
G	**Time frame:**
	Ongoing
H	**Geographical coverage:**
	Canada, the United States and Mexico
Comments: The NARAPs website is: www.cec.org	

8. Chile

Data Source: Comisión Nacional del Medio Ambiente, CONAMA

Comments: La Asociación Gremial de Industriales Químicos de Chile /ASIQUIM) 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)
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.) Asociasión Gremial de Industriales Químicos de Chile (ASIQUIM)

9. Côte-d'Ivoire

1A	**Title of the Main Project:**
	National Pilot Project for Ecological Management of PCBs.

10. Congo

A	**Title of the Main Project:**
	Nous n'avons pas programmé d'activités sur le remplacement et la réduction des POPs au cours de l'année 1999.
Comments: Compte-tenu du retard enregistré par notre département dans l'élaboration d'une politique sur la gestion des POPs, nous n'avons pas été en mesure d'organiser les activités pour l'année 1999.	
Data source: Michel Kouka-Mapengo- Conseiller juridique du Ministre de l'Industrie Minière et de l'Environnement	

11. Croatia

1A	**Title of the Main Project:**
	Action plan for exporting PCB condensers and PCB transformers.
Data Source: Renata Sinovcevic, B.Sc. State Directorate for the Protection of Nature and the Environment- Ilica 44- HR 10000 Zagreb- Croatia.	

12. Djibouti

Comments: Only a substitution product has replaced DDT.
Data Source: Health Ministry.

13. Ecuador

1A	**Title of the Project:**
	No existe proyecto peo en forma general se esta utilizando otro dielétrico en lugar de los PCBs en transformadorees (no se conoce la cobertura)
B	**Responsible Organisation:**
	Fue el organismo rector en la coordinación de generación y distribución de energía eléctrica.

14. Ethiopia

1A	**Title of the Main Project:**
	National Profile for the Management of Chemicals, including POPs.

15. Fiji

1A	**Title of the Main Project:**
	Development of alternative quarantine desinfestation treatment (using hot temperature forced air). Use of Oxygen in place of chlorine as bleaching agent.
B	**Objective of the Project and Geographical Coverage:**
	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. Nationwide.
C	**Responsible Organization(s):**
	MAFF; Ministry of Labour
D	**Partner (s)**
	MAFF; FAO/AUSAID. Private sector.
E	**Project Funder (s)**
F	**Timeframe of the project**
	On-going. 10 years (1994-2004). 10 years (1995-2005)

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.
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.

16. The Gambia

A	**Title of the Main Project:**
	Roll back Malaria Program
B	**Responsible Organization(s):**
	Department of State for Health
C	**Partner(s)**
	The Medical Research Council, World Health Organisation
D	**Field:** (e.g. Public Health; Occupational Health; Environmental Protection; Consumer Protection)
	Public Health
E	**Objective(s):**
	To reduce cases of malaria through the use of bed nets dipped in permethrin, or other pyrethroids
F	**Substance(s) covered:**
	DDT
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.	
Data source: National Environment Agency, 5 Fitzgerald St., PMB. 48, Banjul Tel: (220) 228056/224867/224868. Fax: (220) 229701. E-mail: nea@gamtel.gm	

17. Germany

1A	**Title of the Main Project:**
	Replacement of POP pesticides: chemical alternatives/biological alternatives/Integrated Pest Management

Comments: Chemical alternatives: synthetic chemical such as organophosphates have been employed as chemical alternatives to the severely restricted/banned POP pesticides. Their persistence in the environment is quite short, usually in the order of hours to days. Some examples of organophosphates include malathion, parathion, dichlorvos, dimethyldichlorovinylphosphate and tetraethylpyrophosphate. However, these chemicals are 10 to 100 times more toxic than chlorinated hydrocarbons to animal larger than insects. Because of their potentially harmful effects on the non-target fauna these chemical should, in general, not be used where population on non-target organisms may be adversely affected. Chemical alternatives are to be chosen on a case by case basis depending on the intended use type. 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. Integrated Pest Management: IPM is generally accepted as an effective approach to protection from insects, mites, diseases, weeds and other pests. The aim of IPM is to prevent economic loss resulting from pests as well as to avoid harm to people, non-target organisms (plants and animals) and the environment. However the object of IPM is not to control 100% of the pest in an area. One treatment or a combination of several treatments is coordinated into a program to control the pest organism. This may include the combination of biological controls, cultural controls, physical or mechanical controls, or use of a low level of chemical controls.

18. Ghana

1A	**Title of the Main Project:**
	Disposal of transformer oil.
B	**Objective of the Project and Geographical Coverage:**
	To protect human health and the environment. Geographical Coverage: countrywide
C	**Responsible Organization(s):**
	Electricity Company of Ghana.
D	**Partner (s)**
	Environmental Protection Agency (Ghana).
F	**Timeframe of the project**
	5-10 years.
Comments: Expensive undertaking that requires external assistance.	

2A	**Title of the Main Project:**
	Persistence and fate of ^{14}C- Lindane applied to soil in maize ecosystem.
B	**Objective of the Project and Geographical Coverage:**
	Studies on Persistence and fate of radio-labeled Lindane in maize ecosystem. Geographical coverage: Greater Accra region.

C	**Responsible Organization(s):**
	Department of Chemistry- Ghana Atomic Energy Commission- Ghana
D	**Partner (s)**
	FAO/IAE Joint Division
F	**Timeframe of the project**
	1993-1995
Comments: Radio-labeled ^{14}C- Lindane applied to the soil surface in a maize ecosystem (1 month after planting) was found to be taken up by the plant.	
Data Source: Environmental behavior of crop protection chemicals IAEA Vienna 1997. (IAEA/ SSSM 343/23) 163-170.	

19. Hungary

1A	**Title of the Main Project:**
	PIC procedure. All pesticides have been replaced (see F. point, next page). No further activity is required.
B	**Objective of the Project and Geographical Coverage:**
	Replacement of Pesticides. Chlorinated hydrocarbons (ban), Replacement: organophosphorus esters, carbamates (insecticides), pyrethroids were permitted. Geographical Coverage:
C	**Responsible Organization(s):**
	Ministry of Health, Ministry of Agriculture and Regional Development.
D	**Partner (s)**
	National Institutes and regional organizations of Public Health and Environmental Protection. NGOs
Comments: Hungary has been dealing with the replacement of POPs since 1996 (see measures in Annex 3). Reason: Health protection, environmental protection.	
Data Source: Recommendations of the PIC Committee, Permission documents of the Ministry of Agriculture and regional Development.	

20. Indonesia

1A	**Title of the Main Project:**
	National Program of the Integrated Pest Management.

B	**Objective of the Project and Geographical Coverage:**
	To reduce and limit the application of hazardous pesticides for agricultural pest control. To use natural pest regulation mechanism for pest management. To educate and train farmers in applying Integrated Pest Management in their own fields. Geographical coverage: 13 provinces of Indonesia which have functioned as a national "food basket".
C	**Responsible Organization(s):**
	Directorate General Food Crops and Horticulture, Department of Agriculture.
D	**Partner (s)**
	World Bank and FAO.
E	**Project Funder (s)**
F	**Timeframe of the project**
	1989- 1999.
<u>Comments</u>: Efforts to replace the agricultural POPs have been carried out seriously since 1970's but for industrial (PCB's, dioxins and furans), the effort has been limited.	

21. Japan

1A	**Title of the Main Project:**
	Master Plan for Promoting Countermeasures Against Dioxins - Anti-dioxins Plan for 5 years - Promoting Appropriate Disposal of PCBs - Disposal of wastes containing PCB in Japan.

22. Republic of Korea

1A	**Title of the Main Project:**
	National Actions taken to reduce/eliminate the releases of POPs, summary of Regulatory Actions

23. Lao People's Democratic Republic

A	**Title of the Main Project:**
	Awareness Workshop on Persistent Organic Pollutants for Government Staffs and Private Sectors
B	**Objective of the Project and Geographical Coverage:**

	To encourage Lao People to understand the danger and risk of Persistent Organic Pollutants.
C	**Responsible Organization(s):**
	Science Technology and Environment Agency
D	**Partner (s)**
	Ministry of Agriculture and Forestry, Ministry of Industry and Handicraft and other line Ministries concerned.
E	**Project Funder(s):**
	Will be asking from UNEP chemicals
F	**Timeframe of the project**
	Middle September of 2000
Comments: It is necessary to encourage the Government staff at the policy making levels to understand the danger and risk of POPs	
Data Source: Ministry of Agriculture and Forestry, Ministry of Industry and Handicraft, Ministry of Trade, Ministry of Health.	

24. Latvia

1A	**Title of the Main Project:**
	PCBs in the power industry of Latvia.
B	**Objective of the Project and Geographical Coverage:**
	Identification of sources. Latvia will make testing and other measures with assistance of Sweden. To transfer know-how from scientists and authorities in Sweden to Latvia.
C	**Responsible Organization(s):**
	Latvenergo of Latvia.
D	**Partner (s)**
	Swedish Environmental protection Agency, Swedish Wattenpall AB.
F	**Timeframe of the project**
	September 1995-end of 1998.

25. Mexico

1A	**Title of the Main Project:**
	Experience in reducing use of DDT

26. Nepal

A	**Title of the Main Project:**
	Management of PCBs in waste and in other forms in Nepal.
B	**Responsible Organization(s):**
	Nepal Bureau of Standards and Metrology
C	**Partner(s)**
	Pesticide Registration Office Department of Plant Protection Ministry of Agriculture
D	**Field:** (e.g. Public Health; Occupational Health; Environmental Protection; Consumer Protection)
	Public Health, Occupational Health, Environmental Protection, Consumer Protection, Government Action
E	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.
F	**Substance(s) covered:**
	PCBs
G	**Time frame:**
	November 1999 to March 2000
H	**Geographical coverage:**
	Industrial zones of Nepal and other stakeholders throughout Nepal
Comments:	
Awareness Programme has to be launched throughout Nepal among the stakeholders.	
Data source:	
NBSM's Survey Report.	

27. The Netherlands

1A	**Title of the Main Project:**
	"The Dioxins Step Plan"

28. New Zealand

1A	**Title of the Main Project:**
	Refer to comments below.
Comments: No POPs pesticides used in New-Zealand. PCBs over 50 PPM are prohibited from use.	

2A	**Title of the Main Project:**
	- Reporting on Persistent Organochlorines in New Zealand, September 1998 - Phasing out Small PCB Holdings, 1995 - A Strategy for Managing PCBs, 1998

29. Niger

A	**Title of the Main Project:**
	Coordination technique interministérielle chargée des POPs au Niger.
B	Objectives of the project and Geographical Coverage:
	Service de Législation et de Règlementation Phytosanitaire. Direction de la Protection des Végétaux. Couvrir l'ensemble du pays à partir des chefs-lieux de départements (Niamey, Dosso, Tillabery, Tahoua, Agadez, Maradi, Zinder, Diffa)
C	**Responsible Organization(s):**
	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.
D	**Partner(s)**
	- - Santé publique (populations rurales et citadines) - Environnement (Forêts, faune, Eau et Sol) - Agriculture (cultures) - Distributeurs agréés et utilisateurs de produits chimiques -
F	**Objective(s):**
	Prise de décisions sur la règlementation des produits chimiques et des POPs (remplacement des POPs, destruction, re-exportation, interdiction) Former et informer les utilisateurs des produits chimiques

G	**Substance(s) covered:**
	Tous les produits chimiques dangereux (pesticides et produits chimiques industriels et domestiques) et les POP en particulier.
H	**Time frame:**
	5 ans
Comments: Instituer et organiser la coordination, merner des activités programmées et assister aux réunions et conférences.	
Data Source: Niamey, le 19/10/1999.	

30. Norway

1A	**Title of the Main Project:**
	Norwegian Action Plan for PCB- Summary and Conclusions

31. Panama

1A	**Title of the Main Project:**
	Creación de un Grupo Técnico de Trabajo sobre Plaguicidas que ha elaborado un manual de procedimiento de fiscalizaciíon 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)
B	**Objective of the Project and Geographical Coverage:**
	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. Geographical coverage: Todo el país
C	**Responsible Organization(s):**
	Grupo técnico de Trabajo sobre Plaguicidas conformado por Representantes del Departamento de Agriquímicos: Miniterio de Desarollo 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.

D	**Partner (s)**
	MIDA/ANAM/CLICAC/MICI/Empresas Hidroeléctricas privadas/ONGs ambientalistas.
F	**Timeframe of the project**
	3 años

32. Peru

1A	**Title of the Main Project:**
	Activities to replace the POPs (no projects)
B	**Responsible Organization(s):**
	DIGESA
C	**Partner(s)**
	No partners
D	**Field:** (e.g. Public Health; Occupational Health; Environmental Protection; Consumer Protection)
	All the activities are in the areas of the public health protection, occupational health, environmental protection and consumer protection.
E	**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.
F	**Substance(s) covered:**
	All pesticides of health industry in public and domestic use
G	**Time frame:**
	Permanent
H	**Geographical coverage:**
	National
Comments: These actions are within the normal functions of the Health Ministry.	
Data source: DIGESA.	

2A	**Title of the Main Project:**
	SENASA No project

B	**Objective of the Project and Geographical Coverage:**
	Replacement of PCB
C	**Responsible Organization(s):**
	SENASA - National authority on pesticides for agricultural use. DIGESA - National authority on pesticides for domestic use.
E	**Project Funder (s)**
	SENASA.
F	**Timeframe of the Assessment /Monitoring project**
Comments: All activities must be development in order to protect public health, occupational health of environment and consumer.	
Data Source: SENASA	

33. Philippines

1A	**Title of the Main Project:**
	The management of chemicals and toxic substances (RA 6969); Pre-manufacturing and Pre-importation Notification (PMPIN) of chemicals and substances.
B	**Objective of the Project and Geographical Coverage:**
	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. Geographical coverage: Nation-wide
C	**Responsible Organization(s):**
	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)
D	**Partner (s)**
	Inter-Agency Committee that include DOST and DOLE
E	**Project Funder (s)**
F	**Timeframe of the project**
	Continueing

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.
Data Source: Orientation manual, DENR Administrative Order N°29. RA.6969, 1995, Environmental Management Bureau.

34. Romania

1A	**Title of the Main Project:**
	- We don't have yet such a project.

35. Russian Federation

1A	**Title of the Main Project:**
	Multilateral Co-operative Project on Phase-out of PCB use and Management of PCB contaminated wastes in the Russian Federation.
B	**Objective of the Project and Geographical Coverage:**
	o 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 three phases. Geographical coverage: Russia
C	**Responsible Organization(s):**
	AMAP and State Committee of the Russian Federation for Environmental Protection.
D	**Partner (s)**
	The Eight Arctic countries: Canada, Denmark/ Greenland/ Iceland, Finland, Norway, Russia, Sweden and the USA.
F	**Timeframe of the project**
	1999-2000: Phase I, Evaluation of the current status of the problem with respect to environmental impact and development of proposals for priority remedial actions. 2000: Phase II, Feasibility study >2000: Phase III, Implementation of demonstration projects, e.g. non PCB alternatives, destruction of PCB and PCB contaminated equipment, rehabilitation of PCB contaminated areas.
Data Source: Existing information from Russia and AMAP assessment	

2A	**Title of the Main Project:**
	Multilateral Cooperative Pilot Project for phase-out of PCB use, and management of PCB-contaminated wastes in the Russian Federation
B	**Objective of the Project and Geographical Coverage:**
	- prevention of resuming of PCB production and use; - Development and construction/retrofit of facilities for production of alternatives to PCB; - Environmentally sound decommissioning of PCB stocks and contaminated equipment and containers; - Rehabilitation of PCB-contaminated territories.
D	**Partner:**
	Swedish EPA.

3A	**Title of the Main Project:**
	Draft National Strategy and Action Plan for Reducing and Eliminating POPs releases.

4A	**Title of the Main Project:**
	Federal Target Programme for "Protection of the Environment and Population from Dioxins and Dioxin-like toxic substances".

5A	**Title of the Main Project:**
	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 corespondents and consumers out of NGOs, mass media, and governmental organs.
B	**Objective of the Project and Geographical Coverage:**
	Public monitoring of the state of the environment (chemical safety). Objective: raising awareness of public (via mass media), NGOs, governmental structures. Geography: Russian Federation, Ukraine, Azerbayjan, Kazakstan, Moldova, Byelorussia, Kyrgyzstan, Armenia.
C	**Responsible Organization(s):**
	Ecocenter Dront: works for 10 years. Initiator of many public ecological projects on regional national and international levels.
D	**Partner (s)**
	"Union for Chemical Safety", Greenpeace (Russian), independent experts (Sergey Yufit, Veniamin Khudoley, Vatentina Cherikasova, Alexey Yablokov), network of interested NGOs.
E	**Project Funder (s)**

	German Ministry of International Economical cooperation (via Heinrich Böll Stiftung).
F	**Timeframe of the Assessment /Monitoring project**
	1996 – March 2000 (funded by Heinrich Böll Stiftung). April – December 2000 (made applications for grants to European Commission and ROLL)
Comments: We'd like to use our capacities (network) for deepening the work on POPs, look for sources of financial support.	
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	

36. Saudi Arabia

A	**Title of the Main Project:**
	Introduction of new pesticides to replace the banned ones
B	**Responsible Organization(s):**
	Ministry of Agriculture and Water, Agri. Research Department
C	**Partner(s)**
	Ministry of Commerce
D	**Field:** (e.g. Public Health; Occupational Health; Environmental Protection; Consumer Protection)
	Agriculture
E	**Objective(s):**
	To replace the banned pesticides with safe and environmentally friendly products.
G	**Time frame:**
	Continuous
H	**Geographical coverage:**
	Saudi Arabia

37. Slovenia

1A	**Title of the Main Project:**
	No aditional project for the POPs, they are covered in the project explained in Anex 1
Comments:	
New Legislation: - Act on Chemicals, OJ No. 36/99	

38. Sudan

A	**Title of the Main Project:**
	Disposal of obsolete pesticide Stocks
B	**Objective of the Project and Geographical Coverage:**
	- Safe disposal of the obsolete stocks, by incineration - Irrigated schemes in Central Sudan & PPD Seasonal Camps all over the Sudan
C	**Responsible Organization(s):**
	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
D	**Partner (s)**
	Agricultural Research Corporation (ARC)- Wad/Medani PO Box 126 Sudanese Agrochemicals Association (SAGA)
E	**Project Funder**
	Not determined yet
F	**Timeframe of the project**
	Twelve months
Data Source: Pesticides Registrations of Sudan- ARC	

39. Sweden

1A	**Title of the Main Project:**
	Alternatives to Persistent Organic Pollutants- The Swedish input to the IFCS Expert Meeting on persistent organic pollutants in Manila, the Philippines, 17-19 June 1996 (KemI report 4/96).

2A	**Title of the Main Project:**
	Swedish Environmental Quality Objectives. A Summary of the Government Bill 1997/1998: 145..

40. Togo

1A	**Title of the Main Project:**
	Impregnated Bednet
B	**Objective of the Project and Geographical Coverage:**
	Restrict the use of indoor chemical pesticides Avoid the exposure to Mosquito bites. Geographical coverage: The whole country.
C	**Responsible Organization(s):**
	Service National de Lutte contre le Paludisme (National Service of Preservation against Malaria)
D	**Partner (s)**
	Togolese Government and WHO.
Remark: 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.	

2A	**Title of the Main Project:**
	Screening of Botanical Pesticides as Alternatives to POPs Pesticides in Small Scale Grain Storage
B	**Responsible Organization(s):**
	University of Togo
D	**Field:** (e.g. Public Health; Occupational Health; Environmental Protection; Consumer Protection)
	Agriculture, botany
E	**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.

F	**Substance(s) covered:**
	Hyptis suavolens; Ocimum canum; Aeolanthus pubescens and Cymbopogon schoenanthus.
G	**Time frame:**
	The research has begun in early 1997.
Comments:	
Laboratory trials are under way. Financial and technical assistance will undoubtedly help… meet the UNIDO's policy promoting Clean Technologies.	
Data source:	
Komla SANDA, University of Benin, TOGO. http://www.ub.tg	

41. United Kingdom

1A	**Title of the Main Project:**
	Agriculture, trade and food security.
B	**Objective of the Project and Geographical Coverage:**
	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. Geographical coverage: Our main focus is on working with partners in Africa.
C	**Responsible Organization(s):**
	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
D	**Partner (s)**
	NGOs and the Pesticides Action Network.
E	**Project Funder (s)**
F	**Timeframe of the project**
	Part of our current programme and on-going while the problem exists.
Data Source: 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.	

2A	**Title of the Main Project:**
	Action Plan for the Phasing out and Destruction of PCBs and PCB substitutes.

42. United States of America

1A	**Title of the Main Project:**
	- Canada- United States Strategy for the Virtual Elimination of Persistent Toxic Substances in the Great Lakes, 1996 (The Great Lakes Binational Toxics Strategy)

43. Uzbekistan

1A	**Title of the Main Project:**
	National Action Plan for the Reduction of Production and Use of POPs and the Introduction of Alternatives to POPs in 1999-2000.

44. Zambia

1A	**Title of the Main Project:**
	PCB Management.
B	**Objective of the Project and Geographical Coverage:**
	Capacity building. Geographical coverage: The whole country.
C	**Responsible Organization(s):**
	Environmental Council of Zambia.
D	**Partner (s)**
	Zambia Electricity Supply Corporation.
F	**Timeframe of the project**
	1997-1999
Comments: The project aims are capacity building and securing of PCBs in Zambia, however, the disposal aspect is not included.	
Data Source: PCB Management Project. Manager.	

Section 5 Country contributions: Information on the regulatory status of POPs; bans, restrictions, and/or other legal permitted uses.

The following countries reported not having any legal action taken to control POPs:

Albania, Algeria, , Belarus, Bulgaria, Congo, Fiji Islands, Kazakhstan, Uzbekistan, Venezuela

1. Argentina

Comments: Prohibición de producción, importación y uso de plaguicidaas orgánicos persistentes para acciones sanitarias. Resolución n° 364/99- MS yAS. Boletín Oficial 27/05/1999. Autoridad de Aplicación: Ministerio de Salud y Acción Social (MS yAS).

Abreviaturas utilizadas:

SA y G: Secretaría de Agricultura y Ganadería- Ministerio de Economía de la Nación.

SS a, G y P: SubSecretaría de Agricultura, ganadería y Pesca.

S, A, G, P y A: Secretaría de Agricultura, ganadería, pesca y alimentación. Las anteriores son leas distintas denominaciones que tuviera el área de agricultura y ganadería de la Nación, dependiente del Ministerio de Economía de la Nación, en los períodos contemplados en la normativa presentada.

PEN: Poder Ejecutivo Nacional

MS y AS: Ministerio de Salud y Acción Social

MT y SS: Ministerio de Trabajo y Seguridad Social

SRN y DS: Secretaría de recursos Naturales y Desarollo Sustenable.

Data source: Perfil Nacional de Sustancias Químicaas- 1997- Ministerio se Salud (MS yAS)

Base de datos legislación Secretaría de recursos Naturales y Desarollo Sustenable.

Boletín Oficial de la Nación.

POPs Chemical	Banned	Restricted	No Action
Aldrin	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)	

Dieldrin	Prohibición de fabricación, importación, formulación, comercialización y Uso. Ley Nacional n°22289- 1980. Boletín Oficial 02/10/1980. Auto.Applic. SA,G y P.		
DDT	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)	
Endrin	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)	
Chlordane	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)	
Hexachloro-benzene		(1)Prohibición de uso en bovinos y porcinos- Decreto PEN2143/68- Boletín Oficial 30/04/68. Auto.Applic. SA y G (Sanidad Animal) (2)Prohibición como gorgorocida. Disposición n°47/72- Sanidad Vegetal. Boletín Oficial 01/06/72. Auto.Aplic. SA yG. Prohibisción como terapéutico de semillas- resolución n°10/91. Autoridad de Aplicación SSAG yP. Régimen de expropriación de fungicidas formulados con HCB.-Ley.Nacional 20316 de1973. Boletín Oficial 11/05/1973. Auto.Aplic. S,A yG.	
Mirex	- 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.		
Toxaphene		Same (1) &(2) as HCB. (3) Prohibición de uso en ciclo vegetativo de cereales y oleaginosas. Dispocisión n°79/72. Boletín Oficial 1972. Aut.Aplic. SA yG	

		(Sanidad Vegetal)	
Heptachlor	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.	
PCBs		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	
Dioxins and Furans		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 desarollo Sustenable.	

2. Armenia

POPs Chemical	Banned	No Action	Restricted use
Aldrin	Banned in 1970		
Dieldrin	Banned in 1985		
DDT	Banned in 1970		
Endrin			
Chlordane			
Hexachloro-benzene			
Mirex			
Toxaphene			
Heptachlor	Banned in 1986		
PCBs		X	

Dioxins and Furans		X	

3. Austria

Data Sources:

Federal Law Gazette N°747/1995 concerning Maximum Values of Residues of Pest Control Agents in and on Food Products.

Federal Law Gazette N°448/1991 concerning the content of Pesticides in Drinking Water.

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin	X			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 ΣPCB=0,06µg/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			Same as Aldrin
DDT	X			Same as Aldrin
Endrin	X			Same as Aldrin
Chlordane	X			Same as Aldrin
Hexachloro-benzene	X			Same as Aldrin
Toxaphene	X			Same as Aldrin
Heptachlor	X			Same as Aldrin
PCBs				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 ΣPCB=0,06µg/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 Ballschmiter-congeners=0,2mg/kg dry substance.
Dioxins and Furans		Restriction		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

4. Barbados, W.I.:

Comments: The ban dates for some of the imported POPs could only be estimated, since the licensing body, the Pesticide Control Board, kept no precise records, only deciding in the mid-80's to stop licensing the import of organochloride compounds.

Data Sources: The Pesticide Control Board (PCB), Ministry of Agriculture and Rural Development, The Barbados Light and Power Company, and the Ministry of Environment, Energy & Natural Resources (MEE).

POPs Chemical	Banned	No Action	Comments
Aldrin	24-09-1987		
Dieldrin	1986		
DDT	11-06-1967		
Endrin	1986		
Chlordane	31-12-1986		
Hexachloro-benzene	Since the mid-1980's, there was a general refusal to issue import licenses for organochloride compounds.		
Mirex	Since the mid-1980's, there was a general refusal to issue import licenses for organochloride		

	compounds.		
Toxaphene	Since the mid-1980's, there was a general refusal to issue import licenses for organochloride compounds.		
Heptachlor	1986		
PCBs		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.
Dioxins and Furans		X	The levels of dioxins and furans are not monitored in Barbados, and the frequency of activities that might generate these substances (such as the indiscriminate burning of plastics) is unknown.

5. Belgium

Data source: Royal decrees in Belgium.

POPs Chemical	Banned	Restricted	Comments
Aldrin	1976 for agricultural/non-agricultural use		
Dieldrin	1974 for agricultural use 1976 for non-agricultural use		
DDT	1974 for agricultural use 1976 for non-agricultural use		
Endrin	1962 for agricultural use 1962 for non-agricultural use		
Chlordane	1981 for agricultural use 1988 for non-agricultural use		

Hexachloro-benzene	1974 for agricultural use and never authorized for non agricultural use		
Mirex	Never authorised		
Toxaphene	1974 for agricultural use and never authorized for non agricultural use		Source: Royal decrees in Belgium
Heptachlor	1976 for agricultural use and never authorized for non agricultural use		
PCBs		Royal Decree of 9/07/86	regulatory action that limits the use of PCB-PCT and that makes an inventory of PCB equipment
Dioxins and Furans			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 TEQ/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 TEQ/Nm3 / from 01/01/2003) Emission standards from VLAREM (Flemish environmental regulation)

6. Benin

Comments: toutes les mesures n'empêchent pas l'entrée frauduleuse et l'utilisation clandestine des POPs.

Data source: Ministère du développement rural, Direction de l'Agriculture (Service de Protection des Végétaux) SPV/DAGRI/HDR. Ministère de l'Environment, de l'Habitat et de l'Urbanisme.

POPs Chemical	Banned	No Action	Comments
Aldrin	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	1993		Idem Aldrin
DDT	1993		Idem Aldrin
Endrin	1993		Idem Aldrin
Chlordane	1993		Idem Aldrin
Mirex	1993		Idem Aldrin

Heptachlor	1993		Idem Aldrin
Dioxins and Furans		X	

7. Brazil

Comments: Brazil does not produce any of the 10 POPs, but imports Heptachlor as wood preservative.

(*) Prohibition of agricultural use, trade and distribution of organochlorine pesticides. Exception: Aldrin for ant control, wood preservative, public health and agricultural emergency use; Mirex for ant control. But in 1993, Brazil prohibited Mirex and Aldrin for all agricultural uses.

(**) In 1998- Ministry of health prohibited the use of DDT for public health.

POPs Chemical	Banned	Comments
Aldrin	1993	CONAMA Resolution n°20-86- specific for water Directs n°204/97- Transport of dangerous products Directs n°329/85- use in agriculture*
Dieldrin	1993	CONAMA Resolution n°20-86- specific for water
DDT	1993 1998 for public health use	CONAMA Resolution n°06/88 CONAMA Resolution n°20-86- specific for water Directs n°204/97- Transport of dangerous products Directs n°329/85- use in agriculture*
Endrin	1993	CONAMA Resolution n°20-86- specific for water Directs n°204/97- Transport of dangerous products Directs n°329/85- use in agriculture*
Chlordane	1993	CONAMA Resolution n°20-86- specific for water Directs n°204/97- Transport of dangerous products
Hexachloro-benzene	1993	CONAMA Resolution n°06/88 Directs n°204/97- Transport of dangerous products Directs n°329/85- use in agriculture*
Mirex	1993	CONAMA Resolution n°20-86- specific for water Directs n°204/97- Transport of dangerous products Directs n°329/85- use in agriculture*
Toxaphene	1993	CONAMA Resolution n°20-86- specific for water Directs n°329/85- use in agriculture*
Heptachlor	1993	CONAMA Resolution n°20-86- specific for water Directs n°204/97- Transport of dangerous products Directs n°329/85- use in agriculture*
PCBs		CONAMA Resolution n°06/88 CONAMA Resolution n°20-86- specific for water Directs n°204/97- Transport of dangerous products CONAMA Resolution n°19/94 Directs n°19/81

8. Brunei Darussalam

Data Source: Department of Agriculture

POPs Chemical	Banned	Restricted Control Use
Aldrin	1980	
Dieldrin	1980	
DDT	1980	
Endrin	1980	
Chlordane	1980	
Hexachlorobenzene	1980	
Toxaphene	1980	
Heptachlor	1980	
Dioxins and Furans		Control used for furans, e.g., carbamate compound used for rice pests control. No dioxins were allowed in Brunei.

9. Burkina Faso

Data Source: Profil National pour la gestion des produits chimiques / Service de la Protection des Végétaux et Contrôle Phytosanitaire.

Comments: Toutes les mesures d'interdiction sont provisoires. NB: pour les Annexes 1 et 2, rien n'est entrepris a leur sujet.

POPs Chemical	Banned	No Action
Aldrin	X, no date of effectiveness	
Dieldrin	X, no date of effectiveness	
DDT	X, no date of effectiveness	
Endrin		X
Chlordane	X, no date of effectiveness	
Hexachloro-benzene		X
Mirex		X
Toxaphene		X
Heptachlor	X, no date of effectiveness	
PCBs		X

Dioxins and Furans		X

10. Canada

Comments: Dioxins/furans and hexachlorobenzene may occur as unintentional contaminants of products and emissions. Initiatives are underway to control/reduce these releases consistent with the Canadian federal government's Toxic Substances Management Policy.

Data source: PMRA (Pest Management Regulatory Agency). 1997. Product History and Regulatory Information Sheet. Health Canada, Ottawa, Canada, K1A 0K9.

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.

Environment Canada. 1993. Polychlorinated dibenzodioxins and polychlorinated dibenzofurans - Canadian Environmental Protection Act. Priority Substance List Assessment Report No. 1. ISBN 0-662-17644-8, 56 pages.

Environment Canada. 1997. Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans. Candidate Substance for Management under Track I of the Toxic Substances Management Policy. ISBN 0-0662-25427-9, 36 pages.

POPs Chemical	Comments
Aldrin	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.
Dieldrin	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.
DDT	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.
Endrin	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. 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.
Chlordane	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. 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.
Hexachloro-benzene	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*. Currently, the principal sources of hexzachlorobenzene 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.
Mirex	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.
Toxaphene	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.
Heptachlor	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. 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.
PCBs	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. 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. 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.

Dioxins and Furans	Dioxins and furans may enter the environment from four broad categories of sources: chemical products, combustion, natural and industrial. There is no intentional production or use of PCDDs and PCDFs with the exception of small quantities (i.e., milligrams or grams) produced and used in scientific research. Anthropic sources include a broad range of industrial and combustion processes. Other anthropogenic sources include releases from processes such as municipal, medical and hazardous waste incinerators, cement kilns, steel plants, wood combustion and diesel fuel combustion, and the dispersion of commercial products contaminated by PCDDs and PCDFs. The Canadian federal government's Toxic Substances Management Policy (TSMP) provides a framework for the virtual elimination of dioxins/furans from the environment.

11. Chile

Data Source: Comisión Nacional del Medio Ambiente (CONAMA), Servisio 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 (ASIQUIM)

POPs Chemical	Banned	No Action
Aldrin	Resolución n°2003 de 22 de Noviembre de 1998: Prohibe la importación y fabricación de aldrin a partir del 01.01. 1989. Prohibe la distribución, venta y uso de Aldrín a partir del 01.04 1989.	
Dieldrin	Resolución n°2142 de 19 de Octubre de 1987: Prohibe la importación y fabricación de Dieldrín a partir de la fecha de la resolución. Prohibe la distribución, venta y uso de Dieldrín a partir del 01.01.1998.	
DDT	Resolución n°639 de 7 de Mayo de 1984: Prohibe la importación y fabricación de DDT a partir de la fecha de la resolución. Prohibe la distribución, venta y uso de DDT a partir del 01.01.1985.	
Endrin	Resolución n°2142 de 19 de Octubre de 1987: Prohibe la importación y fabricación de Dieldrín a partir de la fecha de la resolución. Prohibe la distribución, venta y uso de Dieldrín a partir del 01.01.1998	
Chlordane	Resolución n°2142 de 19 de Octubre de 1987: Prohibe la importación y fabricación de Dieldrín a partir de la fecha de la resolución. Prohibe la distribución, venta y uso de Dieldrín a partir del 01.01.1998.	
Hexachloro-benzene		X
Mirex		X
Toxaphene	Resolución n°2179 de 17 de julio de 1998: Prohibe la importación y fabricación de heptacloro a partir de la fecha de la resolución. Prohibe la distribución, venta y uso de Toxafeno a partir de la fecha de esta resolución.	
Heptachlor	Resolución n°2142 de 19 de Octubre de 1987: Prohibe la importación y fabricación de Dieldrín a partir de la fecha de la resolución. Prohibe la distribución, venta y uso de Dieldrín a partir del 01.01.1998.	
PCBs	Prohibe el uso de PCBs como fluído dieléctrico en transformadores, condesadores y cualquier otro equipo eléctrico. Resolución exenta n°610, del 02/09/82	

	cualquier otro equipo eléctrico. Resolución exenta n°610, del 03/09/82.	
Dioxins and Furans		X

12. China

POPs Chemical	Banned	Restricted	Comments
Aldrin	1994	X	Max. residue limit in grain: 0,02mg/kg. GB2715-81
Dieldrin	1994	X	Max. residue limit in grain: 0,02mg/kg. GB 5127-85
DDT	1994	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<0,001µg/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.
Endrin	1994		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
Chlordane	1994		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
Hexachloro-benzene	1994		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
Mirex	1994		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
Toxaphene	1994		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

Heptachlor	1994		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
PCBs	1994		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

13. Colombia:

Comments: Regulation regarding the levels of PCBs in used oils that are reused in combustion processes is under development.

The Ministry of the Environment is developing regulations for:

1) Emission limits at incineration sites.

2) Handling and disposal of hospital residues.

Data Source: Ministry of the Environment, Ministry of Agriculture, Ministry of Health

POPs Chemical	Banned
Aldrin	Decree 305 of February 16th of 1998: prohibits import, production, formulation and sale.
Dieldrin	Decree 305 of February 16th of 1998: prohibits import, production, formulation and sale. Decree 010255 of December 9th 1993 by the Ministry of Health: prohibits import, production, formulation, trade, handling, use and application
DDT	Resolution N° 891 of 1986 by the Instituto Colombiano Agropecuario (ICA): prohibits use in agriculture. Resolution 010255 of December 9th 1993: prohibits its use in Public Health as from December 1994.
Endrin	Prohibited by resolution 1849 of 1995 by the Instituto Colombiano Agropecuario (ICA
Chlordane	Decree 305 of February 16th of 1998: prohibits import, production, formulation and sale. Decree 010255 of December 9th 1993 by the Ministry of Health: prohibits import, production, formulation, trade, handling, use and application
Hexachloro-benzene	Decree 010255 of December 9th 1993 by the Ministry of Health: prohibits import, production, formulation, trade, handling, use and application.
Mirex	Decree 305 of February 16th of 1998: prohibits import, production, formulation and sale. Decree 010255 of December 9th 1993 by the Ministry of Health: prohibits import, production, formulation, trade, handling, use and application.

Toxaphene	
Heptachlor	Decree 305 of February 16th of 1998: prohibits import, production, formulation and sale. Decree 010255 of December 9th 1993 by the Ministry of Health: prohibits import, production, formulation, trade, handling, use and application

14. Congo

Comments: En général les organochlorés sont strictement interdits en agriculture. Aucun cas spécifique n'autorise leur utilisation dans le pays**.**

Data source: Ministère de l'agriculture et de l'élevage- Service de la Protection des Végétaux- Brazzaville.

POPs Chemical	Banned	No Action	Comments
Aldrin	Produit plus jamais utilisé au Congo		
Dieldrin	Produit plus jamais utilisé au Congo		
DDT	Produit plus jamais utilisé au Congo		
Endrin	Produit plus jamais utilisé au Congo		
Chlordane	Produit plus jamais utilisé au Congo		
Hexachloro-benzene	Produit plus jamais utilisé au Congo	X	
Mirex	Produit plus jamais utilisé au Congo	X	
Toxaphene	Produit plus jamais utilisé au Congo		
Heptachlor	Produit plus jamais utilisé au Congo		
PCB	Produit plus jamais utilisé au Congo		
Dioxins and Furans		Non utilisé	

15. Costa Rica

Comments: Los reglamentos precitados están en proceso de modificación, no obstante las regulaciones mantendrán su estatus de prohibido o restringido según se indica. La Ley General de Salud permite através del otorgamiento de permisos regular los procesos de tal forma que no se produzcan Dioxinas y Furanos. Es importante indicer que en la Gaceta No. 20 de 13 de abril de 1999, se modificarle algunos decretos.

Data Source: Reglamentos, Leyes y Literatura citados anteriormente. 02 Diciembre el 1999, Lic. Arturo Novamo Arras. Do decrets Ejecutivos se publica rou como Reglamentos Técnicos.

POPs Chemical	Banned	No Action	Comments
Aldrin	10/08/1988- Gazeta n°151		

	Reglamento Técnico 18346 MAG-S-TSS		
Dieldrin	13/04/99, Decreto ejecutivo n° 27773 MAG-S-TSS		
DDT	10/08/88, Decreto ejecutivo n°18345 MAG-S-TSS		
Endrin	02/06/90, Decreto ejecutivo n° 19447 MAG-S-TSS		
Chlordane	24/01/91, Decreto ejecutivo n° 20184-S-MAG		
Hexachloro-benzene		X	Regulado, no control measures
Mirex		X	
Toxaphene	8/10/88, Decreto ejecutivo 18346 MAG-S-TSS		
Heptachlor	24/01/91, Decreto ejecutivo 20184 MAG-S-TSS		
PCBs			Articulo 252, regulado la utiliyacion, importacion, exportacion, vente y uso
Dioxins and Furans			Regulado, Aritculo 252, no inciniración, o otras fuentes

16. Croatia

POPs Chemical	Banned	Comments
Aldrin	"Law on poisons", Official gazette, n°27/99	
Dieldrin	n°27/99	
DDT	n°27/99	
Endrin	n°27/99	
Chlordane	n°27/99	
Hexachloro-benzene	n°27/99	
Mirex	n°27/99	
Toxaphene	n°27/99	
Heptachlor	n°27/99	
PCBs	n°27/99	Existence of a number of public health and occupational, environmental standards (data source:questionnaires)
Dioxins and Furans	n°27/99	

17. Cuba

Data source: Centro de Información, Gestión y Educación Ambiental, calle 18A esq.20, Playa, CUBA.

Registro Central de Plaguicidas Ayuntamiento N°231 e/ San Pedro y Lombillo. Cerro. Ciudad de la Habana- CUBA

Instituto de Investigacioness de Sanidad Vegetal. Calle 110, N°514 Esq. 5ta B. Playa. C:Habana- CUBA

POPs Chemical	Banned	Restricted	No action
Aldrin	28/12/90		
Dieldrin	28/12/90		
DDT	28/12/90		
Endrin	28/12/90		
Chlordane		Exclusivamente en cebos para combatir las hormigas cortadoras	
Hexachloro-benzene			X
Mirex			X
Toxaphene	28/12/90		
Heptachlor	28/12/90		
PCBs	28/12/90	A equipos eléctricos. Prohibida la importación de equipos eléctricos con contenido de PCB mayor de 50 ppm.	
Dioxins and Furans			

18. Cyprus

Data Sources: Department of Agriculture, Pesticides Authorization Board

POPs Chemical	Banned	Restricted	Control measures
Aldrin	08/12/1980		
Dieldrin	08/12/1980		
DDT	01/12/1976		
Endrin	Not submitted for authorization		
Chlordane	18/02/1988		
Hexachlorobenzene	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)

		wood preservative	
Mirex	Not submitted for authorization		
Toxaphene	Not submitted for authorization		
Heptachlor	Not submitted for authorization		

Comments: The dangerous substances Laws of 1991 and 1997. Draft regulations under the above laws have been prepared and are under discussion. They cover the classification, packaging, labeling, import, manufacture, use, storage and transport of dangerous substances.

19. Czech Republic

Comments: No action for DDT, HCB, PCB, Dioxins and Furans. A National Action Plan to control the use and releases of POPs will be implemented in the new Legislative Measures.

20. Denmark

POPs Chemical	Banned	Restricted	Comments
Aldrin	01/01/1991 E.C. Directive 90/335 EEC		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.
Dieldrin	01/01/1981 EC Directive 79/117 EEC.		Same as Aldrin
DDT	01/01/1986 EC Directive 85/298/EEC		Same as Aldrin 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.
Endrin	01/01/1991 EC Directive 90/335 EEC		Same as Aldrin
Chlordane	01/01/1981 EC Directive 79/117 EEC		Same as Aldrin
Hexachlorobenzene	01/01/1981	Not used in Denmark as an	Same as Aldrin

	E.C. Directive 79/117 EEC	Denmark as an industrial chemical	
Toxaphene	01/10/1984 EC Directive 83/131 EEC		Same as Aldrin
Heptachlor	01/10/1984 EC Directive 83/131 EEC		Same as Aldrin
PCBs		09/10/1986	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.
Dioxins and Furans		X	Tolerable Daily Intake (TDI) 5pg I-TEQ/kgbw. Danish Guidelines.

21. Djibouti

Comments: Certain chemicals have been banned but insufficient information is available to get the date of effectiveness. There is no data and no reglementation on PCBs /Dioxins and Furans.

Data source: Health Ministry and Agricultural Ministry.

POPs Chemical	**Banned**
Aldrin	X
Dieldrin	X
DDT	X
Endrin	X
Chlordane	X
Hexachloro-benzene	X

21. Dominican Republic

Comments: data is coming from the questionnaires, and is available only for dioxins and furans.

POPs Chemical	Restricted	Comments
Dioxins and Furans	X	Pesticides Control Regulation and Licensing SKO N°56 of 1986 to control importation.

22. Ecuador

Data source: Secretaría técnica del Comité Nacional de Productos Químicos Peligrosos

Ministerio del Ambiente

Av Amazonas y Eloy Alfaro

Edificio MAG, piso 8

Fax: (593-2) 565-809

Email: Iba@inefan.gov.ec/ Isuarez@inefan.gov.ec

POPs Chemical	Banned	Restricted	No Action
Aldrin	Registro Oficial N° 0231 (1985) Registro Oficial N° 0112 (1992)		
Dieldrin	Registro Oficial N° 0231 (1985) Registro Oficial N° 0112 (1992)		
DDT	Registro Oficial N° 0231 (1985)	Salud	
Endrin	Registro Oficial N° 0231 (1985) Registro Oficial N° 0112 (1992)		
Chlordane	Registro Oficial N° 0231 (1985) Registro Oficial N° 0112 (1992)		
Hexachloro-benzene	Aparentemente, la importación es muy pequeña y no aparece en la entidad encargada del registro de importaciones.		No existe información
Mirex	Registro Oficial N° 0231 (1985)		X

	Registro Oficial N° 0112 (1992)		
Toxaphene	Registro Oficial N° 0231 (1985) Registro Oficial N° 0112 (1992)		
Heptachlor	Registro Oficial N° 0231 (1985) Registro Oficial N° 0112 (1992)		
PCBs			No existe prohibición pero existe un dieléectrico alternativo
Dioxins and Furans		Está en proyecto una norma para la incineración de desechos hospitalarios.	

23. El Salvador

Data source: Lista de productos que ha sido cancelado y prohibida la comercialisación en el país de la sección de registro del Ministerio de Agricultura y Ganadería; Ministerio del Medio Ambiente.

POPs Chemical	Banned	Restricted	No action
Aldrin	Por ser un producto organoclorado persistente y por su alta residualidad, con posibles efectos teratogénicos en el humano, 1980.		
Dieldrin	Por ser un producto organoclorado persistente y por su alta residualidad en los productos de consumo y exportación, 1986.		
DDT	Por riesgos wue 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		
Endrin	Es un producto organoclorado persistente en el ambiente y por su alta residualidad, en los productos de consumo y exportación, 1986		
Chlordane	Es un producto organoclorado persistente en el ambiente y por su alta residualidad, en los productos de consumo y exportación, 1986.		
Hexachloro-benzene			Sustancia controlada, se sugiere por ley que el Ministerio de Medio Ambiente y Recursos Naturales autorice el ingreso
Mirex			Registrado para utilizarlo como insecticida vigente.

Toxaphene	Producto persistente por su alta residualidad en el ambiente, 1988.		
Heptachlor	Es un producto organoclorado persistente en el ambiente y por su alta residualidad, en los productos de consumo y exportación, 1986.		
PCBs			Sustancia controlada, se sugiere por ley que el Ministerio del Medio Ambiente y Recursos Naturales autorice el ingreso
Dioxins and Furans			Al momento no existe ninguna actividad realizada.

24. Ethiopia

POPs Chemical	Restricted	No Action	Comments
Aldrin		X	
Dieldrin		X	
DDT	X		Restricted use for vector-borne disease control such as Malaria.
Endrin		X	
Chlordane		X	
Hexachloro-benzene		X	
Mirex		X	
Toxaphene		X	
Heptachlor		X	
PCBs		X	
Dioxins and Furans		X	

25. Fiji

POPs Chemical	Banned	Restricted
Aldrin	3rd Feb. 1995	
Dieldrin	3rd Feb. 1995	
DDT	After Pesticide Act was enforced in 1971	

Endrin	After Pesticide Act was enforced in 1971	
Chlordane	After Pesticide Act was enforced in 1971	
Hexachloro-benzene	After Pesticide Act was enforced in 1971	
Mirex	Never registered	
Toxaphene	After Pesticide Act was enforced in 1971	
Heptachlor	Never registered in Fiji for any use. Importation is prohibited.	
PCBs	Products containing PCB or under PCB category not registered for Agricultural use. Importation prohibited.	Old electrical equipment (transformers may be containing PCB fluids)

26.Finland

POPs Chemical	**Banned**	**Comments**
Aldrin	1972	Ban as plant protection product. Finland has implemented the relevant EU legislation although aldrin is not used in Finland. HELCOM Recommendation 13/13: Aldrin is on the list of "banned pesticides" which can not be approved for any use as pesticides by governmental action. PARCOM 7/13/1: all contracting parties will phase out the use of aldrin as soon as possible.
Dieldrin	1972	Same
DDT	1976	Same
Endrin	1969	Same
Chlordane	1969	Same
Hexachloro-benzene	1972	Ban on the placing on the market and the use of plant protection products containing HCB. All discharges to surface waters are prohibited.
Mirex		Mirex has never been used in Finland.
Toxaphene	1969	Ban on the placing on the market and the use of plant protection products. HELCOM recommendation 13/13: Toxaphene is on the list of "banned pesticides" which can not be approved for any use as pesticides by governmental action.
Heptachlor	X	Heptachlor has never been used in Finland.

PCBs		Maximum concentration of PCBs in fish and fish products 2mg/kg. Ministry of Trade and Industry, Decision 134/96. The occupational safety and health administration has used since 1983 for PCB a limit value 100µg/m2. If there is a possibility of exposure, the measures needed for worker's safety are taken into consideration in a safety plan that is drawn up before the work begins. Ministry of Labour Resolution on Carcinogens (838/1993): the use of PCBs shall comply with the government resolution on Occupational cancer Prevention (1182/92) which stipulates that workers' safety must be guaranteed by assessing the risk and taking necessary precautions. Transformers and condensers (capacity over 1kvar) had to be disposed before the end of 1994. The production, import, placing on the market and supply of the following PCB substitutes is prohibited: monomethyldibromodiphenylmethane, monomethyldichlorodiphenylmethane, monomethyltetrachlorodiphenylmethane, and of products containing these substitutes. EU Council Directive 91/339/EEC, EU Council Directive 96/59 EC. Recommendation for guideline values on PCB concentration in soil: limit value 0,5mg/kg, target value 0,05mg/kg. Council of state decision under preparation. Other agreements: Baltic Marine Environment Protection Commission (HELCOM): Annex I of Convention on the Protection of the Marine Environment of the Baltic sea area 1992. Recommendation 6/1 Recommendation 16/10 North Eastern Atlantic Maine Environment protection Commission (OSPARCOM): Recommendation 92/3.
Dioxins and Furans		Tolerable Daily Intake of 35mg/kgbw/week. Recommendation of the Nordic Council of Ministers. The workers who have been exposed to carcinogenic substances during more than 20 days are registered. Occupation limits for concentrations in repaired and dismantled technical material. Ministry of Labour. Resolution on carcinogens (838/93) Existence of limit values for cleaning up of contaminated soil. Maximum emission limits for municipal waste incineration plants. Gov.order Vnp 626/94.

27. France

POPs Chemical	Banned
Aldrin	Usage agricole: 01/04/73, Protection du bois: 04/10/94, Tout usage: cf regl. CE 2455/92
Dieldrin	Usage agricole: 01/04/73, Protection du bois: 04/10/94, Tout usage: cf regl. CE 2455/92
DDT	Tout usage: cf regl. CE 2455/92
Endrin	Usage agricole: 21/08/91, Protection du bois: 04/10/92, Tout usage: cf regl. CE 2455/92
Chlordane	Usage agricole: 01/01/73, Protection du bois: 04/10/94, Tout usage: cf regl. CE 2455/92
Hexachloro-benzene	Peinture anti-salissures: 04/10/92, Tout usage: cf.Regl.CE 2455/92

benzene	
Mirex	Jamais utilisé en France en tant que matière active de produits phytosanitaires
Toxaphene	Usage agricole: 03/07/90, Peinture anti-salissures: 04/10/92, Tout usage:cf.Regl. CE 2455/92
Heptachlor	Usage agricole:01/01/73, Traitement des bois, peintures anti-salissures: 04/10/92, Tout usage:: cf.Regl.CE2455/92
PCBs	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 04/10/92
Dioxins and Furans	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

28. The Gambia

Data Source: National Environment Agency, 5 Fitzgerald St., PMB. 48, Banjul
Tel: (220) 228056/224867/224868. Fax: (220) 229701. E-mail: nea@gamtel.gm

POPs Chemical	Banned	Comments
Aldrin	17/5/94	
Dieldrin	17/2/97	
DDT	17/5/94	DDT together with other obsolete pesticides were shipped to UK in August 1999, for high-temperature incineration.
Endrin	9/10/96	
Chlordane	17/5/94	
Hexachlorobenzene	12/2/97	
Mirex	19/10/99	
Toxaphene	19/10/99	
Heptachlor	17/2/97	
PCBs		No regulatory action taken, but final decision not import taken.
Dioxins and Furans		No control measures taken.
Notes: PCBs: final decision not to import taken. Regulatory actions on other chemicals were taken at the national level after the chemicals became PIC chemicals. Therefore Notification to Secretariat was not necessary.		

29. Germany

Comments: Commission Directive 79/117/EWG (Bans on the placing on the Market and the use of Plant Protecting Agents Containing particular Active Substances): Prohibits the use and placing on the market of any plant protection agent containing one or more of the following persistent chlorinated organic substances: Aldrin, Dieldrin, DDT, Endrin, Chlordane, Hexachlorobenzene, Toxaphene, Heptachlor, and HCH containing <99% of the γ-isomer.

POPs Chemical	Banned	Comments
Aldrin	1979	See comments.
Dieldrin	1979	See comments
DDT	1979	See comments
Endrin	1979	See comments
Chlordane	1979	See comments
Hexachloro-benzene	1979	See comments
Toxaphene	1979	See comments
Heptachlor	1979	See comments
PCBs	X	Prohibition of Chemical Ordinance: Ordinance on Bans and Restrictions on the Placing on the Market of Dangerous Substances, Preparations and Products pursuant to the Chemical Act. Bans: Trichlorinated and higher chlorinated biphenyl's (PCB). (…) Preparations with a total of more than 50 mg/kg of PCB Products containing PCB as pure substances or preparations within the meaning of numbers may not be placed on the market.

30. Ghana

Comments: External assistance is needed e.g. technical assistance to do a comprehensive study. Need recommended alternatives

POPs Chemical	Banned	No Action
Aldrin	1985	
Dieldrin	1985	
DDT	1975	
Endrin	1975	
Chlordane	1975	

Hexachloro-benzene	1975	
Mirex		X
Toxaphene		X
Heptachlor	1975	
PCBs		X
Dioxins and Furans		X

31. Greece

Comments: Ban of all the POP used as plant protection product in 1972. No data available.

32. Guinea

Data source: questionnaires. SCH/Direction de la Protection des Végétaux.

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin		X		Licence professionnelle requise pour l'importation et lamisse sur le marché des pesticides. Arrêté 5714/MAEF/SGG/96
Dieldrin		X		Idem
DDT		X		Idem
Endrin		X		Idem
Chlordane		X		Idem
Hexachloro-benzene		X		Idem
Mirex		X		Idem
Toxaphene		X		Idem
Heptachlor		X		Idem
PCBs			X	Mesure spécifique inexistante concernant les PCB.
Dioxins and Furans			X	Idem

33. Hungary

Comments: Implementation is the responsibility of the Ministry of Health, Ministry of Agriculture and Regional Development, Ministry of Economy (+other Ministries) NCPH and its Institutes.

Data Source: Banned and restricted chemicals in Hungary (PIC list).

POPs Chemical	Banned	Restricted
Aldrin	1966	
Dieldrin	1966	
DDT	1966	
Endrin	1968	
Chlordane	1968	
Hexachloro-benzene	1966	
Mirex	It has never been permitted in Hungary	
Toxaphene	1992.	
Heptachlor	It has never been permitted in Hungary	
PCBs		It can be used with the permit of NPHOS (1993) only.
Dioxins and Furans		Emission limit values and in case of waste incineration emission limit values also are established for these chemicals

34. Iceland

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin	Banned 1996			Never registered as a pesticide, but was probably used between 1940/50 and 1960/70.
Dieldrin	Banned 1996			Never registered as a pesticide
DDT	Banned 1996			Never registered as a pesticide. Used before 1975 as a pesticide. Used after 1975 on horses for the treatment of scabies.
Endrin	Banned 1996			Never registered as a pesticide.
Chlordane	Banned 1996			Never registered as a pesticide, but was probably used between 1940/50 and 1960/70.
Hexachloro-benzene	Banned 1996			Never registered as a pesticide

Mirex	Banned 1998			Never registered as a pesticide
Toxaphene	Banned 1996			Never registered as a pesticide.
Heptachlor	Banned 1996			Never registered as a pesticide
PCBs	Banned 1988 (see comment)	See comment		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 1996
Dioxins and Furans		See comment		Dioxins and furans are not known to have ever been used in Iceland. There are emission limits 0,1 ng/m3 in force since 1996, for incineration of hazardous wastes
Notes: The use of pesticides is not allowed in Iceland unless that the pesticides are registered. The first list of registered pesticides was published in 1975. Information regarding use of pesticides before 1975 is incidental.				

35. Indonesia

Comments: Most of these products still find their way into the country illegally.

Data Source: Nelson MANDA, Inspector PTS, Environmental Council of Zambia, PO BOX 35131, LUSAKA, FAX:260 11 25 41 64 / Tel: 25 41 30/ 1/ Email: necz@zamnet.zm

POPs Chemical	Banned	No Action	Comments
Aldrin	1974		
Dieldrin	1992		
DDT	1974 for agriculture 1994 for malaria control		
Endrin	1974		
Chlordane	1992		
Hexachloro-benzene			Never registered in Indonesia.
Mirex			Never registered in Indonesia.
Toxaphene	1980		
Heptachlor	1974		
PCBs	1990's		
Dioxins and Furans		No specific action	

36. Ireland

POPs Chemical	Banned	No Action	Comments
Aldrin	1981		Banned as a plant protection product
Dieldrin	1981		Banned as a plant protection product
DDT	1985		Banned as a plant protection product
Endrin	1981		Banned as a plant protection product
Chlordane	1992		Banned as a pesticide
Hexachloro-benzene	1981		
Mirex		X	Mirex has never been authorized for use in Ireland as a pesticide and therefore, no stockpile exist
Toxaphene	1985		Banned as a plant protection product. No stockpiles exist.
Heptachlor	1981		
PCBs	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.
Dioxins and Furans		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.

37. Italy

Data Source: Drssa. Monica Cepasso, Ministry of Health

POPs Chemical	Banned	Restricted use
Aldrin	Banned for use as a plant protection product 26 October 1973; production banned with Regulation 2455/92 – CEE	
Dieldrin	Same as Aldrin.	

DDT		Specific authorization granted by Ministry of Health: • To produce an anti-scab remedy • In the composition of a product for wood protection.
Endrin	Same as Aldrin.	
Chlordane	Same as Aldrin.	
Hexachlorobenzene	Banned for use as a pesticide 17.03.1978	
Mirex		No authorization granted for use or production.
Toxaphene		Same as Mirex
Heptachlor	Same as Aldrin.	
PCBs	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
Dioxins and Furans		0.1 ng TE/m³ 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.

38. Japan

POPs Chemical	Banned	Restricted	Comments
Aldrin	1981 (*1, *2) 1975 (*5)	1971(*3)	
Dieldrin	1981 (*1, *2) 1973 (*5)	1971(*3)	
DDT	1981 (*1, *2) 1971 (*4)		
Endrin	1981 (*1, *2) 1975 (*5)	1971(*3)	
Chlordane	1986 (*1, *2) 1969 (*5)		
Hexachloro-benzene	1979 (*1, *2)		Never used as an agricultural pesticide in Japan.
Mirex	X		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.
Toxaphene	X		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.
Heptachlor	1986 (*1, *2) 1975 (*5)		
PCBs		1974(*1', *2)	
POPs Chemical	Control measures		
Dioxins and Furans	Emission standards for waste incinerators and electrical steel mills since 1997. (C), (D) Emissions standards and discharge standards for certain types of facilities to be determined and applied from 2000. (E)		

Referred legislation

A. Law Concerning the Examination and Regulations of Manufacture, etc. of Chemical Substances:

(*1) Use is not permitted except certain use designated by the law. No use has been designated since the year shown above. Use for research and testing is allowed.

(*1') Use is not permitted except certain use designated by the law. Use for maintenance of main transformers and main rectifiers installed in railroad trains is designated. Use for research and testing is allowed.

(*2) Authorization is requried for manufacture and import. No authorization has been granted since the year shown above.

B. Agricultural Chemicals Regulation Law:

(*3) The sale for agricultural use is banned except for certain uses since the year shown above.

(*4) The sale for agricultural use is banned since the year shown above.

(*5) Registration for agricultural use made invalid since the year shown above. 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.

C. Air Pollution Control Law. (for waste incinerators and electrical steel mills)

D. Waste Management and Public Cleansing Law. (for waste incinerators)

E. Law Concerning Special Measures Against Dioxins.

39. Kazakhstan

Comments: Data is not available for all the POPs.

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin	X			Banned by the decree 9 of 31 May 1996
Dieldrin	X			Banned by the decree 9 of 31 May 1996
DDT	X			Banned by the decree of Ministry of Health of the Republic of Kazakhstan dated 7 March 1989, 171
Endrin				No data available
Chlordane				No data available
Hexachloro-benzene				No data available
Mirex				No data available
Toxaphene				No data available
Heptachlor	X			Banned by the decree 9 of 31 May 1996
PCBs				No data available
Dioxins and Furans				No data available

40. Republic of Korea

Data Source:
Article 24 and 24bis of Ministerial Ordinance, the Waste Management Act

POPs Chemical	Banned	No Action	Control Measures
Aldrin	-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).		
Dieldrin	Banned for agricultural use by Agricultural Chemical Management Act (1970)		

	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	Banned for agricultural use by Agricultural Chemical Management Act (1969) -Banned for all industrial use by Toxic Chemicals Control Act (1991).		
Endrin	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).		
Chlordane	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).		
Hexachlorobenzene		Hexachlorobenzene is a new chemical that has never been intentionally manufactured, imported or used in Korea.	
Mirex			
Toxaphene	Banned for agricultural use by Agricultural Chemical Management Act (1969) -Banned for all industrial use by Toxic Chemicals Control Act (1991).		
Heptachlor	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).		
PCBs	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)		
Dioxins and Furans			- 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

41. Kyrgyz Republic

Comments: No any activity is undertaken; refer to Annexes 1 and 2. List of pesticides banned or limited by Ministry of Health, USSR in 1989 is in force; refer to Annex 3.

Data Source: Department of chemistryzation and plant protection

POPs Chemical	Banned	Restricted	Comments
Aldrin	2.02.1972		
Dieldrin	13.05.1985		
DDT	1970		
Endrin	30.03.1978		
Chlordane			No data (10 years) on Use
Hexachloro-benzene			
Mirex			No data (10 years) on Use
Toxaphene			No data (10 years) on Use
Heptachlor	21.03.1986		
PCBs			No laboratory and analytical facilities for assessing emission sources
Dioxins and Furans			No laboratory and analytical facilities for assessing emission sources

42. Kuwait

Comments: Most of PCB transformers were exported to other countries according to Basel Convention (restricted use). Dioxins and Furans: Emitting in a very low density from central incinerators belong to the Ministry of Health (no action). As far as PCBs are concerned, they are being used in the Ministry of Electricity and Water in some of the old generators. The Ministry has substituted these chemicals and will phase out the use of these generators soon. However, to overcome this difficulty more time is needed to acquire and develop new technology.

POPs Chemical	Banned
Aldrin	28/03/1995 No. 95/95
Dieldrin	28/03/1995 No. 95/95
DDT	28/03/1995
Endrin	28/03/1995
Chlordane	28/03/1995

Hexachloro-benzene	28/03/1995
Mirex	28/03/1995
Toxaphene	28/03/1995
Heptachlor	28/03/1995

43. Lao People Democratic Republic

Comments: Lao P.D.R. does not produce or export any chemicals or pesticides. Chemicals and pesticides used in Lao P.D.R. are imported from foreign countries in several forms for several purposes. Specific POPs chemicals have been banned (see table), others are under consideration to be banned by the Government.

Data Source: National POPs Focal Point, Prime Minister's Office, Science, Technology and Environment Organization

POPs Chemical	Banned	Restricted	Comments
Aldrin	21Nov1992		Use eliminated
Dieldrin	21Nov1992		Use eliminated
DDT		21Nov1992	Use limited to vector control, otherwise eliminated
Endrin	21Nov1992		Use eliminated
Chlordane			Not imported, under consideration for ban
Hexachloro-benzene			Not imported, under consideration for ban
Mirex			Not imported, under consideration for ban
Toxaphene	21Nov1992		Use eliminated
Heptachlor	21Nov1992		Use eliminated
PCBs			Not imported, under consideration for ban
Dioxins and Furans			

44. Latvia

Data Source: Regulations of Cabinet of Ministries "on limitation of use and market of chemical substances and chemical products".

Register of Plant Protection Products.

POPs Chemical	Banned	Restricted	No Action	Comments

Aldrin	02.02.1972			
Dieldrin	X			Prohibited, does not include in official register of permitted substances, collection does not exist.
DDT	1966			Collected substances are placed in special storage till destruction.
Endrin	X			Prohibited, does not include in official register of permitted substances, collection does not exist
Chlordane	X			Prohibited, does not include in official register of permitted substances, collection does not exist
Hexachloro-benzene		Since 1999. Regulations of the Cabinet of Ministries: "on limitation of use and market of chemical substances and chemical products		
Mirex	X			Prohibited, does not include in official register of permitted substances, collection does not exist
Toxaphene	X			Prohibited, does not include in official register of permitted substances, collection does not exist
Heptachlor	21.03.1986			
PCBs		Permitted in electric equipment till 2001		
Dioxins and Furans			X	

45. Lebanon

Data Source: Ministry of Environment; Ministry of Agriculture; Customs Office.

POPs Chemical	Banned	No Action	Comments
Aldrin	27/7/92 by the decision n°108/1 issued by the Ministry of Agriculture		Ban for production and import
Dieldrin	Same		Ban for production and import
DDT	Same		Ban for production and import

Endrin	Same		Ban for production and import
Chlordane	Same		Ban for production and import
Hexachloro-benzene	Same		No more imported or produced. No stock is available. Source of information: Committee of Agricultural Medicines
Mirex		X	
Toxaphene		X	
Heptachlor	Same as above		Ban for production and import
PCBs		X	No import or production is happening in the country.
Dioxins and Furans		X	

46. Lithuania

Comments: Data from the questionnaires concerning the regulatory actions taken to control the use of the POPs: HN48-1994: MAC in drinking water, HN35-1993: MAC in ambient air, HN23-1993: MAC in the air at work area., HN 60-1996: MAC in soil, HN 54-1995: MAC in raw materials and foodstuffs.

POPs Chemical	Banned	Restricted	Comments
Aldrin	1997		Hygiene standards HN 63-1996. Banned and restricted pesticides 1997 04 01
Dieldrin	1997		Hygiene standards HN 63-1996. Banned and restricted pesticides 1997 04 01
DDT	1997		Hygiene standards HN 63-1996. Banned and restricted pesticides 1997 04 01
Endrin	1997		Hygiene standards HN 63-1996. Banned and restricted pesticides 1997 04 01
Chlordane	1997		Hygiene standards HN 63-1996. Banned and restricted pesticides 1997 04 01
Hexachloro-benzene	1997		Hygiene standards HN 63-1996. Banned and restricted pesticides 1997 04 01
Mirex	1997		Hygiene standards HN 63-1996. Banned and restricted pesticides 1997 04 01
Toxaphene	1997		Hygiene standards HN 63-1996. Banned and restricted pesticides 1997 04 01
Heptachlor	1997		Hygiene standards HN 63-1996. Banned and restricted pesticides 1997 04 01
PCBs	X	Hygienic standards HN 36-1999. Banned and restricted	HN 63-1996 Banned and restricted pesticides

		substances 1999 09 01	HN 36-1999 Banned and restricted substances
Dioxins and Furans		Hygienic standards HN 35 1998. Maximum permissible concentrations of chemicals polluting air of residential areas.	

47. Luxembourg

Comments: The 10 POP chemicals are not in use anymore in the country.

48. Macedonia

Data source: The SFRY Official Journal No 43/82

POPs Chemical	Banned
Aldrin	X, Article 4 of the Law on traffic in poisonous substances
Dieldrin	X, Article 4 of the Law on traffic in poisonous substances
Chlordane	X, Article 4 of the Law on traffic in poisonous substances
Heptachlor	X, Article 4 of the Law on traffic in poisonous substances

49. Madagascar

Comments: There are a number of decrees or laws to ban any unusual chemicals and imported anyhow in the country, but field action has not taken place about pesticides used to fight agricultural pests (*Locusta migratoria*
Data source: Ministry of environment, Agriculture, Health Department. Information is not available for all the POPs.

POPs Chemical	Banned	Comments
Dieldrin	Nov 30, 1993.	Decree 93/625. It is a legal instrument issued by the Ministry of Agriculture
DDT	Nov 30, 1993	Decree 93/625. It is a legal instrument issued by the Ministry of Agriculture
Endrin	Nov 30, 1993	Decree 93/625. It is a legal instrument issued by the Ministry of Agriculture
Chlordane	Nov 30, 1993	Decree 93/625. It is a legal instrument issued by the Ministry of Agriculture
PCBs	Nov 30, 1993	Decree 93/625. It is a legal instrument issued by the Ministry of Agriculture

50. Malaysia

POPs Chemical	Banned
Aldrin	Registration under the Pesticides Act 1974, Withdrawn since 1994.
Dieldrin	Registration under the Pesticides Act 1974, Withdrawn since 1994.
DDT	No more registration under the Pesticides Act 1974, since 1. 5. 99
Endrin	Never registered under the Pesticides Act 1974
Chlordane	No more registration under the Pesticides Act 1974, After 1.10.98
Hexachlorobenzene	Never registered under the Pesticides Act 1974.
Mirex	Never registered under the Pesticides Act 1974.
Toxaphene	Never registered under the Pesticides Act 1974.
Heptachlor	No registration under the Pesticides Act 1974 since 1.8.90
PCBs	Import is banned under the Prohibition of Import Order under the Customs Act 1967 since 1994.

51 Mauritius

Data Sources: Pesticide Control Board, Ministry of Health

POPs Chemical	Banned	Restricted
Aldrin	4th December 1991	
Dieldrin	4th December 1991	
DDT		for Malaria Control
Endrin	Banned	
Chlordane	27th May 1993	
Hexachloro-benzene	Banned	
Mirex	Banned	
Toxaphene	Banned	
Heptachlor	27th May 1993	
PCBs	X	

Dioxins and Furans		

52. Mexico

POPs Chemical	Banned	Restricted	Comments
Aldrin	X		Diario Oficial de la federación 31 de enero de 1991. Catálogo Oficial de Plaguicidas, Comisión Intersecretarial para el Control des Proceso y uso de Plaguicidas, Fertilizantes y Sustancias Tóxicas /CICOPLAFEST).
Dieldrin	X		Igual
DDT		X	Este producto sólo se usa en campañas sanitarias
Endrin	X		Diario Oficial de la federación 31 de enero de 1991. Catálogo oficial de Plaguicidas, México. Comisión Intersecretarial para el Control del Proceso y Uso de Plaguicidas, fertilizantes, y Sustancias Tóxicas (CICOPLAFEST).
Chlordane		X	Este producto sólo puede ser adquirido en las comercializadoras mediante la presentación de una recomendación escrita de un técnico que haya sido autorizado por el Gobierno Federal.
Hexachloro-benzene	X		Estan prohibidos su comercialización y uso en Mexico. Programa de las Naciones Unidas para el Medio Ambiente, ONU. Programa conjunto FAO/PNUMA 1991.
Mirex	X		Diario Oficial de la federación 31 de enero de 1991. Catálogo oficial de Plaguicidas, México. Comisión Intersecretarial para el Control del Proceso y Uso de Plaguicidas, fertilizantes, y Sustancias Tóxicas (CICOPLAFEST).
Toxaphene			Para este producto no se tiene información
Heptachlor	1995		Norms of Public Health: NOM-02-SSA1-1995; NOM-028-SSA1-1993; NOM-029-SSA1-1993; NOM-030-SSA1-1993; NOM-031-SSA1-1993; NOM-032-SSA1-1993; NOM-041-SSA1-1993; NOM-0127-SSA1-1994. Occupational norms: NOM-010-STPS-1994

PCBs		X	Este producto esta controlado en México por la secretaría del Medio Ambiente Recursos Naturales y Pesca (SEMARNAP). Acuerdo que establece, la clasificación y codificación de mercancias cuya importación y exportación està sujeta a regulación por parte de SEMARNAP: D.O.F. 27 de diciembre de 1995. Reglamento de residuos peligrosos de la Ley general del Equilibrio Ecológico y Protección al Ambiente. Primer listado de Actividades Altamente Riesgosas. Diario Oficial de la Federación 28 de Marzo de 1990. Segundo listado de Actividades Altamente riesgosas. Diario Oficial de la Federación 4 de Marzo de 1992.

53. Federal States of Micronesia

POPs Chemical	Comments
Aldrin	Chemicals have not been inventoried. Limited quantities may be present in the FSM.
Dieldrin	Chemicals have not been inventoried. Limited quantities may be present in the FSM.
DDT	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.
Endrin	Chemicals have not been inventoried. Limited quantities may be present in the FSM.
Chlordane	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.
Hexachloro-benzene	Chemicals have not been inventoried. Limited quantities may be present in the FSM.
Mirex	Chemicals have not been inventoried. Limited quantities may be present in the FSM.
Toxaphene	Chemicals have not been inventoried. Limited quantities may be present in the FSM.
Heptachlor	Chemicals have not been inventoried. Limited quantities may be present in the FSM.
PCBs	Sampling of old transformers is currently underway. These transformers have been tagged for future action.
Dioxins and Furans	Chemicals have not been inventoried. Limited quantities may be present in the FSM.

54. Mongolia

POPs Chemical	Banned
Aldrin	14 May 1997

Dieldrin	14 May 1997
DDT	14 May 1997
Endrin	14 May 1997
Chlordane	14 May 1997
Toxaphene	14 May 1997
Heptachlor	14 May 1997

55. Morocco

POPs Chemical	Banned
Aldrin	
Dieldrin	Depuis 1984
DDT	Depuis 1984
Endrin	Depuis le 18 avril 1984
Chlordane	Depuis le 18 avril 1984
Hexachloro-benzene	Depuis le 18 avril 1984
Mirex	N'est pas enregistré comme pesticide
Toxaphene	Depuis le 18 avril 1984
Heptachlor	Depuis le 18 avril 1984
PCBs	Utilisation exceptionnelle dans la lutte antiacridienne selon la règlementation en vigueur, mais dans la pratique cet usage a été abandonné totalement par les autorités marocaines.
Dioxins and Furans	

56. Nepal

Data Sources: NBSM's door to door survey. (Case study report on POPs in use in Nepal)

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin	Banned to produce or to import under the Pesticide Act and Rules, 1994.	Restricted to use under Pesticide Act 1991 & Pesticides Rule 1993.		
Dieldrin	Same as above.	Same as above.		
DDT	Same as above.	Same as above.		

Endrin	Same as above.	Same as above.		
Chlordane	Same as above.	Same as above.		
Hexachlorobenzene	Same as above.	Same as above.		
Mirex	Same as above.	Same as above.		
Toxaphene	Same as above.	Same as above.		
Heptachlor	Same as above.	Same as above.		
PCBs	Data are not available (NA)	Data are not available (NA)		
Dioxins and Furans			No Action	

Notes:

Restricted and banned pesticides are also known to be sold in Nepalese market. All of them are suspected to have illegally entered through long porous border with India.

57. The Netherlands

POPs Chemical	Banned	Comments
Aldrin	X as a plant protection product	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)
Dieldrin	Same	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79)
DDT	Same	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),
Endrin	Same	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
Chlordane	Same	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79)
Hexachloro-benzene	Same	Directive 79/117/EEC of 21/112/78 (O.J.L.33/36 of 8/2/79)
Toxaphene	Same	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),
Heptachlor	Same	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),

58. New Zealand

Comments: General phase-out policy for organochlorine insecticides established in April 1970 (Agricultural Chemicals Board Minutes, April 1970).

POPs Chemical	Banned	Restricted	Comments
Aldrin	1985		Last product containing aldrin was voluntarily withdrawn in 1985 (Pesticides Board Minutes, September 1985);
Dieldrin	1988		Last products for dieldrin, DDT, and mirex were deregistered in 1988 (Pesticides Board Minutes, September 1988);
DDT	1988		Last products for dieldrin, DDT, and mirex were deregistered in 1988 (Pesticides Board Minutes, September 1988);
Endrin	1976		Last product containing endrin was voluntarily withdrawn in 1976 (Agricultural Chemicals Board Minutes, October 1976);
Chlordane	1992		Registration of chlordane was declined 1992 (Pesticides Board Minutes, May 1992).
Hexachloro-benzene	1972		Last product containing HCB was deregistered in 1972 (Agricultural Chemicals Board Minutes, October 1972);
Mirex	1988		Last products for dieldrin, DDT, and mirex were deregistered in 1988 (Pesticides Board Minutes, September 1988);
Toxaphene	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.
Heptachlor	1971		Last product containing heptachlor (for research purposes only) was voluntarily withdrawn in 1971 (Agricultural Chemicals Board Minutes, October 1972);
PCBs	1-1-1994		Under the Toxic Substances Regulations
Dioxins and Furans		X	Point source industrial emissions are regulated by decisions at the Regional Government level. National standards are under preparation

59. Nicaragua

POPs Chemical	Restricted	Comments
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 Desarollo (VAUGHAN, 1993).
Dieldrin	X	Igual
DDT		No datos
Endrin	X	Igual que los aldrinas.
Chlordane		No datos
Hexachloro-benzene		No datos
Mirex		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 organocloradosy 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 annual respecto al área agrícola en 1987 y a la importación general de insecticidas agriquímicos.

60. Niger

Comments: Cette mesure règlementaire sera suivie en l'an 2000 par une autre mesure qui banira tous les pOPs au Niger.

Data Source: Niamey, 22 Octobre 1999. Hamidou Lazoumar

POPs Chemical	Banned	Restricted	Comments
Aldrin		Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.	
Dieldrin	Interdit par l'Arrêté n°092 MAG/EL/DPV du 8 juillet 1999.	Same as above	
DDT		Same as above	
Endrin		Same as above	
Chlordane		Same as above	
Hexachloro-benzene		Same as above	
Mirex		Same as above	
Toxaphene		Same as above	
Heptachlor		Same as above	
PCBs		Same as above	
Dioxins and Furans		Same as above	

61. Norway

POPs Chemical	Banned	Control Measures
Aldrin	1969	
Dieldrin	Never registered in Norway	
DDT	1989	
Endrin	1966	
Chlordane	1968	
Hexachlorobenzene	Banned as pesticide	**(for HCB as a by-product)** Emissions from industrial processes restricted by emission limits set in permits
Mirex	Never registered in Norway	
Toxaphene	Never registered in Norway	
Heptachlor	Never registered in Norway	
PCBs	New use banned in 1980	
Dioxins and Furans		Emissions and discharges from industry and combustion are regulated by permits given through a license procedure
Notes: According to national legislation pesticides never approved or registered in Norway are to be considered as banned.		

62. Panama

POPs Chemical	Banned	Restricted
Aldrin	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.	análisis de residuos.
Dieldrin	Same as above	

DDT	Same as above	
Endrin	Same as above	
Chlordane	Same as above	
Hexachloro-benzene	Same as above	
Mirex	Same as above	
Toxaphene	Same as above	
Heptachlor	Same as above	
PCBs	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)	análisis de residuos y en cantidad de PCBs con límites permisibles. Las Normas de Compras de los transformadores exigen < de 50 ppm de PCBs o libres de PCBs, pero existen numerosos transformadores sin etiqueta cuyo contenido de PCBs debe ser identificados y gran cantidad, por el orden de

63. Peru

Comments: The Ministry of Health is going to establish some PCBs regulations.

Data source: SENASA- Ministry of Agriculture.

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin	Banned			Supreme Decree N° 037-91-AG publ.September 11, 1991
Dieldrin	Banned			Supreme Decree N° 037-91-AG publ.September 11, 1991
DDT	Banned for agricultural use			Supreme Decree N° 037-91-AG publ.September 11, 1991
Endrin	Banned			Supreme Decree N° 037-91-AG publ.September 11, 1991
Chlordane	Banned			R.J. N° 036-99-AG-SENASA, publ.March 26, 1999
Hexachloro-benzene	Banned			R.J. N° 036-99-AG-SENASA, publ.March 26, 1999
Mirex			No action	this pesticide is not registered in Peru
Toxaphene	Banned			Supreme Decree N° 037-91-AG publ.September 11, 1991
Heptachlor	Banned			Supreme Decree N° 037-91-AG publ.September 11, 1991
PCBs	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.	No data available in Ministry of Agriculture	No data available in Ministry of Agriculture	No data available in Ministry of Agriculture The Ministry of Health is going to establish some PCBs regulations
Dioxins and Furans	No data available in Ministry of Agriculture	No data available in Ministry of Agriculture	No data available in Ministry of Agriculture	

64. Philippines

Data source: Fertilizers and Pesticide Authority (FPA)-DA- Environmental Management Bureau.

POPs Chemical	Banned	Restricted	Comments
Aldrin	1989		
Dieldrin	1989		
DDT		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
Endrin	1989		
Chlordane		Its use is limited to the pre-construction treatment of the white ants.	
Hexachloro-benzene		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 Biennal Report Form for monitoring purposes.
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.
Toxaphene	1989		
Heptachlor	1989		
PCBs		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.

Dioxins and Furans		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.

65. Romania

POPs Chemical	Banned	No Action
Aldrin		It is not produced in Romania.
Dieldrin		It is not produced in Romania.
DDT		According to the attached list, it is not any more produced at S.C. CHIMCOMPLEX S.A.
Endrin		It is not produced in Romania.
Chlordane		It is not produced in Romania.
Hexachloro-benzene		It was produced by S.C. OLTCHIM - Rm. Valcea into a pilot plant. In 1992 that pilot plant was dismembered.
Mirex		It is not produced in Romania.
Toxaphene		It is not produced in Romania.
Heptachlor		It is not produced in Romania.
PCBs		In the present it is working to elaborate legal regulations for use restriction.
Dioxins and Furans		In the present it is working to elaborate legal regulations for use restriction.
Comments: - Products were not identified in surface waters, in the basins investigate by the institute (Olt, Trotus, Prahova, Ialomita, Somes); - We have no information concerning import and about use restriction /interdiction at national level, excepting PCBs , dioxins and furans.		

66. Rwanda

Comments: 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.

67. St. Kitts and Nevis

POPs Chemical	Banned	Comments
Aldrin	X	Not licensed for importation
Dieldrin	X	Not licensed for importation
DDT	X	Not licensed for importation
Endrin	X	Not licensed for importation
Chlordane	X	Not licensed for importation
Hexachloro-benzene	X	Not licensed for importation
Mirex	X	Not licensed for importation
Toxaphene	X	Not licensed for importation
Heptachlor	X	Not licensed for importation
PCBs		Not licensed for importation

68. Saudi Arabia

POPs Chemical	Banned	Control Measures
Aldrin	1982	
Dieldrin	1982	
DDT	1982	
Endrin	1982	
Chlordane	1982	
Hexachlorobenzene	1982	
Mirex	1982	
Toxaphene	1982	
Heptachlor	1982	
PCBs	1982	
Dioxins and Furans		Any product that is contaminated with any level of dioxins & furans is banned from registration.

69. Singapore

POPs Chemical	Banned	Restricted Use
Aldrin	Banned since 1980s	
Dieldrin	Banned since 1980s	
DDT	Banned since 1980s	
Endrin	Banned since 1980s	
Chlordane	Banned since Jan 1999. Prior to the total ban, use was restricted only in non-water catchments since 1986.	
Hexachlorobenzene		Restricted only for use in laboratories for research purposes
Mirex	Banned since 1980s	
Toxaphene	Banned since 1980s	
Heptachlor	Banned since 1980s	
PCBs	Banned since 1980s	

70. Slovakia

POPs Chemical	Banned in	No Action	Comments
Aldrin	1-3-1999		Ban of import for agricultural use. Regulation N°33/1999
Dieldrin	1-3-1999		Ban of import for agricultural use. Regulation N°33/1999.
DDT	1-3-1999		Ban of import for agricultural use. Regulation N°33/1999.
Endrin	1-3-1999		Ban of import for agricultural use. Regulation N°33/1999.
Chlordane	1-3-1999		Ban of import for agricultural use. Regulation N°33/1999.
Hexachloro-benzene	1-3-1999		Ban of import for agricultural use. Regulation N°33/1999.
Mirex	1-3-1999		Ban of import for agricultural use. Regulation N°33/1999.
Toxaphene	1-3-1999		Ban of import for agricultural use. Regulation N°33/1999.
Heptachlor	1-3-1999		Ban of import for agricultural use. Regulation N°33/1999.
PCBs		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)
Dioxins and Furans		X	

71. Slovenia

Data Sources:

- Data from Ministry of the Health,
- Act on Poisons, OJ, No. 43/82
- Decision on the banned or restricted toxic substances and their preparations, used as plant protection products OJ, No.13/99
- Act on Chemicals OJ, No. 36/99
- Ordinance on Waste Management OJ, No. 84/98
- National Program for Environment Protection accepted in 1999
- Manuscript: Legislation on Landfills
- Manuscript: Legislation on handeling with PCBs and PCTs.

POPs Chemical	Banned	Restricted	Control Measures
Aldrin	Banned 1982		
Dieldrin	Banned 1982		
DDT	Banned as an active substance in plant protection products 1996		
Endrin	Banned as an active substance in plant protection products 1996		
Chlordane	Banned 1982		
Hexachlorobenzene	Banned 1982		
Mirex	Not in use in Slovenia at all.		
Toxaphene	Banned as an active substance in plant protection products 1996		
Heptachlor	Banned 1982		

PCBs		Restricted use • All users have to report their quantity to Ministry of the Environment. • No new refill to condensors or transformers. • Till 31st Of December 2010 all PCB in Slovenia must be properly destroyed.	
Dioxins and Furans			New equipment for monitoring was purchased in 1999.
Comments: National Program for Environment Protection accepted in 1999. New legislation: Ordinance on Waste Management harmonised with EU legislation, OJ No. 84/98 Legislation on Landfills on the way. Legislation on handling with PCBs and PCTs on the way.			

72. Sudan

Comments: A National campaign was wadged to increase the public awareness on sources of dioxins and Furans contaminated food and feed.

Data source: Decisions of the National Pesticides Council.

POPs Chemical	Banned in	No Action	Restricted use
Aldrin	Since agricultural season 1981/82		
Dieldrin	Since agricultural season 1981/82		
DDT	Since agricultural season 1981/82		
Endrin	Since agricultural season 1981/82		
Chlordane	Since agricultural season 1981/82		
Hexachloro-benzene		No control measure applied	In seed treatment and Locusts poisoned baits
Mirex	Not registered in the Sudan		
Toxaphene	Since agricultural season 1981/82		
Heptachlor	Since agricultural season 1981/82		
PCBs	Not in use in the Sudan		
Dioxins and Furans			Only legislative measures were implemented to avoid importation of

			food and feedstuffs from countries suspected to have dioxins and furans problems

73. Sweden

POPs Chemical	Banned	Restricted	Comments
Aldrin	1970		
Dieldrin	1970		
DDT	1975		
Endrin	1966		
Chlordane	1971		
Hexachlorobenzene	Approval withdrawn 1980.		
Mirex	Has never been approved for use.		
Toxaphene	Has never been approved for use.		
Heptachlor	Has never been approved for use.		
PCBs		X	In the European Community imports from and exports to third countries (outside the European Community) of PCB is regulated by the Council Regulation (EEC) n°2455/92 of July 1992 concerning the export and import of certain dangerous chemicals. The regulation does not apply to substances or preparations imported or exported for the purpose of analysis or scientific research and development (see above regulation Article 1 bis 3). For your information the European database EDE XIM on notification of export and import of certain dangerous chemicals is available at DG XI E2 BU-5.
Dioxins and Furans			In the 1970's, several technical products containing PCDD/Fs – PCB, Pentachlorophenol and 2,4,5-T – were banned. Guidelines given by the government in 1987 prescribe emission limits to air for new municipal waste incinerators to be below 0.1 ng TEQ per m3 dry flue gas and below 2 ng TEQ for existing incinerators. All Swedish pulp-mills have substituted chlorine gas in the bleaching process to less environmentally damaging methods. This has reduced the total emissions of dioxins to water to 1-2 g per year.

74. Switzerland

Data Source: Ordinance relating to Environmentally Hazardous substances (Ordinance on substances; Osubst) of 9 June 1996, RS 814 013

POPs Chemical	Banned	Restricted	Comments
Aldrin	1986		Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
Dieldrin	1986		Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
DDT	1996		Manufacture supply and use are prohibited since 1 September 1986, import since 1 January 1996. Exemptions: use for research purposes; import for disposal
Endrin	1986		Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
Chlordane	1986		Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
Hexachloro-benzene	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
Toxaphene	1986		Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
Heptachlor	1986		Manufacture supply, import and use are prohibited since 1 September 1986. Exemptions: use for research purposes; import for disposal
PCBs		X	PCBs containing capacitors exceeding a total weight of 1 kg and PCB containing transformers had to be taken out of operation and disposed of by 31 August 1998

75. Syria

POPs Chemical	Banned	No Action	Comments
Aldrin	1990		

Dieldrin	1990		
DDT	1990		
Endrin	1990		
Chlordane	1990		
Hexachloro-benzene	1990		
Mirex	X		This pesticide is not used in Syria
Toxaphene	X		This pesticide is not used in Syria
Heptachlor	1990		

76. Thailand

Data Sources:

- Department of Agriculture, Ministry of Agriculture and Cooperatives

- Department of Industrial Works, Ministry of Industry

- Ministry of Public Health

- Pollution Control Department, MOSTE

POPs Chemical	Banned	No Action	Control measures
Aldrin	September 1988		
Dieldrin	May 1988		
DDT	March 1983 (agriculture use)		
Endrin	July 1981		
Chlordane	May 1995 (public health use)		
Hexachlorobenzene		No application	
Mirex	May 1995		
Toxaphene	March 1983		
Heptachlor	September 1988		
PCBs	Importation is prohibited. Only exportation for waste disposal and management is permitted		

Dioxins and Furans			Emission standard from municipal waste combustors must have dioxin as total chlorinated PCDD plus PCDF less than 30 ng/Nm3

77. Togo

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin	X			
Dieldrin	X			
DDT	X			
Endrin	X			
Chlordane	X			
Hexachloro-benzene	X			
Mirex			X	
Toxaphene			X	
Heptachlor			X	No Action for Heptachlor
PCBs		X	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
Dioxins and Furans			X	
Planned Action: Legal Acts banning or restricting POPs chemicals in Togo will be reviewed in the near future.				

78. Turkey

POPs Chemical	Banned	Restricted
Aldrin	Registration cancelled in 1979	
Dieldrin	Registration cancelled in 1971	
DDT	Registration cancelled in 1985	Restricted in 1978
Endrin	Registration cancelled in 1979	
Chlordane	Registration cancelled in 1979	
Hexachlorobenzene	Not registered	

Mirex	Not registered	
Toxaphene	Registration cancelled in 1989	
Heptachlor	Registration cancelled in 1979	
PCBs	1 January 1996, Foreign Trade and Standardization Communique No 98/3	

79. Ukraine

POPs Chemical	Banned	Restricted	No Action
Aldrin	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	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	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	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	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		

Hexachloro-benzene	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.		
Mirex			X
Toxaphene			X
Heptachlor	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		
PCBs		The inventory of the PCB sources is planned. After that, the estimation of possible action plans will be made.	

80. United Kingdom

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin	1989			(Environmental hazard) under the EC "Prohibition Directive"
Dieldrin	1989			(Environmental hazard) under the EC "Prohibition Directive"
DDT	Phased out 1964-84			(Environmental hazard, High acute Toxicity)
Endrin	Phased out 1964-84			
Chlordane	1992			(Environmental hazard) under the EC "Prohibition Directive"
Hexachloro-benzene			X	Currently waiting outcome of EU review
Mirex			X	Never approved for use in UK
Toxaphene			X	Not manufactured since 1990
Heptachlor	1981			(Environmental hazard) under the EC "Prohibition Directive"

PCBs	1986: ban on sale and use in new plants.	X		Use has been restricted since the 1970s. PCBs in existing equipment will need to be disposed of in accordance with the requirements of the forthcoming UK Regulations. Guideline: Maximum Tolerable Concentrations for Dioxins and PCBs in cows' milk: (16.6ngTEQ/kg milk fat). Tolerable Daily Intake for Dioxins and PCBs: 10 pg TEQ/kg bw/day-(WHO)
Dioxins and Furans		X		Statutory Control: Dioxins in citrus pulp pellet for animal feeding stuffs: limit 500pg I-TEQ (upper bound). Statutory Control: Dioxins in kaolinitic clays for use in feeding stuffs: limit 500 ng WHO-PCDD/F-TEQ/kg (upper bound) Tolerable Daily Intake for Dioxins and PCBs: 10 pg TEQ/kg bw/day-(WHO). Maximum Tolerable Concentrations for Dioxins and PCBs in cows'milk: (16.6ngTEQ/kg milk fat)

81. United States of America

POPs Chemical	Banned	Restricted	Comments
Aldrin	1987		No US registrations, all uses have been cancelled by 1987. No production, export or import
Dieldrin	1987		No US registrations, all uses have been cancelled by 1987. No production, export or import
DDT	1972		No US registration, most uses have been cancelled in 1972, all by 1989. No US production, import or export (except de minim's quantities for analytical standards)
Endrin	1984		No US registrations, all uses have been cancelled by 1984. No production, export or import.
Chlordane	1997		No US registrations, it has been removed from US market in 1987. No production (stopped in 1997), no import or export.
Hexachloro-benzene	1985		No US registrations, all uses have been cancelled by 1985. No pesticides production, export or import. Manufacturing impurity ("contaminant") in several registered pesticides
Mirex	1978		No US registrations, all uses have been cancelled by 1978. No production, export or import
Toxaphene	1982		No US registrations, all uses have been cancelled by 1982 No production, export or import
Heptachlor		X	Most uses have been cancelled in 1988, one remaining US registration to control fire ants in underground cable boxes. No production (stopped in 1997), import or export. Limited quantities of existing stocks for US use.

82. Uruguay

POPs Chemical	Restricted	No Action	Comments
Aldrin	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 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.
Dieldrin	X		Idem
DDT			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 excedeer 500 veces el valor máximo peritido 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 excedeer 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 alacantarillado 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
Chlordane	X		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.
Hexachloro-benzene		X	

Mirex	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 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.
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.
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.
PCBs		X	Se están sustituyendo por iniciativa particulares.

83. Vietnam

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin	1992			
Dieldrin	1992			
DDT	1992			
Endrin	1992			
Chlordane	1992			
Hexachloro-benzene	1992			
Mirex			X	
Toxaphene	1995			
Heptachlor	1992			
PCBs		1998		Serious problems with Dioxins and PCBs that contaminate the soil and human body

84. Yemen

POPs Chemical	Banned	Restricted	Comments
Aldrin	Banned since 1990		
Dieldrin	Banned since 1990		
DDT	Banned in the agricultural sector since 1988	Restricted use in the Health Field (Malaria)	
Endrin	Banned since 1990		
Chlordane	Banned since 1990		
Hexachlorobenzene	Banned since 1990		
Mirex	Banned since 1990		
Toxaphene	Banned since 1990		
Heptachlor	Banned since 1990		
PCBs	We have no industry for transformers, which include PCBs, but there are some of them in the country.		
Dioxins and Furans			There is not enough information about these compounds, but what we found is that such compounds are very seldom used in Yemen in general.

85. Zambia

Comments: Most of these products still find their way into the country illegally.

Data Source: Nelson MANDA, Inspector PTS, Environmental Council of Zambia, PO BOX 35131, LUSAKA, FAX:260 11 25 41 64 / Tel: 25 41 30/ 1/ Email: necz@zamnet.zm

POPs Chemical	Banned	Restricted	No Action	Comments
Aldrin		X		Not registered for use
Dieldrin		X		Restricted for termite control and building
DDT		X		Used for vector control for tsetse and mosquitoes

Endrin		X		For construction only
Chlordane		X		For construction purposes and termite control
Hexachloro-benzene			X	
Mirex		X		Not registered in Zambia
Toxaphene			X	
Heptachlor			X	
PCBs		X		Equipment currently in service, no importation of new equipment with PCBs

Annex 1

Assessment and Monitoring

Country (or region)	*Contact person*
_____	_____

Assessment and Monitoring Projects of POPs chemicals	
A	**Title of the Main Assessment or Monitoring Project:**
B	**Objective of the Project and Geographical Coverage:**

C	**Responsible Organization(s):**
D	**Partner (s)**
E	**Project Funder (s)**
F	**Timeframe of the Assessment /Monitoring project**

Comments:

_____

_____

_____

Data Source:

I.

_____

_____

Annex 2

Actions to replace and/or reduce releases of POPs.

Country (or region)	*Contact person*
_____	_____

Actions focussing on the replacement and/or the reduction of releases of POPs.	
A	**Title of the Main Project:**
B	**Objective of the Project and Geographical Coverage**
C	**Responsible Organization(s):**
D	**Partner (s)**

E	**Project Funder (s)**
F	**Timeframe of the project**
Comments: _____ _____	
Data Source: _____	

Annex 3

Regulatory Actions

Country (or region)	Contact person
_____	_____

REGULATORY ACTIONS TAKEN TO CONTROL THE USE OF THE POPs		
Aldrin	**No Action**	
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:
Dieldrin	**No Action**	□
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:

DDt	**No Action**	□
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:
Endrin	**No Action**	□
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:
Chlordane	**No Action**	□
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:

Hexachloro-benzene	**No Action**	☐
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:
Mirex	**No Action**	☐
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:
Toxaphene	**No Action**	☐
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:

Heptachlor	**No Action**	☐
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:
PCBs	**No Action**	☐
	Restricted Use	If restricted please specify:
	Banned	If banned please include the date of effectiveness:
Dioxins and Furans	**No Action**	☐
	Emission control measures:	please specify:

Comments:

_____

Data Source:_____

Annex 4: Text of the letter requesting the information to the POPs Focal Points for the Master List of Actions

Subject: The POPs Master List of Activities
Date: 10-8-1999

TO: UNEP POPs Focal Points
UNEP Official Contact points in countries that do not have UNEP POPs Focal Points

CC: National Representatives to the third session of the POPs INC

Dear Sir, Madam,

I have the honor to refer to UNEP GC decision 19/13C, where it was decided that international action, including a global legally binding instrument, is required to reduce the risks to human health and the environment arising from the twelve Persistent Organic Pollutants: aldrin, dieldrin, DDT, endrin, chlordane, hexachlorobenzene, mirex, toxaphene, heptachlor, PCBs, dioxins and furans.

In its decision 19/13C on Persistent Organic Pollutants (POPs) it was concluded that immediate international action should be initiated to protect human health and the environment through measures which would reduce and/or eliminate the emissions and discharges of POPs. In response to that, UNEP has initiated a number of immediate actions involving development and sharing of information; evaluation and monitoring of the success of implemented strategies; alternatives to POPs; identification and inventories of PCBs; available destruction capacity; identification of sources of dioxins and furans and aspects of their management. There are already numerous activities taken by Governments and organizations at the national, regional and international levels.

In order to raise awareness and promote coordination of the work undertaken to reduce and/or eliminate the emissions and discharges of POPs and to help ensure effective and efficient use of resources for such activities, the second session of the POPs Intergovernmental Negotiating Committee (INC2) requested the secretariat to develop a master list of ongoing activities relevant to POPs, to be developed and continually updated.

The first full version of this master list was distributed at INC3. In it information was provided by 90 countries. It includes information on:

- **Assessment and Monitoring**: Assessment and monitoring of POPs chemical uses, production and releases and studies on their effects on the environment. This includes both national assessments and monitoring projects as well as project and studies on the regional and international levels (annex 1)

- **Activities to replace and or reduce the releasese of POPs Chemicals**: These include all studies and ongoing projects involving activities focussing on, replacement and replacement strategies and/or the reduction of the releases of POPs Chemicals (annex 2)

- **Regulatory Actions**: This should cover all actions taken to control the use, production and releases of the POPs Chemicals (annex 3)

In order to update the master list for the next session, INC4, which will be held in Bonn, Germany from the 20th through the 25th of March 2000, we would like receiving your input before December 1st 1999. We are asking:

- countries that ***have not yet provided information*** for the master list to do so, in such cases, see the blanc update forms to the annexes attached to this letter;

- countries that ***have supplied us with information*** for the master list or the POPs questionannaire to update their information where appropriate: we have included this information, received from your country, for your review and we have also included the blanc forms for update purposes.

The full version of the master list of activities can be found on the POPs Homepage at http://www.chem.unep.ch/pops/ (under meeting documents INC3). We have also put the electronic version of the annex update forms at the following address: http://www.chem.unep.ch/pops/mastlist/mastlistupd.htm.

I look forward to receiving your contribution to this important document, which will help avoid duplication of efforts and ensure the efficient use of resources.

Yours Sincerely,

[signed]

Mr. James B. Willis

Director UNEP Chemicals

11-13 Chemin des Anémones

CH-1219 Châtelaine

Geneva, Switzerland

fax: +41-22-797-3460

Email: pops@unep.ch

Annex 5: List of countries that responded to the request for information for the Master List of Actions*

1. Albania
2. Algeria
3. Angola
4. Argentina
5. Armenia
6. Australia
7. Austria
8. Barbados, W.I
9. Belarus
10. Belgium
11. Benin
12. Brazil
13. Brunei Darussalam
14. Bulgaria
15. Burkina Faso
16. Canada
17. Chile
18. China
19. Colombia
20. Congo
21. Costa Rica
22. Côte-d'Ivoire
23. Croatia
24. Cuba
25. Cyprus
26. Czech Republic
27. Denmark
28. Djibouti
29. Dominican Republic
30. Ecuador
31. El Salvador
32. Ethiopia
33. Fiji
34. Finland

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* **Please note that also the countries that have provided information to UNEP-Chemicals through the POPs questionnaires, are included in this list.**

35. France
36. The Gambia
37. Germany
38. Ghana
39. Greece
40. Guineé
41. Hungary
42. Iceland
43. Indonesia
44. Ireland
45. Italy
46. Japan
47. Jordan
48. Kazakhstan
49. Kiribati
50. Republic of Korea
51. Kuwait
52. Kyrgyz Republic
53. Lao People’s Democratic Republic
54. Latvia
55. Republic of Lebanon
56. Lithuania
57. Luxembourg
58. Macedonia
59. Madagascar
60. Malaysia
61. Mauritius
62. Mexico
63. Federated States of Micronesia
64. Mongolia
65. Morocco
66. Nepal
67. The Netherlands
68. New Zealand
69. Nicaragua
70. Niger
71. Norway
72. Panama
73. Paraguay
74. Peru
75. Philippines
76. Romania
77. Russian Federation
78. Rwanda
79. Saint Kitts and Nevis
80. Saoudi Arabia
81. Seychelles
82. Singapore
83. Slovakia
84. Slovenia
85. Sudan
86. Sweden
87. Sweden
88. Switzerland
89. Syria
90. Thailand

91. Togo
92. Turkey
93. Ukraine
94. The United Kingdom
95. The United States of America
96. Uruguay
97. Uzbekistan
98. Venezuela
99. Vietnam
100. Western Samoa
101. Yemen
102. Zambi