



## Prepared on behalf of International HCH and Pesticides Association (IHPA)

\*\*\*\*\*

## Aim

The aim of this newsletter is to disseminate information in a cost-effective way on the developments taking place in the area of POPs as implicated in the Stockholm Convention and other PTS of concern. It will cover, among others, the news on science and technology for disposal of obsolete stocks and remediation of POPs contamination which might be of interest for commercial exploitation both in developed and developing countries. Special emphasis will be given to bio-remediation related technologies which will benefit developing countries.

The newsletter will not go into technical details of selected scientific publications but only highlight salient features for the benefit of the readers. One can subscribe and read IHPA Newsletter (2 times/yr free of charge) at: <http://www.ihpa.info/subscription.php>

\*\*\*\*\*

## Note from the Editors

In the second issue under the name of POPs Newsletter, we are pleased to welcome Prof. Ivan Holoubek from the Czech Republic who has kindly agreed to join the team as one of the co-editors of the Newsletter. He will be replacing Ms. Lindita of Albania who is continuing her studies. Prof. Ivan Holoubek does not need any introduction since he wrote an article in the last POPs Newsletter regarding the activities of his Institute RECETOX located at Brno, Czech Republic.

During the last three years, POPs Enabling Activities financed by GEF in support of Stockholm Convention, have been undertaken by many developing countries across the Globe. According to the Stockholm Convention, the participating countries under the enabling activities will prepare National Implementing Plan (NIP) which will be submitted to the Conference of Parties two years after the Stockholm Convention becomes legally binding. So we should see the official NIPs being submitted to the conference of Parties starting sometime in 2006. In order to give a glimpse of understanding of NIP to those who are not familiar with the Terms, our new co-editor Prof. Ivan Holoubek has written a description of how Czech Republic developed Strategies and Action Plan Elements of the NIP. Most of the information is now available on the Internet web page of the Ministry of Environment. We are allotting more space than usually given due to the importance of NIP.

\*\*\*\*\*

### 1. Strategy and Action Plan Elements of the National Implementation Plan on POPs in the Czech Republic

By Ivan Holoubek, RECETOX, Brno, Czech Republic

#### 1a. NIP development

The Czech Republic, which is a signatory to the Stockholm Convention on Persistent Organic Pollutants (POPs), confirmed its interest in participating in internationally coordinated environmental protection and human health protection from the effects of persistent organic pollutants through a National Implementation Plan called NIP for short. The Stockholm Convention entered into force in accordance with its article no. 26 on the ninetieth day after the date of deposit of the fiftieth instrument of ratification, acceptance, approval or accession that is on 17.May 2004.

The fulfillment of the Convention by the Czech Republic is coordinated by the Ministry of the Environment, which will cooperate in the plan implementation with the Ministries of Health, Industry and Trade, Agriculture, Transport, Defense, Interior, Regional Development, and Education, Youth and Sport.

The Czech Republic, as a contracting party to the Convention, is obliged to submit The National Implementation Plan in accordance with article 7 of the Convention to the Conference of the Contractual Parties within two years of the Convention's entry into force. Work on the Plan's preparation started immediately after the signing of the Convention by the Czech Republic, which enables fulfilment of this obligation on the part of the Czech Republic earlier than required by the Convention.

The plan proposal is has been prepared by the Ministry of the Environment in cooperation with the United Nations Industrial Development Organization (UNIDO), which was carried out in 2001-2004 and was financed by the Global Environment Facility (GEF).

With regard to the range of activities associated with implementation of the Convention and their cross-sectional nature, a particular emphasis has been put on the involvement of all interested parties and subjects when preparing the Plan.

Prior to the preparation of NIP all available information concerning production, use, stockpiles, import and export of 12 chemical substances targeted by the Convention was gathered and evaluated within the framework of the project. The technical infrastructure for POP evaluation, their measurements and research including programmes monitoring the release of these substances into the ambient, their impact on the environment and human health were simultaneously charted. The outgrowth of the program is information concerning the presence of POPs in the environment, food, selected veterinary commodities and exposure of the Czech population to these substances. Ascertainment of the current level of the targeted groups' awareness of problems concerning POPs and a survey of the activities carried out by non-governmental organizations in this field form part of the preparatory process of the Plan.

Because of the wide range and expert nature of project outputs, the Ministry of the Environment, in consultation with all relevant ministries and other parties, has prepared the National Implementation Plan. This gives a concise information concerning the political, legislative, and institutional frameworks followed by the complete strategic plan and action plans for selected provisions of the Convention, strategic goals, the time schedule of the implementation and information concerning expenses related to the problems of persistent organic pollutants to the Cabinet. The entire project outputs, including all essential information on the situation in the Czech Republic in relation to POPs are available on the project investigator's web page <http://www.recetox.muni.cz> and on the web page of the Ministry of the Environment of the Czech Republic.

#### 1b. Five basic goals of the project

1. Inception phase, involving the establishment of coordinating mechanisms and project organization, managerial structure, an approved work plan - the final outcome of this phase was the organization of the Inception Workshop - IW;
2. Conducting a POP inventory, establishment of the necessary national infrastructure and the necessary capacities for its realization - the outcome of this phase was the development of the Initial National POP Inventory - INPOPsINV;
3. Determining priorities and subjects of implementation - the outcome was the organization of the National Priority Validation Workshop - NPVV;
4. Formulation of the National Implementation Plan - NIP and Specific plans of action for POPs - SAPs, POPs, including their expert evaluation;
5. Approval of the National implementation plan at the level of involved institutions and groups - organization of the Endorsement Workshop.

The basic overarching principles during the implementation of the NIP were:

- Inclusion of public and stakeholder participation;
- Transparency in information sharing and exchange, particularly related to monitoring and reporting on implementation activities;
- Adherence to "the polluter-pays" principle;
- Integration with overall environmental management and sustainable development policies;
- Adherence to and use of technologies and applications of international standards;
- Commitments regarding public awareness and education.
- Adherence to EU directives

A number of experts, workers from interested institutions and foreign experts took part in preparing the inventory and preparation of the NIP.

A team of experts prepared preliminary National Inventory of POPs. The inventory will be upgraded every year, which means that the second version of CZNPOPsINV was already being prepared during The Enabling project. During the period March -October 2003, the Second version of the National POP Inventory (NPOPsINV2003) (775 pp.) was prepared, which is now available on the internet (<http://recetox.muni.cz>).

1c. POP priorities for the Czech Republic were defined based on the background documents, which were prepared for the Priority Setting Workshop, 12 March 2003, Brno

#### "Top" priorities:

- Inventory of hot spots, inventory of old loads - in the context of potential effects of natural disasters
- Elimination of hot spots
- PCB/OCP Inventory - the finishing of regional waste conceptions
- "Legalization" of the NIP Proposal
- Much broader attention must be given to PAH problems

- POP inventory - air, water, land, products
- Technical solution for the priorities - hot spots, emissions, waste dumps, old technologies, decontamination of land
- System of information and data evaluation and system for evaluation of effectiveness of SC measures
- Establishment of a National POP Centre
- Optimization of the monitoring system
- Target research

Based on the conclusions of the Priority Validation Workshop and conclusions of NPOPsINV2003, the first Draft of the National Implementation Plan was prepared and issued for very broad review (~ 60 people). Presentation of the first draft of the national Implementation Plan for implementation of the Stockholm Convention in the Czech Republic was done in Brno, CR, 24/10/2003.

It was decided that the preparation of the final NIP version would be completed within two years of the start of validity of the Convention. During August and September 2004 the Report for the Government was publicly discussed again. All remarks were presented on 27 October, 2004 and based on this, the final version of the NIP for the Government of the CR and COP will be prepared by 17 May, 2006.

#### 1d. Activities, strategies and action plans

Over the past decade, a wide range of Acts and Directives have led directly or indirectly to a reduction of releases of persistent organic pollutants into the environment, to an objective decrease of their levels in food products and in the human population, resulting in significant advances in the protection of public health and the environment. Recent exposure data show that measures introduced to control POP releases have resulted in a substantial reduction of the intake of these compounds: levels in humans have been decreasing since the beginning of the nineties.

Nevertheless, many unsolved POP problems still exist. There are a lot of potential hot spots (old industrial loads such as Spolana Neratovice), a substantial portion of produced PCB mixtures are still contained in large numbers of transformers and condensers. Many POP-contaminated sites still exist, and based on a relatively precise Emissions Inventory, we can say that the emissions of PCDDs/Fs per capita and km<sup>2</sup> of country area are still very high. This means that the Czech Republic produces higher emissions than other countries of the EU.

#### 1e. The main strategy objectives of the NIP are:

- Elimination of POP releases into the environment and reduction of human exposure to POPs,
- Liquidation of old loads connected with former POP production, use, distribution and disposal,
- Application of BAT/BEP (Best Available Techniques/Best Environmental Practice) principles as basic principles in a future industrial development strategy,
- Gathering additional data necessary for objective evaluation of the load of these substances on selected areas,
- Optimizing monitoring programmes between individual ministries with the goal of realizing tasks associated with the implementation of the Stockholm Convention.

In the Czech Republic, similarly to other countries of the EU, a trend towards decreasing POP emissions into the environment, including PCDD/F emissions has been observed; however, for the preparation of the NIP, the following facts resulting from this decrease are significant:

- In the CR, a trend towards lowering POP emissions into the atmosphere including PCDD/F emissions was observed, with a significant decrease in emissions from industrial sources; however, for non-industrial sources (household solid fuel combustion, household waste combustion, fires, etc.) the rate of decrease is slower.
- Based on the fact that a huge amount of PCBs, materials containing PCBs and PCB-containing equipment will necessitate destruction in the coming years, it will be imperative to resolve the question concerning an environmentally sound manner for their destruction, and prevent any possible environmental contamination and human exposure.

\*\*\*\*\*

#### 2. Eight International Forum of the IHPA, May 26 - 28, 2005 at Sofia, Bulgaria

This time the Government of Bulgaria has taken the lead in sponsoring and organizing the 8th IHPA Forum in 2005.

The organizers are:

- International HCH & Pesticides Association (IHPA), The Netherlands
- Ministry of Environment and Waters of Bulgaria
- National Centre for Agricultural Science, Sofia, Bulgaria
- Institute for sustainable development, Sofia, Bulgaria
- Federal Environment Agency of Germany (UBA)

The details for registration are available in the Website of HCHForum (<http://www.hchforum.com>).

According to the Director of IHPA, Mr. John Vijgen, the initial response for registration is very encouraging.

\*\*\*\*\*

#### 3. Phytoremediation Remediating Pollution

The recent issue of Clu-in.org reports in its Technology innovation Survey posted in its CLU-IN web site dated Sept. 1 - Sept. 30, 2004, market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. The latest survey is available at: <http://www.clu-in.org/products/tins/>

One interesting item in the survey is entitled curiously "solar powered phytoremediation", aesthetically pleasing and it works. Submitted by Illinois Environmental Protection Agency Environmental Progress, Fall 2003. The project is more to clean up of a site from chlorinated solvents used for removal of PCBs. It is a demonstration project and could be called "biological storage" of VOCs in willows and poplar trees. Article is available at:

<http://www.epa.state.il.us/environmental-progress/v28/n5/phytoremediation.html>

\*\*\*\*\*

#### 4. News Events and Comments

##### 4a. PIC (Prior informed List) becoming bigger

Under the Rotterdam Convention in a meeting held on Geneva during Sept. 20-24, fourteen chemicals have been added to PIC- a 50% increase. The list is designed to ensure that countries know the risks of chemicals they are considering importing. PIC was adopted in September 1998 and enforced in Feb. 2004.

##### 4b. Struggling with REACH

In the past we covered widely the REACH (Registration, evaluation, and authorization of Chemicals) and still the Chemical Industry and the UK government are at loggerheads over the potential impact of REACH legislation in the industry. In the European Union the environment minister said that they would not allow the chemicals discussion to be hijacked by their counterparts dealing with industrial competitiveness. They argue that many chemicals pose danger to human health and environment and there is lack of information on many chemicals are responsible for the steep rise in allergies, asthma etc.

##### 4c. Organic food sales take off

In the UK sale of organic food is booming according to London Reuters. It is growing at the rate of 10% a year. Demand for organic baby food is growing at 6% a year and has 50% share of the UK market.

##### 4d. Public awareness

Now more and more newspapers give great importance to man made toxins found in human body especially in breast milk. Daily Express on April 5 2004 in a full page article describes women's concern in breast feeding being afraid of passing toxins such as PCBs, dioxins brominated flame retardants and pesticides. Katherine Tucker, director of the Institute of Medicine of the National Academies is behind a US Government funded report that looked at levels of dioxins in breast milk. She said that when you burn plastic or rubber, dioxins are emitted in the air and settle in the ground and find its way into the fatty tissues of fish and animal products we use for food. The paper says that doctors in London are carrying out clinical trials to look at ways to reduce toxins in women before they become pregnant. They call interestingly detox programme for mothers before thinking of having a baby. No details are given.

##### 4e. What happened to toxic ships

Toxic ships called "ghost ships" were on the news last year for being towed to Britain from the USA for scrapping by a company called Able UK. Some of these ships apparently are contaminated with PCBs and will have to be towed through the migratory route of northern right whale. Meanwhile the work at Able co. came to a standstill since they do not have the correct licence for burying PCBs. Apparently they have to wait for two months to get permit and the company says that they are losing £370,000/week and will reach almost nine million pounds.

4f. Love Canal delisted

US EPA will remove Love Canal site from Super Fund list. According to New York Times (March 22, 2004) "Removing Love Canal from the federal list should not mean removing it from our historical memory. It should be made a kind of national historic toxic waste site, a reminder of just what can go wrong - and what can go right - when corporate, governmental and community interests collide. Love Canal represents one of those moments when ordinary American discovered that they should fight for their own welfare against corporate interests and the governmental echo of those interests. The law that established the Super Fund is a monument to that moment and a reminder of a time the federal government was still willing to side with the ordinary man".

While mentioning of Love Canal, the Editor wants to bring to the notice of the readers that December 3rd this year completes the 20th anniversary of the world's worst chemical disaster at Bhopal, India when more than 3000 people died of methyl isocyanate poisoning. The plant still stands as a monument with highly toxic residues still contaminating the surroundings. The people are still suffering with no help from the government or the corporation. We dedicate this issue to those people who lost their lives and to those who are still suffering.

\*\*\*\*\*

5. Let down by Leading NGOs

As we wind down and take stock of things that went on during the year, let us remember the plight of millions of Africans, Asians, and South Americans who succumbed to the dreadful disease malaria. While leading NGOs are gloating over their success in getting Basel Convention, Montreal Protocol, Stockholm Convention and Rotterdam Convention as legally binding, malaria has come back with a vengeance. The leading NGOs who walked through the corridors of Conference Centres, Intergovernmental meetings fighting, shouting, rightly so, with conviction and determination, for banning or eliminating toxic, persistent and hazardous chemicals, one wonders why with the same fervour they are not fighting for poor Africans and Asians countries to find efficient and environmental friendly alternatives to control malaria vectors, termites and locusts. According to a survey carried out by WHO - malaria obstructs overall economic development in Africa. Economic loss specific to Malaria is given as \$ 100 billion dollars. It says that "the benefits of committing substantial new economic resources to malaria will greatly exceed cost".

The Times UK in its leading article dated. May 7, 2004 brings out "the story of a DDT scandal that has killed millions". The author Mr. John Pollock says "environmentalism a religion that has killed millions. Lives - mostly African mothers and infants - were sacrificed at the altar of green political correctness". The author continues that the charge of the anti-DDT activists was and remains that it is a pollutant that accumulates in the environment and might pose a risk to humans or wild life. The debate on DDT culminated in 1971 with the US EPA inquiry declaring that "DDT is not a carcinogenic, mutagenic or teratogenic hazard to man and does not have a deleterious effect on fresh water fish, estuarine organisms, wild birds or other wild life." Yet the EPA boss William Ruckelshaus overruled the verdict. He said "it was close" adding "the truth is, if I lived in Sri Lanka, I would have it differently, but I decided it for the USA". According to John Pollock "Where the US led, the world followed. Aid donors ceased funding DDT and poor countries had no access to DDT." While there is no argument over the inclusion of DDT among the 12 POPs, one would ask, why the leading NGOs, who fought tooth and nail for Stockholm Convention, are not climbing Nelson Column in Trafalgar Square in London, or squatting on the London Eye in front of the Parliament or hanging banners on the Eiffel Tower or stopping toxic or whaling ships in mid ocean as protest to provide funds to find suitable alternatives to POPs in poor developing countries. If they did to save whales, dolphins, salmon swimming against the flow of the river to reach their place of birth, I am sure poor people in sub-Saharan Africa deserve a more vehement approach by leading NGOs to protect them from malaria . In Africa nearly 700,000 children are infected and dying with malaria each year. A wider availability of treated bed nets would reduce 50% of children getting infected. But only 2% of African children are protected with treated bed nets. UN agencies such as WHO, FAO, UNIDO, UNEP etc. are starving for funds to find alternatives through Integrated Vector Control, Integrated Pest Management, Cleaner Production, Best application techniques etc. and I am sure leading NGOs who spear headed Basel Convention, POPs convention could take as a New Year Resolution to convince rich countries to provide, more for POPs alternatives to poor countries.

With this note we wish all our readers:

A very Happy Christmas and a Prosperous New Year

\*\*\*\*\*

Editor: B. Sugavanam, Email: [bsugavanam@yahoo.co.uk](mailto:bsugavanam@yahoo.co.uk)  
Co-Editor: Ivan Holoubek, Email: [holoubek@recetox.muni.cz](mailto:holoubek@recetox.muni.cz)  
Co-Editor: Sushil Khetan, Email: [skhetan@andrew.cmu.edu](mailto:skhetan@andrew.cmu.edu)

\*\*\*\*\*

**SUBSCRIPTIONS**

To subscribe, visit: <http://www.ihpa.info/subscription.php>

\*\*\*\*\*

Copyright 2002-2004, IHPA

<http://www.ihpa.info>

\*\*\*\*\*