











International POPs Elimination Project

Promotion of Active and Efficient Civil Society Participation in Preparation for Implementation of the Stockholm Convention

Partnerships Between NGOs and Research Facilities for Capacity Building to Reduce Adverse Health and Environmental Impacts of POPs

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About the International POPs Elimination Project

On May 1, 2004, the International POPs Elimination Network (IPEN http://www.ipen.org) began a global NGO project called the International POPs Elimination Project (IPEP) in partnership with the United Nations Industrial Development Organization (UNIDO) and the United Nations Environment Program (UNEP). The Global Environment Facility (GEF) provided core funding for the project.

IPEP has three principal objectives:

- Encourage and enable NGOs in 40 developing and transitional countries to engage in activities that provide concrete and immediate contributions to country efforts in preparing for the implementation of the Stockholm Convention;
- Enhance the skills and knowledge of NGOs to help build their capacity as effective stakeholders in the Convention implementation process;
- Help establish regional and national NGO coordination and capacity in all regions of the world in support of longer term efforts to achieve chemical safety.

IPEP will support preparation of reports on country situation, hotspots, policy briefs, and regional activities. Three principal types of activities will be supported by IPEP: participation in the National Implementation Plan, training and awareness workshops, and public information and awareness campaigns.

For more information, please see http://www.ipen.org

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This report is available in the following languages: English Summary and Full report in Russian

Partnerships Between NGOs and Research Facilities for Capacity Building to Reduce Adverse Health and Environmental Impacts of POPs

Project aims: to attract the attention of the general public to the problem of environmental contamination by POPs; to identify means and methods for reduction of adverse health and environmental impacts of POPs; and to raise awareness of residents of Ukraine of the problem of POPs and the Stockholm Convention on POPs.

Project objectives:

- 1. To strengthen partnerships between the general public and authorities in the course of decision-making on reduction of adverse health and environmental impacts of POPs.
- 2. To raise public awareness of health impacts of POPs and activities to reduce these impacts.
- 3. To enhance public participation in development and eventual implementation of the National Plan of Implementation of the Stockholm Convention on POPs.

Target groups: members of the general public (local residents, particularly women and children); specialists, members of the academic community, representatives of industry, businesses; chemical and agricultural producers, representatives of the waste management sector, workers under occupational exposure to POPs; representatives of local authorities and decision-makers, teachers, schoolchildren and their parents, students and lecturers; mass media and NGO representatives. Overall, up to **50,000 project beneficiaries**.

Planned activities:

Aims	Activities	Results
Data gathering and development of information materials on existing POPs stockpiles and national POPs management policies.	Organising and holding a multi-sectoral roundtable with participation of experts, representatives of local authorities, businesses and NGOs to discuss the following relevant issues: • POPs-related risks: air, water and soil pollution, adverse health impacts; • The need to develop a national POPs management strategy. • Roles and the need of international cooperation in elimination of POPs-related risks, reduction of health risks of POPs • What technologies can reduce risks and phase out POPs. Development of the brochure (at the base of the roundtable discussions) for its further dissemination among the general public and interested organisations as an information source on POPs-related problems in Ukraine.	Development and publication of the brochure at the base of the roundtable discussions.

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Analysis of the due national legislation in the sphere of POPs management and implementation of the Stockholm Convention.	Establishment of the initiative group of representatives of NGOs, local communities, experts, businesses and industry to analyse of the due national legislation in the sphere of POPs management and implementation of the Stockholm Convention. Conducting the analysis of the due national legislation in the sphere of POPs management and implementation of the Stockholm Convention by members of the initiative group; Development by members of the initiative group: • proposals for improvement of the due national legislation in the sphere of POPs management and implementation of the Stockholm Convention; • proposals for reduction of adverse health impacts of POPs. Lobbying for these proposals at the national and regional levels.	Proposals for improvement of the due national legislation in the sphere of POPs management and implementation of the Stockholm Convention. Proposals for reduction of adverse health impacts of POPs.
Raising public awareness of adverse health impacts of POPs.	 Conducting the information campaign to raise public awareness of health impacts of POPs: Development, publishing and dissemination of the booklet, leaflets and the brochure among target groups. Conducting a press conference to present the information materials. Posting the information materials at the web-site of the organisation. Publishing the information materials in the information digest of the organisation. Publishing the information materials in periodicals: MAMA-86 Newsletter and "Green Salad" of Alter-Eco NGO Coalition. Use of "Eco-telephone" Hot Line Service of MAMA-86. 	Development and publishing of the booklet, leaflets and posters on health impacts of POPs. Publication of articles in mass media outlets, information publications of MAMA-86 and posting these materials at the website of MAMA-86.
Replication of the results and experience sharing.	Posting the project results in the Internet, transfer of the materials to libraries of Ukraine. Conducting a press conference for mass media outlets on results of the project.	Provision of information to the country residents and public authorities on results and significance of the project, experience of partnerships of authorities and the general public, control of environmental bodies in

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the course of addressing	
environmental problems.	
Provision of the information	l
materials to mass media out	lets and
Internet sites. Launching a	
consultative facility to inform	m
interested citizens and NGO	1
members on health and	
environmental impacts of PC	ЭPs

Introduction

The long-term aims of All-Ukrainian Environmental NGO, MAMA-86, incorporate *inter alia* establishment of a broad public platform to support sustainable development at the local level with participation of representatives of different social sectors/groups; and to support and strengthen activities for improvement of health and environment. We are particularly concerned about the adverse environmental impacts of persistent organic pollutants (POPs) and their impacts on human health, especially POPs impacts on health of women and children. We put our hopes on the Stockholm Convention on POPs, which intends to protect health and environment by control of production and release of 12 initial POPs.

Ukraine signed the Stockholm Convention on POPs on May 23, 2001 and plans to ratify the instrument. Since September 2003, a two-year GEF/UNEP project has been under way in Ukraine ("Support of Actions for Development of the National Plan for Implementation of the Stockholm Convention in Ukraine").

The above project focuses on development of the National Implementation Plan, stipulating incorporation of specific action plans for elimination/reduction of POPs production, use and releases, as well as development of preconditions for approval and implementation of the Plan. In turn, development of the Plan will initiate Ukraine's ratification of the Stockholm Convention. Besides that, the project stipulates broad public information on POPs-related problems and promotion of broad public participation in the development and implementation of the Plan.

Our project - Partnership between NGOs and Research facilities for Capacity Building to Reduce Adverse Health and Environmental Impacts of POPs - aims to develop proposals to promote reduction of these adverse POPs impacts in Ukraine. Implementation of the project allowed us, using experience and opportunities of international co-operation in the sphere of POPs, to make progress in attaining the long-term aim of the organisation; to develop a precondition for capacity building to reduce adverse health and environmental impacts of POPs; to raise public awareness of importance of the problem; and to develop proposals for incorporation to the National Plan of Implementation of the Stockholm Convention, that should facilitate ratification of the Stockholm Convention by the Verkhovna Rada of Ukraine.

POPs in Ukraine

The problem of POPs is fairly relevant for Ukraine as the country has well developed agriculture and high shares of power industry and metallurgy in the national economy.

According to official statistical data, since the decay of the former USSR, more than 14,500 tons of banned and obsolete pesticides have been accumulated in the territory of the country (the majority of them are classified as preparations of 1st/2nd hazard grades). According to independent studies, the real figure may exceed 22,000 tons. The amounts of obsolete pesticides in Ukraine are compatible with the pesticide stockpiles of all African countries.

In 2002-2003, bodies of the Ministry of Agricultural Policy, the Ministry of Environment and the Public Health Ministry conducted inventories of obsolete pesticides. As of December 1, 2003, Ukraine's pesticide stockpiles were estimated as 20.9 thousand tons of obsolete pesticides, which were delivered earlier for agricultural purposes. These chemicals are stored in 4983 storage facilities of agricultural companies of all ownership forms, in different places of the country. The list of these chemicals includes several POPs: DDT - about 2000.0 tons (or about 10% of the overall stock); heptachlor - 13.4 tons (about 0.07%); hexachlorobenzene - 1.0 ton (about 0.005%); and endrin - 1.1 tons (about 0.005%).

Besides that, pesticides (including POPs) were used by forestry, water management and defence facilities. Residual amounts of pesticides are stored in storage facilities of the relevant agencies.

It is worthwhile to note that the majority of pesticides are stored in inadequately equipped storage facilities. Owners of pesticide storage facilities often changed - as a result, accompanying documents were lost, packaging materials were damaged and pesticides of different brands were mixed and reacted with other chemicals, generating new hazardous substances. Many pesticide storages are not guarded and are located nearby residential areas. There is a real threat of unauthorised access and use of obsolete pesticides.

Residents of the country are not sufficiently aware of risks associated with stockpiles of obsolete pesticides. There were numerous cases of unauthorised application of obsolete pesticides, causing soil and groundwater contamination, and eventually human exposure.

Experts believe that the option of separation of POPs-pesticides from other accumulated obsolete pesticides is not technically and economically feasible. They propose to consider technical, technological and organisational aspects of the problem of management of the whole amount of accumulated obsolete pesticides.

The second important problem is associated with polychlorinated biphenyls (PCBs). A well developed power supply network and numerous power supply installations allow one to suggest that huge amounts of PCBs are used in Ukraine. The first comprehensive inventory of PCBs in Ukraine was conducted in 2002 - 2004, in the framework of a project of the National Centre for Management of Hazardous Chemicals with support from UNEP Chemicals. This inventory project resulted in development of the database of PCBs-containing equipment items and dielectric liquids in Ukraine (including information on their brands and amounts). The database contains preliminary information, submitted by 3500 facilities of Ukraine (information on about 100,000 electric equipment items and 250 tons of PCBs-containing dielectric liquids). Preliminary analysis of the above data suggests that there are at least 5000 tons of PCBs in use or at storage in Ukraine now (in the majority of cases, PCBs were found in already decommissioned electric equipment).

The scale of dioxin emissions in Ukraine has not been assessed yet, due to lack of necessary analytical instruments.

Preliminary estimates of dioxin emissions were made by experts of POPs Emissions Task Force of GEF/UNEP project "Support of Actions for Development of the National Plan for Implementation of the Stockholm Convention in Ukraine" according to the UNEP Chemicals' Methodological Guidelines for Identification and Quantitative Assessment of Emissions of Dioxins and Furans. Their data suggest that emissions of dioxins and furans in Ukraine reached 851.6 g TEQ. in 2002 (the figure is lower than relevant estimates for 1990 - 1486.3 g TEQ)

The project results

At the initial stage of the project, necessary consultations were conducted on participation of experts from different spheres of science and technology dealing with management of hazardous waste (including POPs) and NGOs active in the sphere. Seventeen NGOs from Ukraine were involved in the project, including regional organisations of MAMA-86 All-Ukraine Environmental NGO in Poltava, Artemovsk (Donetsk Oblast), Nezhin (Chernigov Oblast), Sevastopol, Feodosia, Odessa, Tatarbunary (Odessa Oblast), Yaremche (Ivano-Frankovsk Oblast); Kharkov Oblast NGOs: "Eco-Pravo-Kharkov", "The Independent Environmental Information Agency", "Public Initiatives" Charity, "Ecocentre", "Pechenegi" Environmental Group, Kharkov Centre of Women's Studies, "Panna" Fund; NGOs of the North-eastern Ukraine: "Bakhmat" Environmental and Cultural Centre, the Youth Environmental League of the Dnieper Region.

Necessary information materials were developed on available POPs-related data in the country and the state policy in the sphere of POPs management.

The first stage of the project implementation incorporated organisation and holding of a multi-sectoral roundtable. On November 5, 2004 in the "Water Information Centre" municipal facility (Kiev, 1-V Grushevskogo St., Kreschatiy Park) the roundtable discussion was held on "Options of Co-operation for Capacity Building to Reduce Adverse Health and Environmental Impacts of POPs in Ukraine".

The roundtable was organised by MAMA-86 All-Ukraine Environmental NGO and "Water Information Centre" municipal facility.

The roundtable discussion was attended by representatives of the Ministry of Environment and Natural Resources of Ukraine, the General Plant Protection Inspectorate of Ukraine and other governmental bodies; representatives of the academic community and GEF/UNEP project "Support of Actions for Development of the National Plan for Implementation of the Stockholm Convention

in Ukraine", as well as by the project experts, representatives of businesses, education facilities, NGOs, scientific periodicals and other mass media outlets (70 persons overall).

The roundtable participants discussed the **following issues**:

- The problem of POPs in Ukraine (expert assessments of inventories of PCBs and obsolete pesticides).
- Technologies for reduction of POPs-related risks and POPs phase out.
- Assessment of POPs risks: air, soil and water pollution.
- Adverse impacts of POPs on health of children and adults in the country.
- Existing national legislation on POPs and options for its harmonisation with international legal acts.
- The need to develop a governmental strategy for management of POPs.
- The National Plan of Implementation of the Stockholm Convention in Ukraine as a component of a national strategy for capacity building to reduce adverse health and environmental impacts of POPs.
- The need and roles of international co-operation for elimination/reduction of POPs-related risks for human health.
- Participation of NGOs and the general public in addressing the problem of POPs in the
- Options to strengthen partnerships for capacity building to reduce health and environmental risks of POPs.

The roundtable participants **noted**:

- 1. the need to strengthen partnerships between the general public, local communities and research and education facilities, businesses, industries and governmental bodies in the course of decision-making on reduction of adverse health and environmental impacts of POPs;
- 2. the need to improve the national legislation on POPs management for implementation of the Stockholm Convention on POPs;
- 3. the need to develop additional measures for reduction of adverse health and environmental impacts of POPs;
- 4. the need to develop measures to raise public awareness of health and environmental impacts of POPs and activities to reduce these impacts;
- 5. the need to enhance public participation in development and eventual implementation of the National Plan of Implementation of the Stockholm Convention in Ukraine.

The roundtable participants **recommended**:

- 1. To develop a brochure at the base of information materials of the roundtable; to use these materials for information campaigns on the problem of POPs in the country; to disseminate the brochure among members of the general public and interested organisations.
- 2. To initiate an information campaign to raise public awareness of health and environmental impacts of POPs.
- 3. To establish an initiative group of representatives of NGOs, communities, businesses, industries, experts for further analysis of POPs-related developments in the country

(particularly at the regional level) and the country's commitments for implementation of the Stockholm Convention.

- 4. Members of the initiative group should develop proposals on:
 - Improvement of the national legislation, pertaining to management of POPs and commitments for implementation of the Stockholm Convention.
 - Reduction of adverse health and environmental impacts of POPs by review and application of best practices of POPs minimisations; improvement of agro-chemical policy of the country, introduction of environment-friendly technologies.
 - Improvement of monitoring of health/environmental quality.
 - Raising public awareness of POPs impacts on health and environment.
 - Use of capacity and partnerships of scientists, NGOs and educators to raise public awareness of POPs hazards.
- 5. To lobby for approval of these recommendations at the national and regional levels.

The second stage incorporated development and publication of the roundtable materials. These materials were published in a brochure (5000 copies). The brochure incorporated information on the International POPs Elimination Project; the program and recommendations of the roundtable, reports/presentations of experts and representatives of NGOs.

The brochure with information materials of the roundtable and other materials of the organisation on the problem of POPs were provided to the "Water Information Centre" to organise an information display dedicated to the problem of POPs in Ukraine.

Copies of the brochure were disseminated in the course of information campaigns on the problem of POPs and in the course of actions, dedicated to the Global Day of Actions against POPs (April 15 -23, 2005).

The third stage of the project implementation incorporated establishment of the initiative group for analysis of the national legislation in the sphere of POPs management. The initiative group incorporated experts, representatives of NGOs, local communities businesses and industries. The group had been established to analyse existing national legislation, pertaining to management of POPs and commitments for implementation of the Stockholm Convention. The initiative group was led by experts of "Eco-Pravo-Kharkov" NGO. The experts reviewed results of analysis of existing legislative acts on POPs and developed recommendations for implementation of the Stockholm Convention. The experts **noted**:

- 1. Notwithstanding some reduction of production of chemicals comparatively to early 1990s, we still face the problem of their potential health and environmental impacts. Therefore, both decision-makers and members of the general public need accessible and reliable information on production and export/import of hazardous chemicals.
- 2. It is necessary to develop a special governmental strategy for management of POPs the strategy should account for their high toxicity, health and environmental impacts. It is necessary to develop national legislative acts for regulation of POPs management. It is necessary to develop programs for monitoring of uses and releases of POPs.
- 3. It is necessary to develop and approve the National Plan of Implementation of the Stockholm Convention.

- 4. It is necessary to refuse application of incineration technologies for elimination of POPs and other types of hazardous waste; it is necessary to develop and use alternative technologies.
- 5. Production of chemicals is not the only indicator of their potential impacts on health and environment, it is necessary to collect information on releases that accompany a chemical at all stages of its life cycle (from production to consumption and eventual disposal).
- 6. It is necessary to maintain a close control of circulation of dioxins and dioxin-like compounds in the environment; it is necessary to develop methods for minimisation of dioxin releases, to introduce a moratorium on production of new dioxin-like substances, to identify priority dioxin-generating facilities for decommissioning or reconstruction.
- 7. POPs elimination activities should be prioritised; opportunities for potential extension of the initial list of substances (the dirty dozen) should be stipulated.
- 8. It is necessary to organise a system of control and notification on application of pesticides.
- 9. It is necessary to develop mechanisms to inform consumers on effects of different chemicals ingredients of products/consumer goods.
- 10. It is necessary to improve the system of waste collection and recycle. The human society could apply the waste-prevention approach broader, instead of the contemporary waste management model.
- 11. In order to facilitate improvement of waste management laws and regulations and harmonise them with applicable international requirements, the following recommendations were proposed:
 - In the course of development of the waste management system of Ukraine, it is necessary to improve legislative mechanisms regulating activities of waste management services and relevant supervisory bodies.
 - Economically and environmentally beneficial mechanisms of waste processing should be introduced to reduce environmental pollution.
 - Systems of collection and processing of municipal waste should be improved (including waste separation and reuse). Such a progressive approach would allow separation of secondary materials for their direct processing.
 - In order to reduce adverse health and environmental impacts of unusable waste, application of environmentally safe waste disposal methods should be ensured in compliance with applicable sanitary standards.
 - Projects for processing/disposal of toxic waste should be financed only after completion of their sanitary and environmental assessments.
 - In order to promote compliance with applicable sanitary standards, to prevent environmental contamination and adverse health impacts, different types of toxic waste should be categorised, accounting for the following parameters:
 - o sources of pollutants' releases (production, transportation, storage, application);
 - o contaminated objects (soil, water, transport, constructions, etc.);
 - o nature of contaminants in environmental media (highly toxic, persistent, unstable, radioactive, etc.);
 - o properties of chemical agents (physical and chemical properties, biodegradation, biotransformation);
 - o sources of toxic exposure of human beings and animals (air, soil, food, water).
 - A database of the most hazardous production facilities, production processes and waste storage sites in Ukraine should be developed.

- Sites of accumulated waste stockpiles should be rehabilitated, particularly the ones containing toxic waste.
- Awareness levels of relevant agencies and members of the general public in the sphere of waste management should be raised, they should be provided timely and reliable information on these matters (by means of seminars and lectures on waste-related risks, risk assessment of waste management, enhancement of general education and consumer culture).
- Legislative mechanisms regulating activities of waste management services and relevant supervisory bodies should be improved.
- 12. It is necessary to maintain international co-operation for elimination POPs-related risks and to get finance support and technical assistance.

Besides that, recommendations were developed for improvement of the national legislation in the sphere of POPs management and commitments for implementation of the Stockholm Convention on POPs:

- To carry out a comprehensive "inventory" of the legislation of Ukraine, pertaining to management of chemicals and chemical waste (including POPs).
- To address legislative gaps and inadequacies identified. For example, according to Decree No. 303 of the Cabinet of Ministers of Ukraine of March 1, 1999 "On Procedures of Setting Rates of Pollution Charges and Collection of these Charges", emissions (discharges) of 1 ton of andrin to air and water bodies are subject to charge of UAH 3 (\$0.6).
- To develop regulations on use of PCBs in electric equipment. Contemporary Rules of Construction of Electric Installations and Electric Equipment for Special Installations (DNAOP 0.00-1.32-01, approved by Order No. 272 of the Ministry of Labour and Social Policy of Ukraine of June 21, 2001), specify that "Oil-filled equipment items and instruments can be used in fire-risk zones of all classes (except oxygen plants and lifting mechanisms, where use of such equipment items and instruments is prohibited)". The Stockholm Convention states that Parties should avoid use of PCBs in equipment items and in fire-risk zones (PCBs are often used as components of dielectric/cooling liquids of electric equipment).

At the base of results of these activities, relevant letters were submitted to the Ministry of Environment of Ukraine. In these letters, we expressed out hopes that members of the general public and experts will be broadly involved into development of the National Plan of Implementation of the Stockholm Convention; that the Plan development process will be open and transparent, accessible for broad discussions of all interested parties.

The fourth stage of the project implementation was dedicated to organisation of the information campaign on adverse health impacts of POPs.

The booklet "Persistent Organic Pollutants and Human Health" (5000 copies) and two poster format leaflets (2000 copies) were developed and published.

The project experts developed proposals for reduction of adverse health impacts of POPs. They noted that lack of adequate monitoring data on POPs in environmental media necessitates coordination of efforts to analyse and interpret available information on POPs levels and their impacts on human health.

Accounting for a broad range of POPs-generated health problems, it is necessary to inform broad circles of the general public on adverse impacts of toxic chemicals on human health in order to develop programs for protection from toxic effects of POPs. Serious efforts are necessary to make environmentally safe chemical management a component of sustainable development principles and improvement of life quality. Otherwise, further application of chemicals would generate additional problems of environmental contamination. All public health programs should incorporate environmental protection aspects.

Stability and progress of all countries and all of humanity will depend on the health status of future generations - therefore it is necessary to develop preconditions for more secure and environmentally safe future for children. To this end, it is necessary to make a few simple steps right now - to apply the precautionary principle for children's environment, to reduce application of household chemicals, to buy household items and food prudently. Children were involved in the information campaign on adverse impacts of POPs on human health (meetings on these matters and creative contests). A drawing of the contest winner was used for leaflet-calendar "Let Us Unite and Save the World from POPs" (1000 copies of the leaflet were published).

On January 20 - 21, 2005, in Kharkov, at the seminar of the Ukrainian Education Reform Program ("Relevant Environmental Issues in the Context of Introduction of Sustainable Development Principles in Ukraine") for representatives of mass media outlets of Eastern Ukraine, two presentations were made:

- 1. Regional Experience of Addressing the Problem of POPs in Ukraine (O. Tsyguleva. MAMA-86-Kharkov).
- 2. Adverse Health Impacts of Different Environmental Factors (Particularly POPs) on Children's Health (E.Kovaleva, MAMA-86-Poltava).

Besides that, the project information materials on the problem of POPs were also presented to journalists.

Information materials of the project were posted in the Internet www.mama-86.org.ua, published in "EcoMama" quarterly of MAMA-86 All-Ukraine NGO, and distributed among all interested persons and organisations.

In February 2005, the interview with O.Tsyguleva was published in "Den" national newspaper - "Environmentalists Do Not Talk to the Winds" - dedicated to the problem of emissions of waste incinerators and alternatives to waste incineration.

On April 23, 2005, in the course of events, dedicated to 35th International Earth Day, in the framework of national campaign "A Green Germ of the Future", MAMA-86 All-Ukraine NGO conducted a large-scale action in Kiev, at Kreschatik St. and Nezaleznosty Sq. The action sought to mobilise capacity of partnerships of the public and authorities for addressing environmental problems and raising public awareness of environmental problems. The event focused on the problem of solid waste management in Ukraine and was dedicated to 15th anniversary of MAMA-86 All-Ukraine NGO". In the course of preparations to the International Earth Day, several pressconferences for journalists were held. At one of them (on April 21, 2005), O. Tsyguleva made her presentation on dioxin pollution and emissions of waste incineration plants. In the course of the press-conference, information materials of the project were disseminated.

Local residents are continuously informed on the problem of POPs by "Eco-telephone" Hot line service that operates in the regional organisations of MAMA-86 All-Ukraine NGO.