











### The International POPs Elimination Project

Fostering Active and Effective Civil Society Participation in Preparations for Implementation of the Stockholm Convention

## **Kazakhstan Country Situation Report English Summary**

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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 <a href="http://www.ipen.org">http://www.ipen.org</a>

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

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#### **POPs sources**

In the result of preliminary inventory, we discovered 108 transformers, filled with PCB-containing dielectric fluid known as Sovtol in the territory of Kazakhstan.

We also discovered over 38,000 PCB-containing capacitors, of which 15,000 were buried in Semipalatinsk range, 16,000 are used at JSC "Aksujsky Ferroalloy Plant", 811 are stored in storage houses of high-voltage substations of JSC "KEGOK", 577 belong to "Kazakhstan Temir Zholy Ltd."

#### Levels of POPs

In 1986 – 1995, application of agricultural chemicals decreased to 1,800 tons. Application of pesticides per hectare also decreased.

Since 1998, volumes of pesticide use began to increase, and now reach 9-11 thousand tons, of which over 50% are herbicides and fungicides.

DDT was prohibited in the USSR in 1971; nevertheless it was in use in Kazakstan until 1990s, for veterinary and medicine purposes.

In 1985, DDT and DDE were found in Syr-Daria River between Uzbek border and Kazalinsk city. Several cases of pestilence of fish and birds were registered in this area at that time. DDT and its metabolites were found in bodies of dead fish and birds.

During 1982 – 1987, 14 cases of pestilence of fish were registered in the territory of Kazakhstan, and they were attributed to accumulation of organic chlorine pesticides in the water reservoirs. For example, over 1/3 of all surveyed reservoirs contained DDT in water, water plants, invertebrates, fish tissue, and sediments.

Contamination of soils may be characterized by the following figures: the average concentration of DDT residues is 1.2 to 5.9 times higher than the maximum allowable concentrations.

12 thousand soil samples were tested for pesticide contamination in 1994. Organic chlorine preparations were found in 1/10 of all samples. In 1993, the corresponding figure was 1/5. Thus, we conclude that 10% - 20% of all agricultural lands in Kazakhstan are contaminated by organic chlorine pesticides, including DDT and other persistent organic pollutants.

The list of forbidden pesticides contains many chlorine-containing substances, including aldrin, dieldrin, DDT, heptachlor, hexachlorocyclohexane, polychlorpinen, polychlorcamphene.

The stock of useless pesticides in the republic increases every year, while the amount of neutralized preparations and containers decreases.

It is especially worrisome that outdated pesticides are often stored in territories contaminated by radionuclides and salts of heavy metals.

Among obsolete pesticides sometimes we find substances which were in use 40 years ago.

#### Damage caused by POPs

- 1. Absence of technologies for utilization of PCB-containing equipment. There are over 38,000 units of PCB-containing equipment in the republic. All this equipment must be decommissioned and destroyed before 2025. Unfortunately, the technologies for destruction of such equipment are not available. Existing metallurgical furnaces do not meet the requirements for POP incinerators. The most feasible option is to use furnaces of cement factories, but they have to be equipped with additional devices. The best option would still be utilization of technologies of chemical decomposition of POPs, without incineration.
- 2. Absence of conditions for temporary storage of dismantled and written-off PCB-containing equipment. Before installation of technologies for destruction of POPs, the dismantled equipment must be stored somewhere. Many facilities already face this problem: for example, JSC "KEGOK" examines options for destruction or burial of 300 written-off and dismantled PCB —containing capacitors at a high-voltage substation "Sarbaisky MES". JCS "Kazakhstan Zink" is tackling the same kind of problem of utilization of 500 written-off capacitors. The storage facilities must be chemically insulated to prevent leakage of chemicals in the environment. As a temporary solution, we propose using the testing installations of Semipalatinsk nuclear-testing range, after estimation of transportation costs if the equipment should be delivered down there from the entire territory of the republic. Because the Stockholm Convention requires that such POPs-containing equipment should be destroyed after several years' period, economists will have to decide whether such temporary solution is economically expedient.
- 3. Rehabilitation and restoration of PCB-contaminated territories. The inventory discovered the following PCB-contaminated sites:
  - Ablaketka village and Ust-Kamenegorsk capacitor plant;
  - Storage pond of UKKZ;
  - Ekibastuz substation;
  - JSC "Paylodar Chemical Plant".

Rehabilitation and restoration of these sites will require considerable capital outlays.

#### Situation with ratification of the Stockholm Convention

In May of 2004, over 30 environmental NGOs of Kazakhstan signed a petition to the Government with the requirement to ratify Stockholm Convention on persistent organic pollutants as soon as possible. This petition was sent to the President of Kazakhstan, the Parliament, United Nations, Ministry of Environmental Protection, and several other ministries and agencies.

In the answer to this petition, the President asserted that Kazakhstan is going to ratify the Convention and currently prepares the required documentation.

#### **Recommendations for POPs' Elimination**

#### NGO proposals:

Taking in account environmental risks of POPs, and the risk of irreversible genetic transformations, the program of POPs control, monitoring and management must be developed in 2005 – 2006.

Kazakhstan NGOs ask the Government of the Republic of Kazakhstan to ratify Stockholm Convention no later than May 2005, the date of the second conference of parties to the Aarhuz Convention; and to implement all precautionary measures specified in Principle 15 of Rio-de-Janeiro Declaration on Environment and Development.

We also demand that Kazakhstan Government, industry and scientific institutions fulfill the agreements made during the Intergovernmental Forums on Chemical Safety.

We propose the following steps necessary to meet Kazakhstan's national obligations under the Stockholm Convention and implement the Kazakhstan National Implementation Plan addressing POPs problems:

To ensure access to information:

- 1. Mobilize resources to increase public awareness on POPs;
- 2. Organize trainings of specialists and experts of involved agencies on POPs problems;
- 3. Facilitate public access to information on POPs;
- 4. Administer educational courses devoted to hazardous consequences of POP application for the environment and public health;
- 5. Disseminate information and international experience about POPs alternatives.
- 6. Facilitate public involvement into decision making on POPs;
- 7. Develop response actions, including public participation;
- 8. Train researchers, university teachers, civil servants;
- 9. Ensure regular updating of information and access to information for the public and decision makers at the same time;

- 10. Support NGOs that deal with POPs issues;
- 11. Form an information network and consult experts to achieve efficiency of this activities;
- 12. Create mechanisms (pollutant emission and transfer registers) necessary to collect and disseminate information on POPs and other toxics.

#### To facilitate research and monitoring:

- 1. Involve the public in research, development and monitoring of POPs, conduct studies (like risk assessment POPs to human health);
- 2. Support public efforts and public initiatives;
- 3. Facilitate data collection;
- 4. Facilitate networking activities on POPs;
- 5. Help recruit consultants to provide intellectual support for such networks;
- 6. Ensure regular and timely access to data and results of studies and assessments.

#### To provide support:

- 1. Include public representatives in various working groups, e.g. task force for the development of action plans on chemical safety;
- 2. Strengthen the potential of public organizations working on POPs issues;
- 3. Help organize public seminars, sessions and round tables for NGOs;

#### To publicize initiative and experience of NGOs:

NGOs of Kazakhstan recommend development of mechanisms and procedures of public participation in the implementation of Stockholm Convention on POPs, principles of interaction with legislative and executive authorities in the area of hazardous substances.

Taking into account the global character of POPs problems and its importance for Kazakhstan, environmental NGOs admit the importance of improvement of legislation in this field. National legislation should be harmonized with the provisions of Stockholm Convention. Special national laws on POPs should be adopted, or, alternatively, problems of POP pollution should be adequately reflected in the existing legislation.

In 2002, NGOs of Central Asia agreed that POPs problem is very important for the whole region.

#### International cooperation may include:

- Creation of Central Asia network on POPs, with representative offices in all countries of this region;
- Research, analysis and subsequent implementation of existing technologies of neutralization (destruction) of POPs, these technologies should be safe for the environment and public health;

- Development of database on POPs in Central Asia, consultations and experience sharing, expert support;
- Information dissemination and public education, informing public about the inventory results and any materials about POPs. This information should be communicated in official and other languages;
- Teaching a class in universities and technical colleges devoted to POP problems.

Cooperative actions of state agencies and NGOs in the area of POPs may take various forms:

- Creation of public organization which would monitor and control stocks of POPs and hazardous industrial waste, as well as actions of industrial companies that deal with POPs
- Public participation in exposure of illegal stocks of obsolete pesticides;
- Public participation in international projects in the area of POPs.

#### For future development:

- 1. With respect of all chemical substances, the public of Kazakhstan should receive information about degree of hazard for public health and for the environment;
- 2. The Republic of Kazakhstan should prepare registries of emissions and transfer of pollutants;
- 3. Create a center of environmental toxicology;
- 4. Develop approaches and mechanisms of public access to information about all chemicals which are offered for sale.

#### **Resources on POPs**

- Eco-Accord information materials (Eco-Accord is a leading Russian NGO in the area of dissemination of information about POPs (http://accord.cis.lead.org));
- Basel Convention on control of transboundary movements of hazardous waste and their disposal;
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade;
- Stockholm Convention on persistent organic pollutants;
- Materials of Agency of environmental information "Greenwomen" (Kazakhstan);
- Report of N. K. Dusembaeva "Influence of Persistent Organic Pollutants on Public Health";
- The Second Seminar of UNPD/GEF in the framework of project "Initial Assistance to Republic Kazakhstan for fulfillment of obligations under Stockholm Convention on persistent organic pollutants;
- Report of Mr. Moiseev "Experimental theories of Assessment of Influence of POPs on Public Health":
- Report of A. D. Beibitova "Inventory of PCD-Containing Equipment in Republic Kazakhstan";
- Website: http://www.pops.int/documents/convtext/convtext\_ru.pdf