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International POPs Elimination Project

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

POPs in Trans-Dniesteria (Moldova) - Situation Assessment and Public Information 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 <http://www.ipen.org>

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The views expressed in this report are those of the authors and not necessarily the views of the institutions providing management and/or financial support.

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

POPs in Trans-Dniesteria (Moldova) - Situation Assessment and Public Information

English Summary

The project implementation by "Eco-TIRAS" International Environmental Association of River Warriors, in partnership with local NGOs "Turunchuk" (inventory works and seminars in Slobodzeiskiy district, NGO Chairman - Nikolai Galenyuk), "Doctors for Environment" (Elena Stepanova - seminars and roundtables) and "Pelican" (Leonid Ershov), as well as the State Administration of Slobodzeiskiy district and the Centre of Preventive Health Care (Chisinau, Professor Nikolai Opopol), generated the following results:

Primary inventory works have been completed at pesticide storage sites at the territory of Slobodzeiskiy district, quantities of chemicals and storage conditions were assessed (see the inventory results in the Annex). Findings of the inventory works have been submitted to the State Administration of the district. As a result, the problem of pesticides became well known to the district residents and attracted attention of local authorities that ordered to concentrate all obsolete and unidentified pesticides (earlier scattered at different sites in the district) to the duly equipped storage facility in Pervomaisk Township.

In general, we can conclude that there are relatively small quantities of POPs in the district, compared to the right-bank Moldova (in the last years of the former USSR, district authorities had managed to transfer banned and obsolete pesticides to Vulkaneshtskiy district for burial). Besides that, land in Trans-Dniesteria is not privatised and processes of dissolution of state/collective farms started only recently. -As a result, pesticide storage facilities are now of much higher technical quality, comparatively to the right-bank Moldova. In addition, some storage facilities were emptied and do not operate now, while some operational ones are duly staffed by well trained personnel. According to our assessments, in 1990, at the territory of Slobodzeiskiy district, 113 different brands of pesticides were applied.

No.	Pesticide types	Number of brands	<i>Application purposes</i>
1	Insecticides	36	Pest control in vegetation period
2.	Nematocides	2	Nematode control
3.	Zoocides	1	Rodent control
4.	Fumigants	1	Fumigation of cereals and beans. Pest control in storages.
5.	Seed treatment chemicals	19	Plant disease control
6.	Herbicides	42	Weed control
7.	Ripening agents	2	Sunflower and tomatoes ripening promoters
8.	Biological preparations	4	Pest control by biological methods

1400 tons of pesticides were applied at agricultural lands of the district, including:

- Insecticides 350 tons
- Seed treatment chemicals 7 tons
- Fungicides 810 tons
- Herbicides 200 tons
- Ripening agents 1.8 tons
- Biological preparations 32 tons

In vegetation periods, the key crops were treated:

- Cereals 1 time
- Corn 1.6 time
- Beet 4 times
- Sunflower 1 time
- Vegetables 4.1 times
- Gardens 9 times
- Vineyards 4 times

There were 17 operational pesticide storage facilities in the district, including 13 certified ones. All facilities were equipped by amenity rooms. Area improvement works were completed at all storage sites.

Now, there are 12 pesticide storage facilities in the district. Four facilities are operational including 3 certified ones (Blizhniy Khutor, Pervomaisk and Glinoye).

The above storage facilities contain about 10 tons of pesticides - mainly herbicides (triazine derivatives), biological preparations and fungicides. Chemicals are stored in adequate packaging at shelves. Storage facilities are duly guarded. However, some storage facilities need repairs.

There are no banned pesticides at the territory of the district. There are 820 kg of unidentified pesticides. In 2004, a special order was issued by the district State Administration on banned and unidentified pesticides. The order instructed managers of all facilities (regardless their ownership forms) to transfer these chemicals to storage facility in Pervomaisk township. Storage facilities in Blizhniy Khutor and Glinoye are in the due technical order.

In 2003, at the territory of the district, 42 tons of pesticides were applied, including:

- Insecticides more than 4 tons
- Fungicides more than 27 tons
- Herbicides about 8 tons
- Seed treatment chemicals more than 2 tons

Storage facilities in the district mainly operate according to applicable rules.

Now, 6 plant protection agronomists operate in the district. In other agriculture facilities, their functions are performed by relevant chief agronomists.

As a result of the problem of sales of agricultural products, pesticide application intensity decreased. The Table below shows pesticide application rates in the district in 2003.

No.	Crops	Total	Insecticides	Fungicides	Biological preparations	Herbicides
1.	Cereals	0.03	0.03	-	-	0.2
2.	Corn	-	-	-	-	0.7
3.	Vegetables	0.58	0.4	0.34	-	0.09
4.	Gardens	1.6	1.44	1.2	-	-
5.	Vineyards	2.7	-	2.5	0.3	-

In connection with reorganisation of agricultural facilities, a new problem emerges - decentralised supply of plant protection chemicals. Pesticide storage facilities in some settlements are not needed any more, as a result, new potential sources of pollution emerge, including:

- Parkanskiy facility was sold for storage of construction materials (cement, slate).
- Nezavertailovskiy storage facility was demolished in 1995.
- Pesticide storage facilities in Ternovka village and Slobodzeya are not needed any more.
- Kremenchug village, Kopanka village and Frunze technical school-state farm were re-subordinated to other administrations.

On the one hand, application of the new generation of preparations, that are used in small doses (from 10 to 200 g/hectare), changes pesticide management operations. On the other hand, ongoing transformation of large collective farms into smaller facilities (individual

farms, lease-based facilities, agricultural companies, etc.) is associated with new relations between pesticide suppliers and users, making control of pesticide import, application and storage more difficult.

Now, pesticides are used without intermediate storage. Such a model of pesticide application stipulates purchase of limited quantities of pesticides, necessary for a specific pesticide application operation in a time. The range of key suppliers incorporates: "Agromatto" (Tiraspol), "Gernik" (Bendery) and "Fertiliate" (Chisinau).

District power supply networks incorporate 484 transformers (125375 KWh) containing 161.8 tons of dielectric liquids.

Used transformer oil is delivered to Tiraspol for regeneration and then is re-used. In this connection it is necessary to study environmental safety aspects of the oil regeneration process.

2. We submitted collected information to a GEF World Bank project that stipulates addressing POPs-related issues in Moldova in the nearest years, in order to amend the Action Plan for Implementation of the Stockholm Convention. Now, the project does not cover Trans-Dniesteria and opportunities for use of the project funds in the region will depend on resolving the frozen regional conflict.

3. Seven seminars and roundtables were conducted in Slobodzeiskiy district, Bendery, Dubossary and Chisinau (150 participants - agricultural specialists, school teachers, representatives of NGOs, journalists, representatives of local authorities, sanitary and epidemiological facilities, environmental inspectors). Two presentations on issues of POPs and the Stockholm Convention in Moldova were made at an International Conference "Integrated Management of Natural Resources in Trans-boundary Dniester Basin" (Chisinau, September 2004) with participation of 30 representatives of Trans-Dniesteria.

4. In the course of the project implementation, 7 papers were published in local and central printed media outlets on POPs problems, as well as 1 brochure. Unfortunately, due to the specific situation in Trans-Dniesteria, to avoid potential damage to local authorities and NGOs that supported the project, we have not incorporated information on Slobodzeiskiy district into the brochure, and provided only general information on POPs and the Stockholm Convention. It is worth to note that the brochure is the first local language source of information on the problem in the region. We published 1000 copies of the brochure and we have funds to cover mailing costs, so we can be sure that all Trans-Dniesteria residents will have access to the information in schools, libraries and public health facilities.

5. Intensive and persistent activities of local NGOs (particularly "Turunchuk", "Eco-Dniester", "Doctors for Environment", Pelican") promoted their development and interest

to POPs-related problems, improving thus prospects of IPEP project development in Trans-Dniesteria. Twenty other NGOs of Moldova and Trans-Dniesteria also participated in seminars and roundtables. In the future, these activities will be supported by the Sanitary and Epidemiological Service of the district that has already demonstrated its professionalism, interest in the problem and willingness to co-operate.

6. The project implementation allowed development of a new sphere of activities of "Eco-TIRAS" International Environmental Association and facilitated development of the association.

We express our gratitude to IPEP/GEF and other funders for financial support and to "Eco-Accord" centre for fruitful and pleasant co-operation.

Addenda:

1. Results of POPs inventory works in Slobodzeiskiy district;
2. Copies of newspaper publications;
3. Brochure "Persistent Organic Pollutants - the Problem of All and Everyone in 21st Century", Chisinau: Eco-TIRAS, 2005, 46 pages, published in the framework of the project.

Compiled data on storage facilities and other POPs sources in Slobodzeiskiy district (Moldova, Trans-Dniesteria), according to the questionnaire (Autumn 2004).

<i>Parameters</i>												
Sukleya village	The number of storage facilities	Area of storage facilities, m ²	Storage capacity (tons)	Roof (yes/no)	Concrete floor (yes/no)?	Guards and protection zone (yes/no)?	Types and quantity of POPs		Water treatment installations (yes/no)	Permits of the Sanitary and Epid. Service (yes/no)	Distance to the nearest water source (m, km)	Distance to the nearest residential area (m, km)
							Identified, kg, l, m ³ , bags (kg), etc.	Unidentified, kg, l, m ³ , bags (kg), etc.				
Experimental production farm	1	150	20	yes	yes	No guards. Protection zone exists	20kg	70kg	No	No	1.2km	1.2km
Collective farm	1	200	100	yes	yes	Yes	300kg	400kg	no	No	3km	2km
<i>Parameters</i>												
Chobruchi village	The number of storage facilities	Area of storage facilities, m ²	Storage capacity (tons)	Roof (yes/no)	Concrete floor (yes/no)?	Guards and protection zone (yes/no)?	Types and quantity of POPs		Water treatment installations (yes/no)	Permits of the Sanitary and Epid. Service (yes/no)	Distance to the nearest water source (m, km)	Distance to the nearest residential area (m, km)
							Identified, kg, l, m ³ , bags (kg), etc.	Unidentified, kg, l, m ³ , bags (kg), etc.				
	3	450	150	yes	yes	Yes	no	No	no	no	3.5km	4km
<i>Parameters</i>												
Frunze village	The number of storage facilities	Area of storage facilities, m ²	Storage capacity (tons)	Roof (yes/no)	Concrete floor (yes/no)?	Guards and protection zone (yes/no)?	Types and quantity of POPs		Water treatment installations (yes/no)	Permits of the Sanitary and Epid. Service (yes/no)	Distance to the nearest water source (m, km)	Distance to the nearest residential area (m, km)
							Identified, kg, l, m ³ , bags (kg), etc.	Unidentified, kg, l, m ³ , bags (kg), etc.				
	-	-	-	-	-	-	-	-	-	-	-	-
<i>Parameters</i>												

Krasnoye township	The number of storage facilities	Area of storage facilities, m ²	Storage capacity (tons)	Roof (yes/no)	Concrete floor (yes/no)?	Guards and protection zone (yes/no)?	Types and quantity of POPs		Water treatment installations (yes/no)	Permits of the Sanitary and Epid. Service (yes/no)	Distance to the nearest water source (m, km)	Distance to the nearest residential area (m, km)
							Identified, kg, l, m ³ , bags (kg), etc.	Unidentified, kg, l, m ³ , bags (kg), etc.				
	-	-	-	-	-	-	-	-	yes	-	-	-
Parameters												
Vladimirovka village	The number of storage facilities	Area of storage facilities, m ²	Storage capacity (tons)	Roof (yes/no)	Concrete floor (yes/no)?	Guards and protection zone (yes/no)?	Types and quantity of POPs		Water treatment installations (yes/no)	Permits of the Sanitary and Epid. Service (yes/no)	Distance to the nearest water source (m, km)	Distance to the nearest residential area (m, km)
							Identified, kg, l, m ³ , bags (kg), etc.	Unidentified, kg, l, m ³ , bags (kg), etc.				
	1	200	5	yes	yes	yes	150kg	-	-	-	50m	4km
Parameters												
Blizhniy Khutor village	The number of storage facilities	Area of storage facilities, m ²	Storage capacity (tons)	Roof (yes/no)	Concrete floor (yes/no)?	Guards and protection zone (yes/no)?	Types and quantity of POPs		Water treatment installations (yes/no)	Permits of the Sanitary and Epid. Service (yes/no)	Distance to the nearest water source (m, km)	Distance to the nearest residential area (m, km)
							Identified, kg, l, m ³ , bags (kg), etc.	Unidentified, kg, l, m ³ , bags (kg), etc.				
	1	456	250	yes	yes	yes	100	-	yes	yes	3km	3km
Parameters												
Nezavertailovka village	The number of storage facilities	Area of storage facilities, m ²	Storage capacity (tons)	Roof (yes/no)	Concrete floor (yes/no)?	Guards and protection zone (yes/no)?	Types and quantity of POPs		Water treatment installations (yes/no)	Permits of the Sanitary and Epid. Service (yes/no)	Distance to the nearest water source (m, km)	Distance to the nearest residential area (m, km)
							Identified, kg, l, m ³ , bags (kg), etc.	Unidentified, kg, l, m ³ , bags (kg), etc.				
	-	-	-	-	-	-	-	-	-	-	-	-

<i>Parameters</i>												
<i>Korotnoye village</i>	<i>The number of storage facilities</i>	<i>Area of storage facilities, m²</i>	<i>Storage capacity (tons)</i>	<i>Roof (yes/no)</i>	<i>Concrete floor (yes/no)?</i>	<i>Guards and protection zone (yes/no)?</i>	<i>Types and quantity of POPs</i>		<i>Water treatment installations (yes/no)</i>	<i>Permits of the Sanitary and Epid. Service (yes/no)</i>	<i>Distance to the nearest water source (m, km)</i>	<i>Distance to the nearest residence area (m, km)</i>
							<i>Identified, kg, l, m³, bags (kg), etc.</i>	<i>Unidentified, kg, l, m³, bags (kg), etc.</i>				
	1	300	100	yes	yes	Yes	6000kg	200	-	-	1km	5km
<i>Parameters</i>												
<i>Kikskany village</i>	<i>The number of storage facilities</i>	<i>Area of storage facilities, m²</i>	<i>Storage capacity (tons)</i>	<i>Roof (yes/no)</i>	<i>Concrete floor (yes/no)?</i>	<i>Guards and protection zone (yes/no)?</i>	<i>Types and quantity of POPs</i>		<i>Water treatment installations (yes/no)</i>	<i>Permits of the Sanitary and Epid. Service (yes/no)</i>	<i>Distance to the nearest water source (m, km)</i>	<i>Distance to the nearest residence area (m, km)</i>
							<i>Identified, kg, l, m³, bags (kg), etc.</i>	<i>Unidentified, kg, l, m³, bags (kg), etc.</i>				
	1	550	200	yes	yes	Yes	1650kg	-	-	-	1km	1.5km
<i>Parameters</i>												
<i>Pervomaisk township</i>	<i>The number of storage facilities</i>	<i>Area of storage facilities, m²</i>	<i>Storage capacity (tons)</i>	<i>Roof (yes/no)</i>	<i>Concrete floor (yes/no)?</i>	<i>Guards and protection zone (yes/no)?</i>	<i>Types and quantity of POPs</i>		<i>Water treatment installations (yes/no)</i>	<i>Permits of the Sanitary and Epid. Service (yes/no)</i>	<i>Distance to the nearest water source (m, km)</i>	<i>Distance to the nearest residence area (m, km)</i>
							<i>Identified, kg, l, m³, bags (kg), etc.</i>	<i>Unidentified, kg, l, m³, bags (kg), etc.</i>				
	1	720	300	yes	yes	Yes	500?	150	yes	yes	3km	3km
<i>Parameters</i>												
<i>Ternovka village</i>	<i>The number of storage facilities</i>	<i>Area of storage facilities, m²</i>	<i>Storage capacity (tons)</i>	<i>Roof (yes/no)</i>	<i>Concrete floor (yes/no)?</i>	<i>Guards and protection zone (yes/no)?</i>	<i>Types and quantity of POPs</i>		<i>Water treatment installations (yes/no)</i>	<i>Permits of the Sanitary and Epid. Service (yes/no)</i>	<i>Distance to the nearest water source (m, km)</i>	<i>Distance to the nearest residence area (m, km)</i>
							<i>Identified, kg, l, m³, bags (kg), etc.</i>	<i>Unidentified, kg, l, m³, bags (kg), etc.</i>				

	1	200	100	yes	yes	-	-	-	-	-	0.5km	0.5
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<i>Parameters</i>												
<i>Glinoye village</i>	<i>The number of storage facilities</i>	<i>Area of storage facilities, m²</i>	<i>Storage capacity (tons)</i>	<i>Roof (yes/no)</i>	<i>Concrete floor (yes/no)?</i>	<i>Guards and protection zone (yes/no)?</i>	<i>Types and quantity of POPs</i>		<i>Water treatment installations (yes/no)</i>	<i>Permits of the Sanitary and Epid. Service (yes/no)</i>	<i>Distance to the nearest water source (m, km)</i>	<i>Distance to the nearest residential area (m, km)</i>
							<i>Identified, kg, l, m³, bags (kg), etc.</i>	<i>Unidentified, kg, l, m³, bags (kg), etc.</i>				
	1	450	100	yes	yes	Yes	100kg	-	-	yes	1km	1km

<i>Parameters</i>												
<i>Parkany village</i>	<i>The number of storage facilities</i>	<i>Area of storage facilities, m²</i>	<i>Storage capacity (tons)</i>	<i>Roof (yes/no)</i>	<i>Concrete floor (yes/no)?</i>	<i>Guards and protection zone (yes/no)?</i>	<i>Types and quantity of POPs</i>		<i>Water treatment installations (yes/no)</i>	<i>Permits of the Sanitary and Epid. Service (yes/no)</i>	<i>Distance to the nearest water source (m, km)</i>	<i>Distance to the nearest residential area (m, km)</i>
							<i>Identified, kg, l, m³, bags (kg), etc.</i>	<i>Unidentified, kg, l, m³, bags (kg), etc.</i>				
	1	400	250	yes	yes	Yes	-	-	-	-	1.5km	0.2

<i>Parameters</i>												
<i>Karagash village</i>	<i>The number of storage facilities</i>	<i>Area of storage facilities, m²</i>	<i>Storage capacity (tons)</i>	<i>Roof (yes/no)</i>	<i>Concrete floor (yes/no)?</i>	<i>Guards and protection zone (yes/no)?</i>	<i>Types and quantity of POPs</i>		<i>Water treatment installations (yes/no)</i>	<i>Permits of the Sanitary and Epid. Service (yes/no)</i>	<i>Distance to the nearest water source (m, km)</i>	<i>Distance to the nearest residential area (m, km)</i>
							<i>Identified, kg, l, m³, bags (kg), etc.</i>	<i>Unidentified, kg, l, m³, bags (kg), etc.</i>				
	1	110	50	yes	yes	-	500kg	-	-	-	1.5km	1.5

<i>Parameters</i>												
<i>Slododzeya</i>	<i>The number of storage facilities</i>	<i>Area of storage facilities, m²</i>	<i>Storage capacity (tons)</i>	<i>Roof (yes/no)</i>	<i>Concrete floor (yes/no)?</i>	<i>Guards and protection zone (yes/no)?</i>	<i>Types and quantity of POPs</i>		<i>Water treatment installations (yes/no)</i>	<i>Permits of the Sanitary and Epid. Service (yes/no)</i>	<i>Distance to the nearest water source (m, km)</i>	<i>Distance to the nearest residential area (m, km)</i>
							<i>Identified, kg, l, m³, bags (kg), etc.</i>	<i>Unidentified, kg, l, m³, bags (kg), etc.</i>				
Russian part of the settlement	1	150	100	yes	yes	-	-	-	-	-	0.5km	2.5
Moldova part of the settlement	1	150	100	yes	yes	yes	300	-	-	-	0.3 km	0.5

