



COUNTRY REPORT

Legal and Technical Assessment
of the Management of Obsolete
Pesticides

Republic of Belarus



Food and Agriculture Organisation
of the United Nations



International HCH & Pesticides Association



Country Report

Legal and technical assessment of the management of
obsolete pesticides Republic of Belarus

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The European Union and the Food and Agriculture Organization of the United Nations (FAO) have invested € 7 million to assist countries in Central Asia and Eastern Europe to foster an environment of cooperation and capacity development to eliminate the risks from obsolete pesticides and Persistent Organic Pollutants (POPs) and to develop a more sustainable agriculture in the future. This report was prepared by the International HCH and Pesticides Association (IHPA) under a contract from FAO to assess the need for, and legal and technical capacity for, the sound management of hazardous waste in the country and to develop a “road map” for achieving self-sufficiency in sound hazardous waste management in the region.

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Content

Content.....	4
Foreword	5
Acknowledgement	6
List of acronyms.....	7
Introduction	8
Summary	12
Suggestions and recommendations	14



Data, Annexes and Working Document

All original data and Annexes are available in a separate document: 'Working Document, Legal and Technical Assessment of the Management of Obsolete Pesticides, Republic of Belarus'

Annexes:

- Annex 1: Terms of Reference for IHPA for coordination of a Disposal Study for Obsolete Pesticides in the Former Soviet Union
- Annex 2: Review of the current state of the Gomel Oblast Complex for Toxic Industrial Waste Recycling and Burial MUE, and the possibility of environmentally sound storage of waste referred to as persistent organic pollutants (POPs) at the complex in conformity with international requirements.

Foreword

Dear Friends,

We highly appreciate the publication of this report as an outcome of the study "Assessment of Capacity for Environmentally Sound Disposal of POPs and Obsolete Pesticides Wastes" that has been executed by the International HCH and Pesticides Association in the context of the joint EU/FAO Project "Improving capacities to eliminate and prevent recurrence of obsolete pesticides as a model for tackling unused hazardous chemicals in the former Soviet Union".

The information presented in the report not only describe the current situation in Belarus with the different issues related to POPs and Obsolete Pesticides Wastes management, but gives a clear understanding about the activities we still have to develop or improve upon in the short and medium term.

This report consists of a legal part, which includes a thorough assessment of the situation, and it shows that over the years Belarus has been seriously working on the systematic approach of the management of POPs and obsolete pesticides wastes. This has led to permanent developments in national legislation and a strong commitment to implement the concerned international conventions. Even more, the report confirms a strong enforcement of law, which is an anchor stone for the environmentally sound management of the POPs and obsolete pesticides wastes in Belarus.

The waste management section of the report describes each step of national pesticide waste management system and reflects the capacities present in the country. Moreover, it shows the technical competence our country has built. We realize that all these efforts have increased our ability to assist other countries technically and institutionally in the region with our acquired experiences



in the environmentally sound management of the POPs and obsolete pesticides wastes.

Finally, we like to express our gratitude to all involved parties for supporting this study.

Yours

A handwritten signature in black ink, appearing to read "Igor Kachanovsky".

Igor Kachanovsky, Deputy Minister of Natural Resources and Environmental Protection of the Republic of Belarus



Acknowledgement

IHPA would like to thank herewith both main authors Mr. Alexander Gnedov, legal expert responsible for Part I. Assessment of the legal framework on the Pesticides Waste Management and Ms. Marina Belous, the national waste management consultant who was responsible for Part II. Technical assessment of the management of obsolete pesticides and POPs waste and soil contamination in Belarus within the framework of a Disposal Study for Obsolete Pesticides in the Former Soviet Union.

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We give special thanks for the methodological support, general coordination and encouragement of the work to FAO, Mr. Kevin Helps, former Project Coordinator of FAO-EU Partnership, Mr. Richard Thompson, present Project Coordinator of FAO-EU Partnership Project, Ms. Lalaina Ravelomanantsoa, Legal Officer, Development Law Branch, FAO Legal Office, Ms. Oxana Perminova, Agricultural Officer (Social and Economic Impact) of FAO-EU Partnership Project, Milieukontakt International, Green Cross Belarus and Blacksmith Institute.

List of acronyms

ADR	International Carriage of Dangerous Goods by Road	NCC	National Coordinating Committee
BAT	Best Available Techniques	NFP	National Focal Point
BEP	Best Available Practices	NGO	Non-Governmental Organization
BelRC "Ecology"	Republican Research Unitary Enterprise Belarusian Research Center "Ecology"	NILOGAZ	Planning and Surveying Republican Unitary Enterprise
BRW	Belarusian railways	NIP	National Implementation Plan
CIS	Commonwealth of Independent States	NSEM	National System of Environment Monitoring
CMR	Conditions for the international carriage of goods by road. (original: Convention relative au contrat de transport international de Marchandises par route	OP	Obsolete pesticides
COWI	Christen Ostenfeld Wriborg W. Jønson, Denmark	OSCE	Organization for Security and Co-operation in Europe
DANCEE	Danish Environmental Assistance to Eastern Europe	PCB	Polychlorinated biphenyl
DOT	US Department of Transport (DOT) classification of dangerous material	PDF-B	Project Development Facility (GEF)
EA	Environmental Assessment	POP	Persistent Organic Pollutant
EC	European Commission	PRTR	Pollutant Release and Transfer Register
EEC	European Economic Community	PSMS	Pesticide Stock Management System (FAO)
EECCA	Eastern Europe, Caucasus and Central Asia	RID	International Transport of Dangerous Goods by Rail (original: Reglement concernant le transport international ferroviaire des Marchandises Dangereuses)
EIA	Environmental Impact Assessment	SAICM	Strategic Approach to International Chemicals Management
EMP	Environmental Management Plans	STI of MIA	State Traffic Inspectorate of the Ministry of Internal Affairs of the Republic of Belarus
EMTK	Environmental Management Tool Kit for Obsolete Pesticides (FAO)	Swedish EPA	Swedish Environmental Protection Agency
EU	European Union	TEQ	Toxic Equivalent
FAO	Food and Agriculture Organization of the United Nations	UNDP	United Nations Development Programme
GEF	Global Environment Facility	UNEP	United Nations Environment Programme
GHS	Globally Harmonized System of Classification and Labelling of Chemicals	UNITAR	United Nations Institute for Training and Research
Gosstandard	Gosudarstvennyy standart, means state standard for the Russian Federation and Republics of the Former Soviet Union	USSR	Union of Soviet Socialist Republics
HDPE	High Density Polyethylene	WB	World Bank
IATA	International Air Transport Association	WTO	World Trade Organisation
IMDG	International Maritime Dangerous Goods Code		
MAC	maximum allowable concentration		
MoD	Ministry of Defence		
MKT	Milieukontakt International		
MNREP	Ministry of Natural Resources and Environment Protection		
MUE	Municipal Unitary Enterprise		
N/A	Not Applicable		
NATO	North Atlantic Treaty Organization		
NATO PfP	NATO's Partnership for Peace programme		



Introduction

Within the EC / FAO project GCP/RER/040/EC “Improving capacities to eliminate and prevent recurrence of obsolete pesticides as a model for tackling unused hazardous chemicals in the Former Soviet Union” the International HCH & Pesticides Association (IHPA) has been tasked to develop capacity for management of hazardous wastes through the example of OPs and POPs pesticides. There is an estimated 200,000 tonnes of these materials known to be affecting the countries of the Former Soviet Union. Much of the previous work on disposal of waste from the countries has looked to export thousands of tonnes of pesticide stockpiles to high temperature incinerators operated commercially in EC member states. Whilst this strategy meets all international environmental compliance requirements it is prohibitively expensive. The vast distances involved for transport of waste from Central Asian Countries to facilities in Europe makes the option of finding a local solution appealing based on both risk management and cost considerations. Moreover, the huge volumes of hazardous waste generated in the region increases the need for local destruction hazardous waste capacity. Based on the national Legal and Technical assessment reports of the management of OPs that were produced in 2014, the “Road Map to Establishing Environmental Sound Management of POPs Pesticides and other Hazardous Waste in the EECCA region”, was published at the end of 2015.



The Disposal Study involved (see Terms of Reference in Annex 1 of the Working document) the following activities:

- Review of existing policy framework for the management and elimination (including inventory, assessment and transport) of POPs and OPs in line with the requirements of the respective EU Directives/Stockholm Convention;
- Conduct benchmarking of current POPs management (including (temporary) storage and destruction) against international best practice on BAT/BEP as set out by the Basel / Stockholm Convention working groups; highlight and describe best ongoing practices in the country;
- Review of existing and planned treatment options for POPs pesticides, OPs and related hazardous wastes, contaminated containers and contaminated land;
- Assess potential treatment facilities such as existing modern cement kilns, as well as planned and/or implemented pilot plant investigations which can develop in the next years to important market players;
- Assess the Russian-Belarus-Kazakhstan customs union and its implications for hazardous waste in and through Russia, including an assessment of 1) experiences over the last years practical implementation and of 2) alternative transport routes from the republics avoiding Russian territory. This was completed with due reference to the requirements of the Basel Convention;
- Assess access (by road, train or water) to treatment options and economics of transport of waste across the region to treatment facilities/alternative storage facilities; and,
- Review existing POPs data (OPs and PCBs) as far as available, and make efforts to collect, if possible, total hazardous waste stream data as set out in national profiles such as the UNITAR chemicals profile. This was collated for the country in order to assess the potential need for future investment per country/region. Provide estimates of the scale of investments (in terms of tonnes of POPs for disposal) and a rough estimation of their national distribution, tonnes of other OPs, distribution and quantities of contaminated land and contaminated containers;
- Assess status of recycling options for empty containers or already planned or ongoing programs and initiatives;
- Prepare country summary sheets on findings and identify the gaps in information;
- Compile report of study findings, including recommendations for filling the information gaps.

Expected Outputs based on the Terms of Reference:

- i. Summary report of existing policy framework for the elimination and management of POPs and OPs (12);
- ii. Analysis of barriers (technical, legal, economic) to the development of national and regional waste management capacity;
- iii. Report on opportunities for introduction of new technologies (thermal and non-thermal) e.g specific stockpiles (DDT and HCH waste);
- iv. Summary report of existing and potential treatment facilities, pilot plant facilities and empty container recycling facilities/initiatives (12 countries);
- v. Report on POPs waste in relation to total hazardous waste market and approaches for Investment plan for POPs destruction for the region;
- vi. Presentation of the draft report to the SC meeting in February 2015, finalization of the report incorporating received comments.



Part I of the study on the assessment of the legal framework for pesticides waste management is structured into five main sections:

I. General background information (Participation in international treaties)

The introduction includes general information about international cooperation and the state's participation in international treaties in the waste management field. The purpose of this section is to identify and clarify the state's position in the field of waste management at an international level.

II. Regulatory framework on waste management

The first chapter is about the political and legal framework that determines the policies or strategies at the national/federal level aimed at the prevention of waste generation and minimization of risks associated with wastes. Also this section provides a general overview of all national laws and regulations that govern hazardous waste management.

The second chapter on specific laws and regulations that govern waste management is focused on the determination of all laws regarding waste management across different sectors such as: import/export, landfill of waste, incineration, shipment of waste and general waste management.

The third chapter on "Institution(s) involved in waste management (focus on pesticides)" studies the relevant institutions that are involved in waste management, and their obligations and responsibilities, in order to identify the competent organizations that are responsible for waste management planning.

III. Analysis of existing national waste management legislation

This section is dedicated to an analysis of existing national waste management legislation that reflects the legal framework regarding the different activities of waste management such as:

- Register of pesticides waste and general classification of waste
- Licensing
- Trans-boundary movement, import/export rules
- Economic initiatives regarding transport
- Labelling requirements
- Packaging and containers
- Emergency procedures
- Disposal obligations
- Incineration
- Recording, monitoring, and reporting
- Offences and penalties
- Official controls and inspection
- Research and development

IV. Information supplementing legal analyses – from other experts includes three main topics:

- Pesticides manufacturing industry
- Management of OP Stocks – legal provisions regarding the conditions/methods for inventory/storage/disposal activities related to obsolete stocks.
- Methods used for treatment of pesticides wastes



V. Disposal, storage recycling and recovering facilities – practical information from other experts is composed of four topics:

- Disposal facilities
- Storage facilities
- Recycling facilities
- Recovery facilities

This section aims to identify the legal norms that apply to any disposal/storage/recycling/recovery facilities of pesticides waste.

Part II of the study, the national technical assessment (waste management report)

We realized that in order to fulfil the specific conditions on capacity building and benchmarking in each country, as specified in the terms of reference, an adequate analysis of the whole cycle on how to deal with OPs was required. This applies from the very beginning of the process, including who is responsible and who is involved in every step from finding the OPs to the final step of complete elimination. Having carefully worked this out, it was then necessary to design a clear and standardized structure that all national waste management consultants could simply follow in order to assess each step. It was also important to allow comparison between the assessments of each country and therefore it was decided to develop a standardized template for each report using a tabular format. For clarity and brevity the entries have been made as concise as possible.

The report has been built up in four main sections containing a large number of individual items that have been assessed, these being:

1. Benchmarking of current POPs management against international best practice

This section includes detailed information on each step of all actions necessary for elimination of OPs and POPs pesticides:

1. **Institutional arrangements** that include the responsibilities of the concerned organisations in the country.
2. **Inventory** with all national/regional inventory updates, data sources and existing inventories, first National Implementation Plan (NIP), recent NIP update

(specifically on new POPs), UNITAR Chemicals Profile, if existing, National Pesticides and/or POPs Inventory, FAO PSMS Inventory and other information.

3. **Environmental Assessment** consistent with national requirements, and also with International experience often implemented by the UN and other agencies. This includes the capacity of the government and private sector to develop such an Environmental Assessment, as well as the FAO stages in Environmental Assessment (EA) and Environmental Management Plans (EMP) experiences from the FAO Toolkit EMTK v 3.
4. **Inventory and Environmental Assessment Management** including vital questions on the inventory and the assessment, and if the organisational capacity is in place to complete the task. For example if the relevant organisation is in place and also operational, and if so whether all managers and coordinators are in place and operational, as well as if all field teams are established and operational. Also if all Inventory data management people are in place and operational, whether the National/Regional Inventory is being updated or not, a National Pesticides and/or POPs Inventory has been established, and if a contaminated sites register exists or not.
5. **Safeguarding** defining what has been implemented at national and international level such as under the FAO projects.
6. **Storage and transport** includes all items on packaging, containerization, storage and transportation with assessment of transport regulations, driver regulations, existence of storage regulations and available storage capacity, and Incident and accident reporting.
7. **Disposal**, assessing the national, international and FAO experience to date, including reporting on the technologies that have been selected, the process on transboundary transport under the Basel Convention and the national transport within the country, disposal capacities in the country, quality and standards applied (national/international), and current ownership of facilities.
8. **Containers** assessing the national and international experience, the FAO supported plans, amounts and type of empty containers and/or packaging materials, and the use of collection centres for empty containers.

2. General overview of POPs and other hazardous waste data

This section has been set up around the following six categories:

- A. Agricultural chemical waste that includes OP waste, POPs pesticides waste and new pesticides waste such as counterfeit pesticides, waste empty containers, and contaminated sites. These contaminated sites consist of burial sites or polygons (landfills) which often contain huge volumes of waste, storage sites, and sites which are still in use;
- B. Industrial chemicals,
- C. By-products,
- D. Petroleum wastes,
- E. Inorganic wastes,
- F. Health care high risk waste.

This effectively means the majority of hazardous waste has been listed. It has also to be mentioned that many of the required data are either preliminary or missing as many countries are in a first stage of such an assessment. Often quantities are listed but not verified in the field. The data also change rapidly as new inventory and assessment activities such as the current NIP updates are planned, so the data can be seen as a “snapshots” of the situation and are likely to be updated again in the near future.

3. Existing and planned treatment options for POPs pesticides, OPs and related hazardous wastes, and contaminated land

This section assesses existing and potential destruction plants, planned facilities and planned and/or implemented pilot plants, as well as existing and/or planned empty container (plastic and/or steel) recycling facilities or initiatives in the country. Data that need to be entered are: type of plant or technology, address/location, contact person (name/contact details) and a brief summary of the technical data, with treatment capacity, types hazardous waste permitted for treatment, permit information, and date of permit. However, it should be noted that there are only a very few plants available in most of the countries.

4. Transportation logistics

This section includes five main issues:

- 1. The assessment of various transport alternatives from main stockpile locations to the existing and or planned treatment facilities including cost estimates;
- 2. Assessment of possible storage networks: waste transfer stations e.g. at main railway stations or at existing landfills (polygons) or waste handling stations;
- 3. Assessment of transport capacity;
- 4. Reference to the requirements of the Basel Convention and previous experience of international export Implications of custom facilities; and
- 5. A brief description of the cases that should be reported.

Due to its clearly defined structure the report is very easy to update periodically, for the use of the national authorities and donors that are interested to support further actions on the elimination of OPs and POPs in the future.

The main report is available in both English and Russian, and all country reports will be accessible in the library of IHPA at <http://www.ihpa.info/resources/library/>

John Vijgen
Director
International HCH & Pesticides Association



Summary

for Republic of Belarus

It should be noted that the conclusions and recommendations in this report have been made on the basis of the information available in 2014. Additionally, this legal and technical assessment of the management of OPs report was followed by a second report: "Road Map for the Development of Hazardous Waste Management in the EECCA Countries". During the work on the last report the country's conclusions and recommendations have been intensively discussed with the national authorities and national consultant, leading to final summaries of legal and waste management issues, which are then specifically addressed for each country in the Road Map report.



Part I. Assessment of the legal framework for pesticides waste management in the Republic of Belarus

Major Findings

The Republic of Belarus ratified two main conventions in relation with waste management: Stockholm Convention on Persistent Organic Pollutants and Basel Convention on the Trans-boundary Movement of Hazardous Wastes and Their Disposal. At the moment, the Republic of Belarus has not ratified the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

There are no special agreements of Belarus with other countries. There are no codes of practice developed in cooperation with other countries. In the framework of the Customs Union there have been adopted legal acts establishing requirements to the movement of hazardous wastes.

There are no direct norms related to the pesticide wastes management in the Law of the Republic of Belarus of 20

July 2007 No. 271-3 "On Wastes Management". There are general requirements to hazardous wastes management, import, export and transit of hazardous wastes.

There are no special facilities for disposal (destruction of pesticide wastes) in Belarus. Pesticide wastes are mostly repackaged and taken for environmentally sound storage at a specialized storage facility or taken for disposal at specialized facilities abroad.

According to current legislation incineration of wastes is not allowed in Belarus. There is no separate document establishing requirements to hazardous wastes incineration (the requirements to incineration of hydrocarbon containing wastes are established; there are also requirements to setting the limits for the emission of pollutants to air during the wastes incineration processes).

There is no special plan or strategy on prevention of pesticides wastes generation in Belarus. The whole amount of stockpiled pesticides wastes in Belarus was generated in the times of the Soviet Union.

There is no special plan for the reduction of risks



associated with the pesticides wastes in Belarus. Whereas in the framework of the implementation of the provisions of the Stockholm Convention in Belarus the Edict of the President of the Republic of Belarus of 27 June, 2011 No .271 approves the National Plan of Implementation of the Obligations assumed by the Republic of Belarus under the provisions of the Stockholm Convention on Persistent Organic Pollutants in 2011-2015.

There is no special organization responsible for the coordination of the pesticide wastes management in Belarus. The Ministry of Natural Resources and Environment Protection is the National Coordination Body and competent authority for the implementation of the Basel Convention and the Stockholm Convention on POPs.

Belarusian Research Center "Ecology" of the Ministry of Natural Resources and Environment Protection is the center for practical implementation of these conventions.

The government bodies dealing with assessment of new pesticides or new chemicals are:

- Ministry of Health,
- Ministry of Agriculture and Food,
- Ministry of Natural Resources and Environment Protection,
- the Council on Pesticides and Fertilizers of the State Inspectorate on Seed-growing, Quarantine and Crop Protection



Part II. Technical assessment of the management of OPs and POPs waste and soil contamination in Belarus

- **Identify the gaps in information (for all 5 sections)**

The major gaps concern difference of classification of the types of wastes on Belarus and in European practice. Not all wastes types are recorded in the governmental statistics of available databases. The main example is the pesticides packaging wastes.

- **Analysis of barriers (technical, economic) to the development of national and regional waste management capacity**

There are no major barriers for the development of national and regional waste management capacity, vice versa there is political will to develop such capacity and even definite steps on allocation of budget financing to that (though evidently insufficient). There is also a well-developed infrastructure of the Chechersk complex in the Gomel region that could be used as an installation site for the disposal equipment.

- **Analysis of opportunities (technical, economic) for the development of national and regional waste management capacity**

There are favourable conditions for the development of a hazardous wastes disposal facility (both national and regional). As for the national, it was already described that the Government supports it both politically and financially. As for the regional facility – it should be considered from the point of view of the Customs Union regulations (Belarus, Kazakhstan and Russia have similar regulations on the movement of hazardous wastes, thus the movement of wastes between the members of the Union may be less problematic comparing to other neighbouring countries). At that current wastes movement regulation of the Customs Union has some limitations on the movement of some definite types of wastes (including POPs wastes) thus in case of a regional installation in any of the countries-members of the Customs Union the relevant amendments to regulations should be introduced. The recent Decision of the Collegium of Eurasian Economic Commission of April 21, 2015, No. 30 clarifies some of the issues relating to transit of such hazardous wastes as PCB making the process consistent with the Basel Convention procedures.

- **Other findings that need to be addressed**

None



Suggestions and recommendations for future activities

Based on the findings listed above, it is recommended for Belarus to:

- Adopt specific legislation in relation to waste incineration, also considering the application of cement kilns.
- Ratify the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
- Develop the national waste legislation regarding specifically pesticides waste management.
- Establish economic mechanisms for the minimization of hazardous waste, including pesticides waste
- Locate developments in destruction capacity by preference at the Cherchesk facility in the Gomel region as there is an existing well-developed infrastructure available .
- Make necessary modifications in the Criminal Code of Belarus, in order to establish responsibility (punishment) for illegal export, import or transit of hazardous wastes.



- Regarding the progress under Stockholm convention, the following specific recommendations can be made:
 - o Develop the cooperation with other countries in the field of pesticides waste management
 - o Implementation of policies or strategies at the national level (federal level) aimed at the prevention of pesticides waste generation and minimization of risks associated with pesticides waste
 - o Adopt direct norms related to the management of specific pesticide wastes (as packaging materials).
 - o Organize at the national level special trainings for persons involved in the management of pesticides wastes.



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