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MINISTRY OF NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION OF THE REPUBLIC OF BELARUS

BELARUS INTEGRATED SOLID WASTE MANAGEMENT PROJECT

Component III Persistent Organic Pollutant Stockpile Management

Environmental Impact Assessment

Minsk

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Final Report

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MAP OF LOCATION

Figure 1. Map of Europe

Figure 2. Administrative map of the Republic of Belarus

SHORT COUNTRY PROFILE

The Republic of Belarus is located almost in the center of Europe (Figure 1). The country borders the Russian Federation in the east (length of border is 990 km), Latvia (143 km) and Lithuania (462 km) in the north-west, Poland in the west (399 km) and Ukraine in the south (975 km).

The area of Belarus' territory is 207.6 thousand km^2. Agricultural lands account for 44% of the country's territory, forests – 38%, water bodies – 2%, other lands – 16%. Belarus is located in the watershed of the Baltic Sea and the Black Sea. The key river basins are transboundary. The Zapadnaya Dvina, Zapadny Bug and Nieman rivers belong to the Baltic Sea basin while Pripyat and Dnieper rivers belong to the Black Sea basin. Surface water resources in the average by water content year make up 58 km^3 per year. They are represented by rivers (21 thousand), lakes (11 thousand), water reservoirs (153) and ponds. Natural ground water resources are estimated at about 16 km^3 per year.

The accident at the Chernobyl nuclear power plant heavily affected the fifth of the country's territory; about 15% of agricultural lands and 22% of forests are located in the radioactive contamination zone.

The climate is moderate continental. The most important resources are potassium salt, peat, oil, timber, fresh and mineral waters.

The Republic of Belarus is a unitary democratic state. Governance is ensured by the President of the Republic of Belarus, the National Assembly and the Council of Ministers. The country is divided into six oblasts (Figure 2) and the capital – the city of Minsk. Each oblast is sub-divided into districts. There are 118 districts, 112 cities, 95 urban and 23863 rural settlements. According to the National Statistics Committee, as of 1 January 2009 Belarus' population totaled 9671.9 thousand people (47 per 1 km^2). Urban and rural population account for 74% and 26% respectively.

In the last ten years, Belarus has recorded a steady economic growth. In 2008 GDP was BYR128829 billion and made up 110 % versus 2007. GDP per capita was BYR 13308 thousand or US$ 6049.

GLOSSARY

Ground waters mean ground waters of the first from a surface permanent water-bearing horizon located at the first waterproof layer having free water surface.

Pesticide burial site means isolation of pesticides at the pesticide burial sites to prevent the harmful impacts of pesticides and products of their interaction and (or) decomposition on the environment, human health, state-owned, corporate and individually owned assets not allowing for their further use.

Local environmental monitoring means an environmental monitoring conducted by legal entities operating the sources of harmful environmental impact to ensure monitoring of the environment at the location of identified or potential sources of harmful environmental impact as well as monitoring of the impact produced by these sources on the environment in their surroundings.

Obsolete pesticides mean hazardous wastes in the form of pesticides that have expired or become obsolete under other circumstances which are banned or do not have quality certificates.

Pesticides mean plant pest-killers and chemicals used for pre-harvest removal of leaves (defoliants), dehydration of plant tissues (desiccants), pre-sowing treatment of seeds (protectants) and other similar chemicals [2].

Ground waters local monitoring station means a water point (drill hole, shaft well, pipe well and interception) equipped in a way allowing to conduct instrumental monitoring of ground waters.

Persistent organic pollutants (POPs) mean hazardous chemicals which are primary products and by-products of industrial production and possess toxic properties, resist degradation, bioaccumulate and are capable for long-range transboundary transportation.

ABBREVIATIONS

FSP	Full-size project
GEF	Global Environment Facility
GDP	Gross Domestic Product
EIA	Environmental Impact Assessment
EMEP	European Monitoring and Evaluation Programme
ESM	Environmentally Sound Management
EU	European Union
HSW	Household Solid Waste
ISW	Industrial Solid Waste
MAC	Maximum Allowable Concentration
MES	Ministry on Emergency Situations
MNREP	Ministry of Natural Resources and Environmental Protection
MoA	Ministry of Agriculture
MoH	Ministry of Health
NEMS	National Environmental Monitoring System
NGO	Non-Governmental Organization
OPs	Obsolete Pesticides
POPs	Persistent Organic Pollutants
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
WB	World Bank
HCH	Hexaclorcyclohexane
DDT	Dichlorodiphenyltricholroroethane
PCB	Polychlorinated biphenyls
PCDD/PCDF	Polychlorinated dibenzo-p-dioxins and dibenzofurans

EXECUTIVE SUMMARY

Background

The Republic of Belarus officially acceded to the Stockholm Convention in 2004 and assumed the respective implementation obligations. To implement effective measures on addressing the problem of POPs, the country has developed the National Implementation Plan in conformity with Article 7, which became a national program – «National Plan of the Republic of Belarus for the Implementation of its Obligations under the Stockholm Convention on Persistent Organic Pollutants for 2007-2010 and until 2028» approved by the Decree of the President of the Republic of Belarus.

Belarus is planning to implement the Integrated Solid Waste Management Project financed by the IBRD loan. The project includes the POPs Stockpile Management Component (the POPs Component), which will addresses the project development objective of assisting Belarus to manage present and future POPs stockpiles within the framework of the country's development of hazardous waste management capacity. This Component will be financed by the GEF with the World Bank as the Implementing Agency.

Project objective

The overall objective of the proposed project component is to strengthen national capacity to manage POPs stockpiles within the national hazardous waste management framework.

Project description

The POPs Component is structured into three activity based sub-components. The fourth sub-component covers Project Management costs.

Sub-Component III.1: POPs Stockpiles and Waste Risk Reduction

1. This sub-component is primarily focused on the physically securing known POPs stockpiles and wastes and POPs contaminated sites in order to contract for the environmentally sound disposal of readily accessible, priority POPs wastes such that the largest release risks are eliminated.
2. This sub-component covers the ongoing work initiated by the Government in 2002 and continued since that time largely using government funding during the project period and beyond. In general this relates to the process of systematically characterizing, re-packaging and providing for secure storage, both interim and long term, for the approximately 7,800 tons of identified obsolete pesticides (OPs) stockpiled in the country. These stockpiles are located

in a number of rural store houses and custom designed secure storage facilities, and in a number of burial sites (the Petrikov, Dribin, Gorodok, Postavy, Verkhnedvisnk, and Slonim obsolete pesticides burial sites). Repackaging along with required upgrading and clean up of OPs in rural storage houses is being completed in 2009 and recovery/repackaging of OPs from burial sites has been initiated with one site completed (Brest) and a second large site currently being done (Petrikov). It is recognized that the overall inventory of stockpiled OPs includes materials that contain POPs, specifically DDT. Of the total estimated 718 tons of DDT stockpiled, 60.1 tons are now in secure storage sites, primarily Cherchersk where it is secure but not readily accessible. The remaining 658 MT is in burial sites, with the largest amount (447.2 tons) at the Slonim site. The focus of the GEF related financing in this activity is to capture the accessible high concentration POPs pesticides from the Slonim burial site and to export them for environmentally sound disposal at qualified destruction facilities.

3. Some other activities under this sub-component are directed at ensuring secure storage of present PCB stockpiles and wastes at owner's sites, arranging for the collection and transport of priority stockpiles to a qualified disposal facility outside the country. Additionally it addresses the longer term planning for the phase out of remaining operational PCB containing equipment in compliance with Convention obligations and the associated management activities (long term storage, pre-treatment, and environmentally sound disposal) that need to be undertaken to support this. The practical part of the Activity covers the contracting of a qualified international waste management company and any required local support services to collect priority PCB stockpiles and wastes from holder's sites and transport to a qualified destruction facility for their environmentally sound disposal. The priority PCB stockpiles and wastes cover stockpiled liquid PCB oil, and decommissioned transformers and capacitors considered priorities in terms of risk and sensitivity of location. The biggest risk is posed by the biggest PCB waste temporary storage site in the Village of Minoity, Lida district. All in all it is estimated that the minimum amount disposed of will be 610 tons at the Minoity and other 6 highest priority locations. The work will be undertaken in accordance with the requirements set out in the Basel Convention Guidelines adopted by the Stockholm Convention, and the requirements of the Basel Convention applicable in Belarus as well as transit countries and the destination country. The activity will also provide for independent supervision and verification of removal and disposal by both local and international experts.

4. This sub-component will also comprise the work undertaken since 2006 and extending through the project period related to addressing POPs contaminated sites, recognizing that

this will likely involve a long term program. Its primary focus during the project period will be work undertaken in the identification, assessment and, as practical, the containment of priority POPs contaminated sites. Currently, 19 sites potentially contaminated with POPs have been identified. These are primarily where PCB contaminated equipment has been stored or PCBs have been used as well as the remaining OP burial sites (Dribin, Verkhnedvinsk, Postavy, and Gorodok). In general, these sites are relatively small in area but require assessment and prioritization. GEF support will be provided for assessment for several sites identified as being high priorities in terms of risk of contaminant release. This activity will also support TA activities related to: i) development of a national POPs contaminated sites inventory, something that can form the basis for a broader national contaminated sites registry supporting general waste and chemicals management into the future; ii) training of local experts in international site assessment practices, including risk assessment; and iii) establishment of national standards for such assessments and associated clean up requirements.

Sub-Component III.2: Technical Support Capacity Development

5. This sub-component addresses three specific sub-activities corresponding to priority areas where overarching technical capacity gaps were identified in the NIP and associated Action Plan. These include *Expanding POPs Monitoring and Analytical Capability,* developing and implementing a comprehensive information management capability for POPs that would fully meet Convention reporting and information exchange requirements, expansion of the preliminary NIP unintended release estimates and source inventory work into a functional source specific inventory and potential source registry.

Sub-Component IV.3: Institutional and Regulatory Strengthening

6. This sub-component covers project support for institutional and regulatory strengthening required to have a comprehensive legal and regulatory framework in place that would govern POPs. It will also support capacity development to ensure sustainable long term capability to maintain and enforce this framework, consistent with current and future Convention requirements, and more broadly emerging international practice related to sound chemicals management. It also includes public awareness and information exchange activities.

Sub-Component III.4: Project Management.

The POPs Stockpiles Management Component will address key environmental concerns related to POPs. In accordance with the World Bank's guidelines and procedures OP/BP 4.01 on

«*Environmental Assessment*» the proposed project was assigned an environmental Category «A»1, which means that a full Environmental Impact Assessment (EIA) report shall be an integral part of the project proposal. This is also consistent with the Belarusian legislation, regulations and practices requiring that all projects that may pose environmental impacts shall include EIA.

Data on current POPs and PCBs stockpiles

The inventory performed as part of NIP has identified obsolete pesticides stockpiles of 6.558 tons including 718 tons of DTT in Belarus. Almost half of the obsolete pesticides (OP) are located in 6 burial sites (the Petrikov, Slonim, Dribin, Gorodok, Postavy, and Verkhnedvinsk) at known locations within the country. The Slonim obsolete pesticide burial site contains up to 892 tons of pesticides including 447.2 tons of DDT (over 62% of total DDT stockpiles in Belarus), which makes this site the major burial of POPs pesticides in the country. The previous assessments of the burial site undertaken in the period 1999-2007 by Republican Research Technical Center "Ecomir" (1999), Belarusian Research Center "Ecology" (2004, 2005, 2006), Belarusian Research Geological Prospecting Institute (2007), and Central Research Institute of Complex Use of Water Resources identified migration of pesticides into ground waters. At present this pesticide migration is insignificant but there is a considerable risk of increased pesticide penetration into ground waters if the plume is not contained.

Identified PCB amounts are estimated at about 1600 tons of which 99.5% is contained in electrical equipment. The PCB containing equipment storage site in the Minoity village (the Lida district) accommodates containers with 3000 PCB containing capacitors. The total (gross) weight of containers is approximately 7 tons. Soils around concrete slabs where containers are located are contaminated. The level of contamination is estimated at 70 g/kg. The findings of PCB inventory suggest that it is the highest contamination level in Belarus.

Given the above, elimination of these POPs storage sites under the project is prioritized.

The data on the concentration of pesticides in the ambient air are not available in Belarus. The most contaminated are the pesticide burial sites and PCB containing equipment storage sites. In the impact zone of the Slonim obsolete pesticide burial site the maximum allowable concentration (MAC) for DDT is exceeded by 9.5 times. The situation at other OP burial sites is similar. PCB concentration in samples of soils of agricultural lands adjacent to Minoity and similar minor PCB storage sites like Mir and Korelichi power substations ranges from 200 to 1200 µg/kg. There is no evidence suggesting that MAC for POPs in surface waters has ever been exceeded.

Legislative and institutional framework for the management of POPs

The Republic of Belarus has adopted and enforced a number of international conventions, Codes and Laws, national and sectoral programs, concept documents and strategies defining the principles and priorities of the environmental protection policy including those relating to POPs management.

The Ministry of Natural Resources and Environmental Protection (MNREP) is responsible for the implementation of the obligations under the Stockholm Convention. The Coordinating Council for the Stockholm Convention Implementation has been established under MNREP to coordinate respective efforts of the government authorities.

Project Investments' Alternatives

At present Belarus does not have a sufficient capacity allowing, in the immediate future, to reduce POPs stockpiles and to mitigate environmental contamination risks and harmful impact of POPs on human health. The main limitations to addressing the issue include lack of technology and installations for OPs and PCBs destruction, insufficient capacity to secure environmentally sound long-term storage of POPs as well as technical capacity limitations to eliminating POPs. Therefore, "not having a project" scenario will entail deterioration of the environment around POPs storage sites with ground waters being the most affected. **This alternative is unacceptable**. Consequently, four options are considered in the assessment of the regional alternatives:

1. Cancellation of pesticide repackaging and removal of pesticides and containers with PCBs; improvement of POPs burial and storage sites for long-term storage. This option is unacceptable as it does not allow to considerably reduce the risk of environmental contamination.

2. Destruction of OPs and PCB containing equipment at the burial site using mobile facilities for POPs destruction. This option was rejected because using a modern mobile incinerator for POPs destruction requires considerable preparatory efforts including high costs and possible public opposition for selection of a plant, its transportation to the burial site, arrangement of additional structures, agreeing the procedure of works with the local authorities and lack of experimental data on environmental safety of such works. Also, the incinerators burning POPs (pesticides and PCBs) and other related waste are associated with the spread of undestroyed and newly formed POPs (e.g., dioxins and furans) into the environment, contaminating air, soil, vegetation, an human population

3. **Repackaging and transportation of the obsolete pesticides and PCB containing materials to an EU country for final destruction through incineration.** This option is a **simple project option** ensuring the best environmental protection effect and involving minimum

risk of environmental contamination. The benefit of this alternative is that POPs will be destroyed at a registered well-monitored facility that meets EU standards. Some temporary environmental impacts still exist with this selected project option and are mainly related to possible POPs leakages and potential contamination of air, soil and water during POPs burial openings, excavations and transportation (e.g. accidents, spillages). The Environmental Management Plan prepared as part of the EIA report for this option presents comprehensive prevention and mitigation measures for such possible impacts, including implementation of occupational, health safety and emergency preparedness requirements to be followed during project activities.

4. Repackaging and landfill disposal at the Chechersk Facility. In terms of environmental impact this option is equal to Option 3 but is unacceptable due to organizational constraints and limited capacity of the Chechersk Facility.

Environmental Impact Assessment

Implementation of the key practical project activities may involve short-term local environmental impacts associated with opening of OP burial site, excavation and repackaging of obsolete pesticides and transportation of containers with OPs and PCB containing equipment. The EIA has found that the proposed project will not have significant adverse environmental impacts that may take place in areas broader than individual project sites. All impacts are primarily site specific and can be contained within the existing POPs pesticide and PCB site boundaries, and none of them are irreversible.

The main potential adverse impacts are related to possible POPs pesticide leakages during excavation and repackaging at the Slonim OP burial site; possible air pollution, soil and water contamination during the Slonim OP burial opening and OP excavation, temporary storage prior to export shipment, remaining environmental pollution and contamination of former POPs sites without timely clean-up and rehabilitation.

The EIA has found out that for all potential adverse environmental impacts from project activities there are prevention, minimization and mitigation measures outlined in various Belarusian regulatory procedures and requirements which have been reflected in the EMP.

The analysis of the Beneficiary's capacity to fully implement the EMP has shown that there are sufficient resources, institutional, regulatory, technical and personnel capacity of the system of the Ministry of Natural Resources and Environment Protection, Ministry of Emergency Situations, Ministry of Public Health, local stakeholders and potential contractors not only to control the project component implementation but also take necessary action in case of the described potential environmental impacts.

Disclosure process and public consultations

In accordance with the national legislation and WB requirements, local communities and local authorities of the project areas were engaged in preparation and implementation of the project activities during public meetings to broadly inform them about the project activities and possible impacts.

Two rounds of public consultations in the key project areas (Slonim and Lida) were held during elaboration of this EIA report. The announcements of public consultations were published in the local newspapers and in the Internet. EIA data have been posted on the web-sites of the Slonim and the Lida District Executive Committees and published in local media (see Annex 15). Public consultations held in Lida and Slonim demonstrated high level of interest of local households and local authorities in addressing the problem of POPs in these communities. Web-site www.soz.minpriroda.by (MNREP official website covering the Stockholm Convention implementation progress in Belarus) will be used during project implementation to disseminate information about the project activities and their effectiveness.

Environmental Management Plan

To reduce environmental and public health risks related to project implementation activities, the EIA incorporates an Environmental Management Plan including a Risk Mitigation Plan and a Monitoring Plan. The activities summarized in the Risk Mitigation Plan are based on the current regulatory framework for POPs management. Environmental and health impacts may temporarily emerge at the sites where works are performed. To prevent or to mitigate possible effects all necessary measures are envisaged including use of polyethylene film to protect soil from potential contamination with pesticides or PCBs, installation of sheds to protect pesticide and contaminated soil excavation places from precipitation and heat, trenches and arrangement of an isolated network of storm collectors, repackaging of all contaminated waste and supplies, use of protective clothes and face masks for workers, etc. A Monitoring Plan is an integral part of the Environmental Management Plan which establishes a procedure of monitoring of all affected environmental media. Environmental protection measures and their monitoring specified in the Plan will be obligatory included in the work contracts and will follow performance regulations.

Conclusion

Implementation of this project will help Belarus to enhance its technical, institutional and expert capacity for current and future POPs stockpiles management. This would allow the country to undertake further measures aimed at elimination of health and environmental risks associated with POPs stockpiles and to fulfill its obligations under the Stockholm Convention.

1. INTRODUCTION

Harmful impact of persistent organic pollutants (POPs) on human health and the environment is a global concern. Belarus pays close attention to this problem. The Republic of Belarus officially acceded to the Stockholm Convention in 2004 and assumed the respective implementation obligations. To implement effective measures on addressing the problem of POPs, the country developed the National Plan of the Republic of Belarus for the Implementation of its Obligations under the Stockholm Convention on Persistent Organic Pollutants for 2007-2010 and until 2028 (NIP) approved by the Presidential Decree N 270 dated 12 June 2007. NIP strategic objective is to protect human health and the environment from the impact of POPs. In line with the strategic objective Belarus has developed and implements interventions intended to ensure environmentally sound storage and disposal of POPs waste.

Implementation of NIP interventions on reduction and further elimination of harmful health and environmental impacts of POPs requires considerable financial resources and skilled professionals having relevant experience and knowledge in the field of POPs disposal and environmental monitoring. Belarus is a transition economy and there are certain problems with allocation of considerable amount of budget resources to address the issue. Besides, there are some other constraints related to insufficient experience in POPs identification, monitoring, repackaging and destruction. International technical cooperation can make a valuable contribution in addressing these concerns. Mitigation of impact and elimination of POPs is one of the priorities of the Global Environment Facility (GEF). To address these challenges Belarus intends to implement a full-scale GEF/World Bank POPs Stockpile Management and Technical/Institutional Capacity Upgrading Project as part of an overall Integrated Solid Waste Management Project (ISWMP). The POPs Stockpiles Management Component of ISWMP will be implemented by the Ministry of Natural Resources and Environmental Protection (MNREP) and funded by GEF and World Bank acting as the Implementing Agency.

The project is aimed at addressing problems causing considerable adverse effect on the environment. In accordance with the World Bank's guidelines and procedures, the proposed project is therefore assigned an environmental Category «A»1 and an Environmental Impact Assessment (EIA) report shall be an integral part of the project proposal. This is also in line with the Belarusian legislation, regulations and practices requiring that all projects which may create significant environmental impacts shall include EIA. Significance of environmental impact assessment is determined by the provisions of the international conventions and the national legislation and also by the fact that EIA procedure allows to engage all stakeholders including local authorities and NGOs in preparation and implementation of the project activities.

Therefore, EIA, in addition to selection of the most environmentally sound solutions, ensures project ownership and commitment at the local level thus allowing to achieve the project objectives at the lowest cost.

1.1 EIA scope and objectives

The project activities are expected to considerably reduce the risk of environmental contamination by POPs both at a local and global level. Given these considerations and the fact that the World Bank will be an implementing agency of GEF full-scale project, EIA will be an integral part of GEF project for POPs stockpile management in Belarus. EIA main objectives are to determine the environmental baseline condition (before the start of the project activities), to assess the likely impact of the proposed interventions on the environment and public health, to develop an Environmental Management Plan on elimination or considerable reduction of the risk of possible harmful environmental and health impacts during project implementation and to consult stakeholders on the proposed project interventions.

The project design provides for both nationwide and regional interventions. Therefore, the general assessment of the environmental condition in Belarus and a detailed regional assessment (around the Slonim obsolete pesticide burial site and the PCB storage site in the Minoity village) are required.

1.2 Background

Obsolete pesticide burial sites

Significant amounts of obsolete or banned pesticides including POPs pesticides have been accumulated on Belarus' territory. They were used by agricultural farms to increase yields. After the data about harmful impacts of POPs on human health and the environment had become available, the use of POPs was banned. Pesticides stored by agricultural farms outdoors or in improper premises were collected and deposited to 7 centralized burial sites in the 70-80s in the previous century. About a half of the total amount of obsolete pesticides is stockpiled in six burial sites (Annex 7) including three burial sites in the Vitebsk oblast (the Verkhnedvinsk (454.5 tons), the Postavy (99 tons) and the Gorodok (411.4 tons)), one burial site in the Gomel oblast (the Petrikov (1423.3 tons)), one – in the Grodno oblast (the Slonim (892 tons)) and one in the Mogilev oblast (the Dribin (353.7 tons)). Within NIP framework, the seventh site at the Brest obsolete pesticide burial site located in the Gershony village (41.5 tons) was eliminated in 2007. The recovered obsolete pesticides (containing no POPs pesticides) were repackaged and transferred to secure storage at the Hazardous Waste Management Facility in the Gomel Oblast (the Chechersk Facility).

Inventory of the obsolete pesticides stockpiled in warehouses

About 7,782.7 tons of obsolete pesticides are currently stored in warehouses and burial sites in Belarus including 718 tons of DDT which is included in the list of the Stockholm Convention. About 4,012.6 tons of unidentified OPs mixtures which may potentially contain POPs are stockpiled in warehouses and the burial sites.

POPs pesticides and POPs unidentified mixtures are stockpiled mainly in warehouses of various agricultural enterprises including the oblast and district enterprises of the «Belagroservice» Republican Amalgamation, collective farms, and hothouse facilities, agricultural and industrial cooperatives. Stockpiles of ditrichlorodiphenylclorethane (DDT) are stored in the warehouses in the Vitebsk and the Grodno oblasts, unidentified mixtures – in the Vitebsk and the Minsk oblasts, unknown mixtures – in the Vitebsk, the Minsk and the Grodno oblasts (Annex 12).

The analysis of the information requested by MNREP and the data collected during surveys of warehouses with stockpiled obsolete pesticides (carried out in the period 2004-2008) suggests that at present the condition of the storage premises is mainly satisfactory: 92% of the examined warehouses are brick buildings with concrete floors and durable doors with locks; every warehouse is supervised by an administrative official of an agricultural enterprise; most of the warehouses have security guard. Repackaging of the obsolete pesticides stockpiled in warehouses is completed. Repackaging works were funded from the proceeds of the National Environmental Protection Fund.

Inventory of PCB containing equipment, materials and waste

As of 25 June 2009 (based on 2009 updates) Belarus has 54.626 thousand power capacitors containing 797.1 tons of PCBs and weighing about 2.4 thousand tons, 318 power transformers containing 728.9 tons of PCBs and weighing about 2.2 thousand tons. The inventory has identified 32 tons of liquid dielectrics containing PCBs (sovtol-10, klophen) which are stored in 30 containers at the sites of enterprises. The largest PCB storage sites are monitored on a regular basis (Annex 8).

The total amount of PCBs in electric equipment and liquids is estimated at 1566.7 tons.

There are also 31.442 thousand small-sized capacitors containing an estimated 4 tons of PCBs.

In addition, there are 33.2 tons of PCB-contaminated soils.

Major part of PCB containing power capacitors is concentrated at the enterprises of the Ministry of Industry (22.2 thousand), Ministry of Energy (8.9 thousand) and the Belneftekhim Concern (5.9 thousand). The Ministry of Industry owns about 42 % of PCB containing capacitors, Ministry of Energy – 16 % and the Belneftekhim Concern – 11 %.

PCB-containing transformers and capacitors are unevenly distributed across Belarus. Amounts of PCBs in capacitors and transformers by Oblasts are shown in Table 1.

Table 1 Availability of PCB containing equipment in Belarus by Oblasts

Oblast	Number of capacitors	Amount of PCBs, tons	Number of transformers	Amount of PCBs, tons
The Brest oblast	7730	112.8	13	25.5
The Vitebsk oblast	4766	69.5	32	40.2
The Gomel oblast	13076	190.8	31	54.9
The Grodno oblast	9154	133.6	3	1.2
The city of Minsk	8013	116.9	47	173.9
The Minsk Oblast	5803	84.7	66	140.5
The Mogilev oblast	6084	88.8	126	297.5
Total	**54626**	**797.1**	**318**	**733.7**

Transformers represent a prevailing type of PCB containing equipment in the Minsk oblast (including the city of Minsk), the Mogilev and the Vitebsk oblasts. They account for 77% of the total amount of PCBs in the Mogilev oblast. Most of PCBs in the Gomel, the Brest and the Grodno oblasts are contained in capacitors. In the Grodno oblast capacitors account for 99% of the total amount of PCBs.

By now 37 % of capacitors and 13 % of transformers have been decommissioned.

135 of decommissioned transformers (41) are stored mainly at the enterprises of the Belneftekhim Concern.

The largest number of PCB containing capacitors is recorded in the Minsk oblast including the city of Minsk (26%) followed by the Gomel oblast (23)%. The lowest number of PCB containing capacitors is recorded in the Vitebsk oblast – 9% of the total amount of PCBs.

The Grodno oblast takes the lead by the number of decommissioned capacitors, followed by the Minsk oblast including the city of Minsk (Table 2). There are no decommissioned transformers in the Grodno oblast.

Table 2 Decommissioned PCB containing capacitors in Belarus by Oblasts

Oblast	Number of decommissioned capacitors	Amount of PCBs, tons
The Brest oblast	2280	33.3
The Vitebsk oblast	1797	26.2
The Gomel oblast	5291	77.2
The Grodno oblast	5115	74.6
The city of Minsk	2361	34.4
The Minsk Oblast	2420	35.3
The Mogilev oblast	1167	17.0
Total	**20431**	**298.0**

Most decommissioned capacitors are owned by enterprises of the Ministry of Industry and the Ministry of Energy: 6.8 thousand and 5.4 thousand respectively. About 2.6 thousand

capacitors are located at the Belneftekhim Concern enterprises (petrol stations, petroleum products storages, oil refineries, chemical plants).

There are three types of storage sites for decommissioned PCB containing equipment: outdoor sites, sites with a shed and indoor premises. The inventory findings (year) suggest that about 39% of decommissioned equipment is stored at outdoor sites and 61% is stored in indoor premises and under sheds.

In terms of the risk of PCBs releases into the environment, the outdoor sites pose the largest threat. Being continuously affected by external factors (precipitation, air temperature fluctuations), shells of capacitors and transformers are deteriorating leading to PCBs leakages (capacitor cells are particularly susceptible to rapid corrosion).

Inventory of POPs unintentional releases

The inventory has included an estimation of unintended releases of POPs (PCDD/PCDF, HCB and PCB) in Belarus. The year of 2004 has been considered as the baseline year.

Dioxin and furan releases to air, water, waste and products have been estimated. The data suggest that in 2004 annual dioxin/furan releases totaled 141.8 g TEQ including releases to air - 36.6 g TEQ, to water - 0.46, to land - 1.36, in products - 0.05 and in residues - 103.3 g TEQ.

1.2 EIA methodology

The present EIA report has been prepared in accordance with the Terms of Reference reviewed by the WB (Annex 14). The MNREP Instruction on Environmental Impact Assessment is largely consistent with the provisions of the World Bank's Guidelines. The requirements to EIA report specified in the national legislation are summarized in Section 3.2.

Forecast and assessment of likely positive/negative impacts of the proposed project activities are based on the assessment of reduction/increase of the risk of environmental media contamination and impact on human health. The following risk assessment criteria are used:

- proximity of POPs storage site to a residential settlement;
- technical condition of POPs storage site;
- degree of ground water protection in the locations of POPs storage sites;
- availability of organizations specializing in POPs repackaging;
- availability of certified analytical laboratories for conducting environmental monitoring during implementation of the project activities;
- availability of regulatory and technical frameworks allowing to implement the proposed design options,
- degree of safety during potential transportation of POPs to burial or destruction sites.

The information described in this EIA report was reviewed and analyzed based on site data collected during previous surveys and studies developed in the last five years (e.g., please note references).

Based on the above criteria, environmental risks are rated based on a five-point scale.

Table 3 Risk assessment scale

Risk rating	Points
Insignificant	1
Low	2
Considerable	3
High	4
Unacceptable	5

Points are calculated for each design option and the option with the lowest number of points is thus identified. Design options with unacceptable risk rating for at least one criterion are considered not-acceptable.

1.3 Explanatory note on the project option choice

The findings of the POPs inventory in Belarus highlight the priority of the elimination of the above referred POPs storage "hotspots" under the project. Preparation of the project proposal has involved environmental impact assessment including consideration of alternative options of reducing environmental impact of these hotspots. Appropriateness of the alternative options has been assessed based on the analysis of reduction (or increase) of environmental contamination risks.

The analysis of the condition of the environment around the Slonim burial site for all options suggests that given the aggregate risks the option of repackaging and transshipment of the obsolete pesticides and containers with PCBs capacitors to an EU country for final destruction through incineration is the most appropriate. Public consultations held in project areas (Lida and Slonim) have demonstrated that local authorities and households give an utmost support to this option.

2. PROJECT DESCRIPTION

2.1 Project objectives

The overall objective of this proposed investment is to strengthen national capacity to manage POPs stockpiles within the national hazardous waste management framework.

These following priority activities are aimed at the fulfillment of the overall objective:

i) provide for the effective capture and secure storage of stockpiles of POPs pesticides and PCBs now identified in NIP and those anticipated in the future to minimize primary and indirect health and environment risks; to capture the accessible high concentration POPs pesticides from the Slonim burial site and PCBs and to export them for environmentally sound disposal at qualified destruction facilities.

ii) undertake site assessment and clean-up feasibility studies and, in critical situations, initiate containment of POPs contaminated sites;

iii) upgrade national technical capacity for analysis and monitoring, data management and reporting, and undertake the planning and detailed program development to address longer term priorities including unintended release reduction and elimination and phasing out of PCBs;

iv) strengthen institutional and regulatory capacity for POPs management to implement obligations under the Stockholm Convention.

The project activities will be nationwide. However, the most significant project interventions will concentrate at two sites:

1. The Slonim obsolete pesticide burial site (the Grodno oblast).

2. PCB containing equipment storage site in the Minoity village (the Lida district of the Grodno oblast).

2.2 Project scope and benefits

The global benefit of the project is to enhance Belarus, which is a transition economy, to the level of developed countries in terms of progress and capacity for addressing the problem of POPs management. The expected direct benefits of the proposed project include:

- Broader identification of the POPs content in the inventory of mixed OPs; investment in export suitable containers for use where segregation of POPs may be appropriate, site screening capacity building, and supporting laboratory based analytical services;
- Elimination of the Slonim obsolete pesticide burial site, repackaging and ESM destruction of 892 tons of OPs including 447 tons of DDT.
- Secure storage of PCBs and dismantled PCB containing equipment at specially designated sites.

- Secure collection and disposal of the priority PCB stockpiles and wastes ranged in terms of risk and sensitivity of location. It is estimated that the minimum amount disposed of will be 610 tons and a target disposal amount is 816 tons.
- Preparation of comprehensive PCB phase out and management plans;
- Development of a national POPs contaminated sites inventory, to form the basis for a broader national contaminated sites registry supporting general waste and chemicals management into the future; training of local experts in international site assessment practices, including risk assessment; and establishment of national standards for such assessments and associated clean up requirements;
- Continuation of the public awareness program initiated during NIP preparation; Developing and implementing a comprehensive information management capability for POPs that would fully meet Convention reporting and information exchange requirements;
- Expansion of the preliminary NIP unintended release estimates and source inventory work into a functional source specific inventory and potential source registry. identification of pollution abatement and technology change options for critical sources;
- Adoption of internationally benchmarked regulatory standards for storage, handling, treatment, disposal and site cleanup;.

The most of the practical project activities will be implemented in the Slonim district and Lida district of the Grodno region (oblast). The scope of the project will cover all POPs management aspects including institutional framework development, elaboration and adoption of POPs management technical standards consistent with international best practices, technical and expert capacity strengthening, introduction and development of POPs monitoring system, development of ITs for establishment of POPs registry, assessment of POPs contaminated sites, capture of non-identified pesticides and implementation of practical interventions at the Slonim obsolete pesticide burial site in the Grodno oblast and the PCB storage site in Minoity village (the Lida district of the Grodno oblast).

2.3 Project components

The project will include four components with relevant expected outcomes as follows:

Component 1. POPs Stockpiles and Waste Risk Reduction

Key activities

Description	**Expected outcomes**
1.1 Obsolete Pesticide Stockpiles	• completing repackaging activities at any additional rural storehouses where they may be identified; • expansion of the understanding of POPs content in the inventory of mixed OPs;

	• site screening capacity improvement; • recovery and re-packaging of POPs from the Slonim burial site; • collection and transportation of the priority POPs pesticides from the Slonim site, taking into concideration a 10 % contingency – 1000 tons all in all.
1.2 PCB Stockpile Management and Phase Out	• An awareness and training program for holders of equipment and stockpiles; • Upgrading storage practices associated with decommissioned PCB equipment at holder's sites in terms of packaging and security of PCB storage sites; • Disposal of priority PCBs stockpiles (minimum amount disposed of will be 610 tons and a target disposal amount will be 816 tons); • Development and initial implementation of a National PCB Phase out Plan for the replacement of all PCB containing equipment
1.3 Priority POPs Contaminated Sites	• a national POPs contaminated sites inventory, something that can form the basis for a broader national contaminated sites registry supporting general waste and chemicals management into the future; • training of local experts in international site assessment practices, including risk assessment; • establishment of national standards for such assessments and associated clean up requirements

Component 2. Technical Support Capacity Development

Key activities

Description	**Expected outcomes**
2.1 Expanding POPs Monitoring and Analytical Capability	• Expanded POPs environmental and health analytical capacity; • Staff trained in international monitoring and analytical practices
2.2 Data Registry and Information Management System	• Comprehensive information management capability for POPs that would fully meet Convention reporting and information exchange requirements.
2.3 Unintended POPs Release Reduction	• initial source specific inventory; • identification of pollution abatement and technology change options.

Component 3. Institutional and Regulatory Strengthening

Key activities

Description	**Expected Outcomes**
3.1 Legislative and Regulatory Development	• regualtions on import/export controls related to POPs wastes and POPs containing equipment, as well as the unauthorized use and disposal of POPs; • a number of internationally benchmarked regulatory standards for storage, handling, treatment, disposal and site cleanup

3.2 Public Awareness and Information Exchange Activities	• continuation of the public awareness program initiated during NIP preparation

Component 4. Project management

Description	**Expected Outcomes**
Organizational activities of Project Management Unit	Full achievement of the expected outcomes

2.4 Project financing, coordination and management

The estimated cost of the POPs component is US$26.7 million of which $5.5 million will be financed by a GEF Grant, and $20.6 million is financed from government and enterprise resources and the remainder from international sources. The project will be undertaken in close coordination with other GEF and bi-lateral programs in the region, specifically the similar World Bank stockpile elimination and capacity building project in Moldova, and the GEF/FAO regional capacity building project on obsolete pesticides, GEF/UNDP small grants program related to local management of obsolete pesticides, a pending Swedish EPA/SIDA project on contaminated sites management and a NATO technology development program on destruction technology development.

The project implementation arrangements will be a continuation of those employed by the MNREP and involving other key stakeholder agencies and institutions, particularly the Ministry of Health (MoH), Ministry of Industry, the National Academy of Sciences and others.

3. INSTITUTIONAL, LEGAL AND ADMINISTRATIVE FRAMEWORK

3.1 Institutional, legislative and administrative framework for the management of POPs

Belarus has adopted and enforced a number of international conventions, Codes and Laws of the Republic of Belarus, national and sectoral programs, concept papers and strategies defining the principles and priorities of the government environmental protection policy including POPs management.

In accordance with the Water Code (adopted in 1998), the Forest Code (adopted in 2000) and the Mineral Resources Code (adopted in 1997), natural resource users are obliged to protect natural assets from chemical pollution.

About 8 % of the territory of the Republic of Belarus is protected areas of various significance. Certain national and international criteria are used for designation of protected areas, which is regulated by the Law of the Republic of Belarus On Specially Protected Areas (1994, latest amendments – 2007). An area can be designated as a protected area (for biosphere reserves, national parks and reserves) if it meets at least 3 national area and at least 2 international criteria. The Project territories do not fall under none of the criteria and are not classified as Protected Areas.

The Republic of Belarus officially acceded to the Stockholm Convention in February 2004 and assumed the respective implementation commitments. Currently, Belarus undertakes active efforts aimed at implementation of the Convention requirements. To efficiently address the problem of POPs management, the country developed the National Plan of the Republic of Belarus for the Implementation of its Obligations under the Stockholm Convention on Persistent Organic Pollutants for 2007-2010 and until 2028 (NIP) approved by the Presidential Decree N 271 dated 12 June 2007. Other important Conventions to which Belarus is a party include the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Helsinki Convention), the Basel Convention and the Aarhus Conventions.

Legal framework for the implementation of these Conventions comprises the following national laws:

- On Environmental Protection (passed in 1992);
- On State Ecological Expert Examination;
- On Waste Management (passed in 2007);
- On Hazardous Cargo Transportation (passed in 2001);

- On Ambient Air Protection (passed in 1997);

- On Sanitary and Epidemiological Safety of Population (passed in 1993);

- On Drinking Water Supply (passed in 1999);

- On Quality and Safety of Raw Food and Food Products for Human Health (passed in 2003).

Most practical aspects of POPs management are reflected in the legal and technical regulations. The most important regulations are the following:

Methodological guidelines on inventory of POPs obsolete and banned pesticides (endorsed by MNREP in 2005)

Methodological guidelines on emergency response related to storage, handling and transportation of pesticides used in the agricultural sector (endorsed by the Ministry of Emergency Situations in 2008);

Regulations on Obsolete Pesticides Management (endorsed by MNREP in 2006);

Regulations on PCB Management (endorsed by MNREP in 2008).

POPs are managed within the framework of natural resource and environmental management in Belarus. The Council of Ministers of the Republic of Belarus pursues a single government policy in the field of environmental protection, defines environmental protection and improvement measures and environmental monitoring procedures.

POPs management functions are performed by MNREP, MoH, MES, Ministry of Agriculture (MoA), State Customs Committee, State Committee on Standards and other government agencies within their area of responsibility. MNREP is a government ministry responsible for the implementation of obligations under the Stockholm Convention. MNREP has established an Interagency Committee for the Stockholm Convention responsible for coordination of efforts of the government agencies on the implementation of the Convention. The main tasks of the Council include development of recommendations on improvement of the national POPs management policies, facilitation of information exchange between the stakeholder government agencies, non-governmental and international organizations and informing the public about the problem of POPs. At the territorial level the main environmental protection activities are implemented and coordinated by the Regional and Minsk Municipal Committees of Natural Resources and Environmental Protection; at the district level – by Municipal and District Inspections of Natural Resources and Environmental Protection.

3.2 National requirements to the content of EIA

Control over compliance with the national environmental protection legislation during implementation of major project activities is based on the following regulatory framework:

1. The Espoo Convention on Environmental Impact Assessment in a Transboundary Context (Belarus acceded to the Espoo Convention in 2005).

2. Law of the Republic of Belarus «On Environmental Protection» passed on 26 November 1992 and amended on 17 July 2002.

3**.** Law of the Republic of Belarus «On State Ecological Expert Examination» passed on 18 June 1993 and amended on 14 July 2000.

4. Law «On Meetings, Rallies, Demonstrations and Picketing» passed on 30 December 1997 and amended on 7 August 2003.

5. Instruction on the State Environmental Expert Examination Procedures in the Republic of Belarus (MNREP Resolution dated 11 May 2001).

6. Instruction on the procedure of environmental impact assessment of intended economic and other activity in the Republic of Belarus. (MNREP Resolution dated 17 June 2005).

7. List of economic activities and sites subject to compulsory EIA of intended economic and other activity (MNREP Resolution dated 17 June 2005).

8. Methodological Guidelines on the composition of materials and main requirements for justification of locating the sites of economic and other activity in Belarus. (MNREP Methodological Guidelines dated 31 March 1993).

9. Construction Norms and Rules 1.03.02-96 «Content and procedure of drafting the «Environmental protection» section in design documents».

The main requirements to the content of EIA are summarized in the Instruction on the procedure of environmental impact assessment of intended economic and other activity in the Republic of Belarus.

In accordance with the referred Instruction, EIA shall involve:

- a Client, a Service Provider and other legal entities and individuals interested in implementation of the intended activities the public; the designated government environmental protection and natural resource management authorities and their territorial departments as well as other government and regional authorities responsible for issuing permits in accordance with the legislation.

The Client (with regard to the present project the Client is the Ministry of Natural Resources and Environmental Protection) shall cover EIA costs, draft the Terms of Reference for EIA, ensure, if needed, public participation, and obtain no objections from the government and control authorities.

The Service Provider, upon instruction of a Client, carries out EIA.

EIA shall be carried out together with elaboration of design documents and include the following stages:

1. Elaboration of a Statement of Intent and Terms of Reference for EIA.
2. Identification of types and scope of environmental impact and anticipated consequences.
3. Elaboration of a Statement about potential environmental impacts.
4. Public consultations.
5. Elaboration and submission of EIA report and other materials required for the state ecological expert examination.

In accordance with the Instruction, EIA materials shall include the following:

- general overview of the intended activity, description of the main project parameters (activity types) and land use requirements at construction and operation stages, key specifications of technological processes; consistency of the intended activity with the endorsed scheme or plan of an enterprise or sector development, if available, and the current utilities networks (heat/gas/water supply, sanitation, drainage, general plans and etc) in the project area; social and economic aspects of the intended economic and other activity (new jobs, personnel qualification upgrading, addressing social development and livelihoods concerns, development of engineering and any other infrastructure and etc.);

- assessment of the current environmental condition including:

- natural resource potential;

- socio-economic description of the project area;

- overview of the main sources of the intended activity's impact on the environment given the existing impact sources such as air pollution sources, sources of impact on water resources, types of impact on lands and bioresources, waste generation sources, nuisances and other impacts;

- forecast and assessment of the change of the environment and socio-economic conditions after the start of the intended economic and other activity; impact on anthropogenic systems and their components;

- comparison of alternative options such as location of the intended facility including "not having a facility" option; technical and technological designs, environmental protection measures, compensatory ecological and social measures;

- public consultation materials;

- description of activities for establishment of environmental monitoring system and pos-project analysis;

- elaboration of a final document (report);

At the subsequent design stages the impact assessment findings shall be updated based on the information collected in the process of design and survey works and specifications of the equipment, technological processes and etc.

4. DESCRIPTION OF THE ENVIRONMENT

4.1 Geography

Belarus is located in the eastern part of Central Europe (Annex 1). The country borders the Russian Federation in the east (length of border is 959 km), Ukraine in the south (891 km), Poland in the west (407 km), Latvia (141 km) and Lithuania (502 km) in the north-west. Four different geographic regions are distinguished. In the northern part of the country there are many lakes and hills covered by forests. The eastern part is an upland and flat area. Polesie (lowland boggy area in the Pripyat river basin) is a lowland and wetland area concentrated in the south while the western part is an agricultural region covered by mixed coniferous forests. The total area of the country is 207.595 km^2; the highest point is the Dzerzhinskaia mountain (346 m above sea level). The territory is mostly flat area with forests, lakes and wetlands; altitude above sea level averages 100–200 m. Plateau stretching from north-east to south-west divides the country into two watershed areas: the northern part runs into the Baltic Sea, the southern – into the Black Sea.

4.2 Climate

Climate in Belarus is moderate continental. Its main characteristics are determined by location in medium latitudes, prevalence of flat relief and relative remoteness from the Atlantic Ocean. The lower layers of the atmosphere are dominated by the western air-mass transport resulting in frequent penetration of moisture-rich air masses; in the eastern regions the influence of the ocean decreases and continental nature of climate becomes more apparent. Domination of the western air-mass transport results in prevalence of the western cyclones bringing humid air. In cold seasons they cause warming, often thaws and precipitation; in summer time — cool and rainy weather.... The average temperature in January ranges from –4.1° in the South-West to -8,4°C in the North-East. Sometimes in winter the temperature falls down to -22 -30°C almost every year; the lowest recorded temperatures are -40 and -44°C. In summer time the average daily temperature is above +15°C. The temperature of the hottest month – July – averages from +17 to +19.7°C. In some days the temperature rises to +28 - +32°C (the temperature maximum is +36-38°C). The average soil temperature is +20-24°C. Duration of the warm period (with the temperature above 0°C) is 250—260 days in the South-West and 220—230 days in the North-East. Belarus is located in the zone of sufficient humidity. The annual precipitation volume depends on the relief and makes up 500-600 mm in lowlands and 600-700 mm at plains and uplands. The number of days with snow cover ranges from 70 the South-West to 130 in the North-East. High humidity causes frequent fogs. The average number of foggy days ranges from 35-60 at plains to 80-100 at uplands. High humidity also causes considerable cloudiness over Belarus' territory. The western air-mass transport prevails; winds from South-West dominate in

winter while winds from North-West prevail in summer time. The average annual wind speed is about 4 m/sec in open areas and about 3 m/sec in hollows. Wind speed increases in cold season. Wind speed can increase up to 18-20 m/sec every year and up to 20-26 m/sec once in five years. Storms and whirlwinds are occasionally recorded [20].

4.3 Geology

Over 10000 deposits of mineral resources have been identified in Belarus. Current mineral resources are sufficient to meet the country' needs in potassium fertilizers, inputs for cement production, dolomite, various clays, construction and molding sands, sand and gravel materials for road construction and construction industry, peat, sapropel, table salt, fresh and mineral ground waters.

10436 deposits are recorded in the Government Inventory of Mineral Resources including 68 oil fields, 9192 peat fields, 2 coal fields, 85 sapropel fields, 3 potassium salt deposits, 3 table salt deposits, 626 non-metallic deposits, 256 fresh groundwater and 201 mineral water fields. 493 deposits are being explored including 42 oil fields, 46 peat fields, 5 sapropel fields, 1 table salt deposit, 150 non-metallic deposits, 153 fresh groundwater and 95 mineral water fields. Given the mining and geological conditions of mineral resources occurrence, Belarus employs borehole, open-mine and shaft methods of field development. Well bores are used for development of fresh and mineral water fields, table salt deposits (underground dissolution method) and oil fields.[20].

4.4 Soils

There are various types of soils in Belarus including sod-podzol, boggy sod-podzol, sod and sod-calcareous, sod and boggy sod-podzol, peat-boggy and floodplain (alluvial) soils. Their granulometric composition differs due to diverse genesis of soil-forming rocks represented by moraine, outwash, limnium, wind-borne, limnium-boggy and alluvial sediments. The most appropriate for agricultural use are light sandy-loam and medium sandy-loam soils which have relatively sustainable water regime and high stock of nutrients. Among agricultural lands clay and heavy loam soils account for 0.4%, medium and light loam soils - 20.1%, sandy-loam soils – 45.6%, sandy soils – 21.2% and peat soils – 12.7%. Belarus' territory is characterized by high availability of peat and boggy soils. The total area of peatbogs before intensive drainage was 2.9 million ha or 14% of the country's territory. Lowland peat-boggy soils are concentrated mainly in the Belarusian Polesie.

According to the land cadastre, the area of lands in Belarus totals 20759.8 thousand ha. The available data of soil monitoring, ecological and geo-chemical surveys suggest that soil contamination is reported mainly in cities and within their influence zone, along roads, within the influence zone of municipal and industrial waste disposal sites and on the agricultural lands.

The area of hazardous level of soil contamination in cities is estimated at 78 thousand ha, within the influence zone of roads – 119 thousand ha and within the influence zone of waste disposal sites – 2.5 thousand ha. The main contaminants are heavy metals, petroleum products, nitrates, sulfates and chlorides.

One of the key concerns is radioactive contamination of lands caused by the Chernobyl accident. The area of agricultural lands with the density of contamination by Cesium above 37kBq/m^2 totaled 1.8 million ha of which 265.4 thousand were removed from agricultural use including 218.3 thousand ha in the Gomel oblast and 47.0 thousand ha in the Mogilev oblast. 1685 thousand ha of forest lands have been affected by radioactive contamination. The exclusion zone totaling 170 thousand ha was included in the Polesie Radiation and Ecological Reserve. [20].

4.5 Ambient air

Regular ambient air monitoring is conducted in 16 cities of the country where almost 65% of urban population live. There are 53 stationary points in cities with monitoring frequency of 3-4 times a day covering 37 air pollutants.

Air pollution is associated primarily with releases from stationary and mobile sources. Prevailing releases are carbon dioxide (56.4%), sulfur dioxide (6.9%), nitrogen oxides (11.1%) and hydrocarbons (14.3%).

Within the framework of the environmental protection policy, practical interventions aimed at reduction and prevention of air pollutant releases are implemented on a regular basis [20].

4.6 Water resources

There are over 10 thousand lakes and 20.8 thousand rivers in Belarus. The largest lake is Naroch (80 km^2) located in the north-west. The largest Dnieper river (700 km on Belarus' territory) flows to the south across almost the whole territory of the country. Its major feeders are the Pripiat river (495 km on Belarus' territory) in the south and the Berezina river (613 km on Belarus' territory) in the central part of the country. Other major rivers are the Western Dvina flowing in the western direction toward the northern border, the Niemen (459 km on Belarus' territory) flowing to the west and the Zapadny Bug flowing to the north along the south-west border with Poland. The Zapadny Bug is connected via the Dnieper-Bug canal with the Pripiat river and, thereby, with the Dnieper river. The total volume of surface waters in Belarus is 57.9 km^3 including 34 km^3 formed within the country. In terms of availability of water resources the situation in the country is relatively favorable. Available resources of natural waters are quite sufficient to meet both current and future needs of the country. Per capita water supply is 3.6 thousand m^3 inclduing 1.4 thousand m^3 of groundwater supply.

The quality of natural waters is affected primarily by contaminants brought with discharged wastewaters and precipitation. Since 1995 discharge of poorly treated wastewaters to the surface natural water bodies has tended to decrease [26].

4.7 Biodiversity and protected areas

Areas subject to special protection include natural reserves, national parks, zakazniks and nature monuments. Areas are designated as protected if they are particularly valuable for ecological, scientific research, recreation and esthetic purposes. Most protected areas are the nuclei of the national ecological network supporting ecological balance in the region.

As of 1 January 2007 there were 1441 protected area in Belarus including:

the Berezinsky bio-sphere reserve (80.9 thousand ha),

4 national parks including the Belovezhskaya Puscha (152.2 thousand ha), the Braslav lakes (71.5 thousand ha), the Pripiatsky National Park (82.2 thousand ha) and the Narochansky National Park (84 thousand ha),

99 republican reserves (936.3 thousand ha) and 414 local reserves (292.4 thousand ha),

337 republican and 586 local nature monuments.

The transboundary bio-sphere reserve "Pribuzhskoie Polesie" has been established within Belarus' territory.

Protected areas in Belarus total 4724.4 thousand ha or 22.7% of the country's territory including protected areas – 1723.8 thousand ha or 8.3% of the country's territory. Protected areas ensure conservation of gene pool and are the centers of flora and fauna reproduction. Designation of protected areas help preserve in a natural condition of mature forests, wetlands and water bodies which play an important role in conservation of bio- and landscape diversity, formation of microclimate and improvement of the ecological situation.

National parks and more than 25 republican reserves have good potential for development of international ecological tourism. Unique Belarus' wetlands (particularly lowland and upland bogs) of the Berezinsky Bio-Sphere Reserve, the «Pripiatsky» National Park, the «Yelnia», «Koziansky» and «Zvanets» reserves and some other protected areas are valuable for global and regional climate.

The system of protected areas of the Republic of Belarus has received international recognition. For example, the Berezinsky Bio-Sphere Reserve and the Belovezhskaya Puscha National Park have been awarded with the European diploma for protected areas and have been given a status of bio-sphere reserves of Europe. The Belovezhskaya Puscha National Park has been also inscribed on the World Natural Heritage List. The «Olmanskie wetlands», «Mid-Pripiat», «Prostyr», «Kotra» and «Osveisky» Republican Landscape Reserves, the «Sporovsky» and «Zvanets» Biological Reserves the «Yelnia» Hydrological Reserves have been included in

the list of international wetlands (the Ramsar sites). 14 protected areas have international significance for protection of globally endangered birds; 18 protected areas have international status [21-23].

Flora

Flora is currently represented by 12 thousand species of plants and mushrooms. In terms of variety of species, the most numerous are mushrooms (more than 7000 species) and water-plants (2232 species). There are 1680 species of vascular plants, 442 species of moss-like plants and 477 species of lichens. Vascular plant flora is dominated by grasses (over 1500 species). The known woody plants include 107 wild indigenous species of which 28 species are trees and the rest are shrubs, semi-shrubs and small shrubs. Natural vegetation covers 67% of Belarus' territory and is represented by forests (7.8 million ha or 37.8%), meadows (3.3 million ha or 15.8%), wetlands (2.4 million ha or 11.5%) and shrubs (0.4 million ha or 1.9%). Forests are the prevailing type of vegetation representing the national asset, pride and heritage. Belarus is located in the zone of mixed forests. The northern part of the country is occupied by the sub-zone of oak and dark coniferous forests. Fir and grey alder forests prevail in this area. The central part of the country is occupied by the sub-zone of hornbeam-oak-dark coniferous forests. The southern part of the country is occupied by the sub-zone of broad-leaved pine forests. Pine and oak forests are widespread here. Percentage of forest land is 38%. Pine forests and broad-lived pine forests tend to dominate (about 60% of the country's forested area).

Wetlands are an integral part of the Belarusian landscape; they occupy over 10% of the country's territory and are unevenly spread. The prevailing type is lowland bogs (61.1%) which are unique ecosystems having few natural habitats on the planet. Several large bogs still exist in the West Polesie; these bogs are the largest natural bogs of this type in Europe. The largest ones are Zvanets (150 km^2) and Dikoie (80 km^2). 39 plant species available in Belarus have the status of protected species in Europe [20,21].

Fauna

Belarus' fauna is currently represented by 467 species of vertebrate animals and over 30 thousand species of invertebrate animals of different groups. There are 76 species of mammals belonging to 6 orders. The biggest cloven-hoofed animals are elk, European red deer, wild boar and the unique auroch. The biggest carnivorous animals are brown bear and wolf. Other carnivorous animals are lynx, fox, badger, otter, marten, marsh otter, weasel, least weasel and raccoon dog, American mink and common raccoon from North America acclimatized in the 20th century. The most diverse vertebrates are birds; there are twice as much as species of birds than that of mammals, reptiles and amphibian taken together. Ichthyofauna is represented by 59 fish species (45 are indigenous species; the rest have been brought from outside for acclimatization

and breeding) and 5 species of Cyclostomata. Several fauna species have resource value and are used for breeding. At present resource species include 19 species of mammals, 30 bird species, 1 reptile species and 2 species of the invertebrate: crayfish and edible snail[20, 23].

4.8. Population, administrative division and socio-economic environment

According to the National Statistics Committee, as of 1 January 2009 Belarus' population totaled 9671.9 thousand people (47 per 1 km^2). Urban and rural population account for 74% and 26% respectively. The population has been slowly decreasing since 1994 when the maximum number of residents – 10.2 million people - was registered. Population density is low compared with the rest of Europe. In general, the population is highly concentrated and urbanized; about half of residents live in 13 big cities. Urbanization process is rapid: as far back as 1979 only 55% of population used to live in cities. Urbanization has contributed to rural population ageing because young people have tended to resettle from villages to cities. Minsk is the capital and the biggest city with 1.83 million residents. Other big cities are the oblast centers: Gomel (498.7 thousand residents), Mogilev (372 thousand residents), Vitebsk (355.7 thousand residents), Grodno (338.2 thousand residents) and Brest (318 thousand residents). The population in the key project areas totals 134.6 thousand people in the Lida district, 95.8 thousand people in the town of Lida, 69.5 thousand people in the Slonim district, 50.9 thousand people in the town of Slonim.

Administratively, the country is divided into six oblasts: the Minsk, the Gomel, the Mogilev, the Vitebsk, the Grodno and the Brest oblasts which are sub-divided into smaller administrative units – the districts. Each oblast has a Council dealing with administrative and regional affairs.

In the last ten years Belarus has recorded a steady economic growth. In 2008 GDP was BYR 128829 billion and made up 110 % versus 2007. GDP per capita was BYR 13308 thousand or US$ 6049. Annual employment in the economic sector averaged 4521 thousand people. The number of the unemployed registered with labor, job placement and social protection agencies totaled 37.3 thousand people or 0.8% of employment in the economic sector. In 2008 the nominal accrued monthly wages averaged BYR 885.6 thousand or US$403. GDP share of the industrial sector was 28.1 %, agricultural sector – 8.4%, construction sector– 9.4 %, trade and catering – 10.6%.

Industry

The industrial sector in Belarus accounts for 1/3 of the national product. In general, the industrial sector has about 100 sub-sectors. The most developed are fuel industry (24.3 % of the total industrial output), machine-building and metal working (22.2%), food industry (15.2%), chemical and petrochemical industry (11.7%).

High development rates are recorded in construction materials industry, timber, pulp and paper industry and ferrous metallurgy.

The distinctive feature of the national industry is production of finished products most of which are exported.

Natural environment in Belarus is favorable for production of highly profitable agricultural products such as milk, beef, pork, poultry, eggs, grain, potato, long-fibred flax, sugar beet and etc.

Agricultural lands occupy almost half of Belarus' territory. Major part of agriculturalproducts is produced by large collective and state farms. Private farms are also developing.

The Republic of Belarus is a transit country between the East and the West. Belarus is crossed by the shortest roads and railways connecting Western Europe with CIS, South and Central Europe with north-west regions of Russia and Scandinavia, central regions of Russia with the Kalinigrad oblast, the Baltic Sea ports with the Black Sea ports.

The length of Belarus' railways is over 5.5 thousand km. Belarus has an extensive network of roads ensuring year-round access to all residential settlements. The length of general use roads is over 81 thousand km. Belarus' territory is crossed by an extensive network of oil-trunk and gas-main pipelines.

4.9 Current concentration of pesticides and PCBs in the environment

Situation with monitoring of POPs in the environment differs considerably depending on POPs types. The most extensive experience has been gained in the field of pesticide monitoring. Monitoring of PCBs concentration and sources of their releases into the environment has been fragmented and has been conducted mainly within the framework of research studies and international projects. Until now PCDD/PCDFs have not been monitored.

An extensive network of monitoring points has now been established. Concentration of DDT and HCCH in lakes and rivers is monitored once a year including at 35 transboundary river stations. The network enables to get representative information about contamination of the key water bodies of the country.

Monitoring of pesticide concentration in soils has been conducted since 1988 in the background (non-contaminated) territories at the radiation monitoring points. After the establishment of the National Environmental Monitoring System (NEMS), monitoring of land/soil contamination with pesticides has been systematized. Soil monitoring within NEMS is conducted at agricultural lands of 29 farms with the total area of about 4.5 thousand ha. *The monitored parameters* include *chlororganic pesticides* notably DDT and its metabolites. Monitoring frequency is two times a year. Monitoring is also conducted at 108 reference points

(sites and landscape-geochemical grounds) of the background contamination of soils/lands. Monitoring frequency is at least once in 5 years. The monitored parameters package includes *chlororganic pesticides* (DDT and its metabolites).

Groundwater contamination with pesticides in Belarus is monitored at the pesticide burial sites and in locations of the largest industrial and household waste disposal sites representing potential sources of environmental contamination (Annex 7).

Since 1999-2000 the level of groundwater contamination has been measured in the vicinity of the obsolete pesticide burial sites including the Dribinsk obsolete pesticide burial site (the Mogilev oblast), the Slonim obsolete pesticide burial site (the Grodno oblast), the Gershony obsolete pesticide burial site (the Brest oblast), the Petrikov obsolete pesticide burial site (the Gomel oblast) the Verkhnedvinsk and the Gorodok obsolete pesticide burial sites (the Vitebsk oblast). Surveys involving one-time sampling of ground waters were conducted at the Postavy pesticide burial site.

Concentration of PCBs in ground waters in the vicinity of the environmental impact sources has been measured since 2003 within NEMS (Annex 8).

As monitoring of POPs contribution to disease incidence is at the initial stage, it is unfeasible to assess POPs impact on public health deterioration.

Health of the personnel handling POPs is not monitored due to the absence of quantitative analysis methods particularly with regard to PCBs and, also, the absence of the environment quality norms required for the assessment. Presence of POPs in food products is not monitored either due to insufficient material and technical capacity.

Comparison of the environmental media contamination with POPs against the national maximum allowable concentrations (MAC) can be used as a criterion for assessing the degree of contamination.

4.9.1 Assessment of environmental contamination with POPs pesticides

Assessment of ambient air contamination

The data on the concentration of pesticides in the ambient air are not available in Belarus.

Assessment of soil contamination

The findings of monitoring suggest that the vast majority of samples contain traces of DDT and its metabolites. The pesticide burial sites are most contaminated. In the impact zone of the Slonim obsolete pesticide burial site MAC for DDT concentration in soil is exceeded by 9.5 times (MAC is 0.1 mg/kg), for dieldrin – by 20 times (the indicative allowable level is 0.0005 mg/kg). The situation at other OP burial sites is similar.

Contamination of soils in the impact zone of the pesticide storage facilities is sometimes higher than the content of pollutants at the burial sites. For example, the monitoring findings suggest that MAC for DDT content in soils around the Gorodok pesticide warehouses is exceeded by 28 times, for dieldrin – by 2880 times.

Assessment of surface waters contamination

The findings of monitoring suggest that samples of surface waters sometimes contain traces of *DDT* (MAC for drinking water is 0.002 mg/dm^3) in concentration up to 10 ng/dm^3; *dieldrin* (there is no MAC; WHO norm for drinking water is 0.03 μg/dm^3) - from 40 to 100 ng/dm^3; *heptachlor* (there is no MAC; WHO norm for drinking water is 0.05 mg/dm^3) — from 5.3 to 39.4 ng/dm^3; *endrin* (there is no MAC; WHO norm for drinking water is 0.6 μg/dm^3) — up to 100 ng/dm^3. There is no evidence suggesting that MAC for POPs in surface waters has ever been exceeded.

Assessment of ground waters contamination

In Belarus assessment of ground waters contamination with pesticides is performed within the framework of NEMS local monitoring in the locations of OPs burial sites and largest industrial and household waste disposal sites which can be potential sources of environmental contamination.

The following POPs have been detected in ground water samples collected in the locations of pesticide burial sites: endrin, DDT and its isomers, aldrin, chlordane and heptachlor.

Concentration of DDT (116 mg/dm^3) in ground waters in the location of the Verkhnedvinsk pesticide burial site exceeded MAC for drinking water (100 mg/dm^3 for DDT). Heptachlor concentration in ground waters above MAC (though insignificant - from 101.6 to 120%) was detected at the Dribinsk pesticide burial site. Concentration of aldrin exceeding MAC by 10 times was detected in ground waters at the Slonim burial site.

4.9.2 Current assessment of environmental contamination with PCBs

Assessment of air contamination

The data on PCBs concentration in the ambient air are not available in Belarus. Calculations suggest that PCBs concentration in ambient air in Belarus is estimated at 0.10-0.13 ng/m^3 [17]. Higher PCB concentrations in the air can be expected in the locations where PCB containing equipment is used and stored and within the sites contaminated by PCBs.

Assessment of surface waters contamination

UNDP projects implemented at transboundary sections of the Dnieper (2000), Zapadny Bug (2001), Zapadnaia Dvina (1999) and Pripiat (2000) rivers involved water sampling for PCB testing. Collected sampled contained no PCBs [29]. Relatively high levels of PCB accumulation

have been detected in bottom sediments of watercourses and water bodies within Minsk and Lida, which, in some cases, have considerably exceeded the threshold of potential effect – 70 μg/kg as well as MACs of some countries (Germany, the Netherlands and Canada) - 20-34 μg/kg.

Assessment of ground waters contamination

Potential contamination of ground waters with PCBs has been monitored within local monitoring of ground waters since 2003. Local monitoring is performed by the environmental services of the enterprises producing considerable environmental impact. In most cases PCBs concentration in ground waters is below 5 ng/dm^3 (threshold of detectability). PCBs concentrations ranging from 14 to 58ng/dm^3 have been detected in exceptional cases only. Currently, there is no MAC for PCBs in ground waters. Tentative maximum allowable values of PCBs concentration may be within the range of 0.01 - 1 μg/dm^3 [30, 31].

Assessment of soil contamination

The available data on PCB concentration in soils of *agricultural lands* which are remote from the main sites where PCB containing equipment is operated and stored suggest that PCB concentration values range from below sensitivity threshold to 222 μg/kg. The concentration of the sum of 8 isomers (PCB-8, 10, 28,, 101, 118, 138, 153, 180) of PCBs averages about 50 μg/kg. In general, in 70% of cases PCBs concentration is below 50 μg/kg which is close tothe background level.

PCB concentration o in isolated samples of soils of agricultural lands adjacent to the Mir, Korelichi and Minoity substations ranges from 200 to 1200 μg/kg; concentration in soils around the power substation in Pleschenitsy - 360 μg/kg. These concentrations are much higher than the indicative allowable level for soils which is 20 μg/kg. The most contaminated are soils where PCB containing equipment is operated and stored.

The highest PCB concentrations are recorded mainly in upper soil horizons (as a rule, up to 10 cm). PCB leakages and, consequently, spots of heavily contaminated soils are recorded almost at all sites where PCB containing equipment is operated and stored. This implies that contaminated spots of soils can be found virtually at all electrical substations of the Belenergo Concern (total of about 100 sites), at traction substations of the Belarusian Railways (5) and sites of many industrial enterprises.

4.9.3 Assessment of environmental contamination by PCDD/PCDF

At present concentrations of dioxins/furans in the environment are not measured in Belarus. The estimates suggest that concentration of dioxins/furans in ambient air averages 2.05 fg TE/m^3, in soils – 0.27 ng/kg [30]. Calculated data about dioxins/furans concentration in water bodies and bottom sediment are not available in Belarus.

4.10 Current impact of the Slonim obsolete pesticide burial site on the environment

The Slonim pesticide burial site is located 10 km to the south-east from Slonim, a district center of the Grodno oblast. Close to the Slonim pesticide burial site the following protected areas are located: the Baranovichi biological reserve - 2 km to the east, the Slonim biological reserve - 7 km to the north-west, geological monument «Split Stone» - 8 km to the north-west, the «Stronga» landscape reserve – 3 km to the north and the «Lipa Korolinskaia» botanic monument – 11 km to the north-west (Annex 9).

In terms of geo-morphology, the burial site is located in the southern part of the Novogrudok finite moraine upland divided by valley of the Schara river and its feeders. Relief is undulating; the relative height is 5-10 m. The absolute surface marks range within 175-190 m going down to the valley of the Schara river to 139-140 m.

The pesticide burial site is situated on the right bank part of the Schara river watershed 6.0 km to the north-east from its bed (in the vicinity of the Dobry Bor village). The closest surface watercourse is the Cherniavka river, the right feeder of the Schara river (about 7 km length). The data on the quality of the river water are currently not available; therefore in the immediate future it is intended to collect and to test samples under the project to assess the likely impact of the pesticide burial site on the river water. Its valley is oriented from north-east to south-west. In the upper course the Cherniavka river flows along a lake-like round dip up to 2.5 km in diameter. The riverbed is canalled; the valley has been drained. The burial site is located 2.5 km in the eastern direction from the Cherniavka riverhead.

The adjacent territory is a forested area with low population density. The Savichi, Gutka-Paslovsakia and Novaia Strazha villages are located within the area. The Bolshie Shilovichi and Chepelevo villages are located in the valley of the Schara river 8 km to the west and north-west from the burial site; the Dobry Bor, Podgornaia and Ezhony villages are located 5-7 km to the south and south-east. The closest village to the burial site in the Savichi village, located in the valley of the Cherniavka river 5 km to the south-west.

There is no central drinking water supply in the villages; as a rule, shaft wells are used. Information on weather this water is contaminated is not known or well documented.

The obsolete pesticide burial site was built in 1974 by the «Slonim Agro-Service». Design and construction documents are no longer available. Certificates on covered-up works are not available either.

The burial site contains powder and liquid obsolete pesticides delivered from the closest districts of the Grodno, the Brest and the Minsk oblasts. Powder pesticides in the standard packs (sacks) are placed in two trenches: № 1 sized 7x32 m and № 2 sized 5x26 m. Liquid pesticides are buried in 2 bunkers: № 3 sized 4.5x6.0 m and № 4 sized 7x7 m. The bottom of trenches is

covered with a layer of clay up to 10 cm deep. Local soil is put on top of the trenches. On top the bunkers are coated with concrete (the floor is also concrete) and local soil. The trenches and bunkers are clearly visible at the burial site and are elevated at 0.9-1.0 м. There are no data about the use of antifiltration protective facilities. The data of the Slonim Municipal and District Inspectorate of Natural Resources and Environmental Protection suggest that the weight of obsolete pesticides in the Slonim burial site totals up to 892 tons.

The burial site contains mostly DDT. The aggregate weight of all its modifications is up to 447.2 tons or 50.1 % of the total amount. DDT is a persistent organic pollutants listed in the Stockholm Convention. Environmental risk of POPs is associated with their long-range transportation ability, longitudinal persistence and heavy carcinogen reproduction ability.

Other pesticides are POPs unidentified mixtures. Prevalence of chloro-organic pesticides possessing the highest persistency properties (long-lasting preservation of biological activity) considerably increases an environmental hazard of the burial site.

A network of stations for local monitoring of ground waters has been arranged at the Slonim pesticide burial site. It includes 4 observation wells located along the contour of the burial site at 4 sides. The Slonim pesticide burial site is subject to the environmental control (soils, surface and ground waters) conducted (once a year) by MNREP and MoH territorial departments. The findings of the 2008 monitoring of ground waters and drinking water in a well in the village of Gutka-Paslovskaia are summarized in Annex 13 [15]. The data show that the pesticides concentrations exceed the MAC for HCCH and DDD, which is definitely the impact of buried pesticides according to the assessment by Central Research Institute of the Complex Use of Water Resources. At present this does not pose a threat to health of local population but it is a sign that in the nearest future the concentrations may go up.

The findings of local monitoring of ground waters in the vicinity of the Slonim pesticide burial site conducted in 2004-2008 suggest that:

a) The following pesticides in concentrations above MAC have been detected in samples of ground waters: the concentration of α-HCCH in the observation wells at the burial site in 2008 averaged 0.021 mg/dm^3 or 10.5 MAC, the concentration of 4,4′-DDD averaged 0.14 mg/dm^3 or 1.4 MAC. Previously (in 2004-2006) concentrations of other chlororganic pesticides ranged from 0.02 to 0.48% MAC; the concentration of prevailing pesticide - DDT - did not exceed 0.02 MAC.

b) Migration of α-HCCH, 4,4′-DDT and its metabolite 4,4′-DDD with the flow of ground waters was recorded in 2008 at the Slonim pesticide burial site.

c) Contamination spot with the maximal detected concentration of 4,4′-DDD 0,0349 mg/dm^3 (or 3.49 MAC), 4,4′-DDT (0.7 MAC), α-HCCH (23.5 MAC) is being formed in the

ground waters at the burial site and adjacent territories. Analytical estimates suggest that the area of ground waters' contamination with pesticides at the burial site and adjacent territories is about 3.5 ha; soluble forms of pesticides in concentration up to 1.0 MAC along the flow of ground waters mainly in the eastern direction can be detected at a distance of up to 184 m from the contour of the burial site.

As of 1 January 2009, the Slonim pesticide burial site does not represent an explicit hazard for human health, flora and fauna. Contamination spot resulting from migration of pesticides from the burial site is local and is within the boundaries of geomorphological element where the burial site is located (watershed section of graded positive moraine structure). The estimated (as of 2008) maximal distance where pesticides in concentration up to 1.0 MAC can be detected is 184 meters. The distance to the nearest residential settlements located along the front of pesticide migration ranges from 5.0 to 8.0 km.

At present the scope of pesticide migration is insignificant but there is a considerable risk of increased pesticide penetration into ground waters.

During a public consultation meeting in Lida (Annex 3) a problem was raised that 43 tons of obsolete pesticides mainly unidentified but definitely containing DDT (based on the archives of agricultural farms that had used these pesticides) are stored in the warehouse at the Gutno railway station (the Lida district). The warehouse is located within the 3rd belt of the Sanitary Protection Zone of the Dubrovnya water intake and water from it is supplied to half of Lida households. In accordance with Sanitary Rules and Norms "СанПиН 10-113 РБ 99", the second and the third belts (restriction belts) of the Sanitary Protection Zone cover a territory intended to prevent water contamination in water supply sources. Storage of such amount of obsolete pesticides within the Sanitary Protection Zone of the water intake is a violation of the existing requirements to Sanitary Protection Zones and, obviously, poses a risk of potential contamination of the drinking water supply source and, consequently, health risks for the Lida residents (95.8 thousand people as of 1 January 2009). Solution to this problem would require loading and transshipment of packed OPs for destruction to an EU country.

4.11 Current impact of the PCB containing equipment storage site in Minoity village on the environment

Minoity village (1850 residents) is located in the Lida district. To the north there are wetlands; to the north-east - a network of drainage canals flowing into the Lidea river; forested areas (pine, birch) and meadows are situated to the west and south.

The closest villages are located at a distance of 1 km (Velichki village, 102 residents), 2.5 km (Peski village) and 1.7 km (Kolesische village).

The Lidea river is located 2.2 km from Minoity Village, the Ditva River – 2.5 km andlake Velichkovskoie – 1.2 km.

The «Dokudovski» Republican Biological reserve (1989 ha) is located at a distance of 3.5 km to the south-east from Minoity village; the «Dubrava» botanic monument (22.2 ha, a unique forested area with valuable species) is located 2 km to the north; the Boltenitsky park (8.65 ha, a botanic monument) is located to the north-west. There are several local reserves around the town of Lida including the Voronovsky, the Ivensky, the Vseliubsky, the Razdory, the Chervonoie, the Peletskie Griady, the Meshkaly and the Berezina (Annex 10).

The following water bodies are located within the «Dokudovski» Republican Biological reserve: the Lidea and the Narva rivers and lakes Levedinoie and Glokhovets where there are restrictions on fishing and use of motor boats intended to secure preservation and reproduction of fish resources. The Lidea river is the left confluent of the Ditva river (the Niemen river basin). Its length is 31 km, watershed area – 167 km^2, the average annual water discharge in the estuary - 1,2 m^3/sec, the average water surface slope – 0.9 ‰. The river originates near Verknia Lida village and flows into the Ditva river at a distance of 1 km to the east from Dorzhi village. The main feeder is the Narva river. The river valley from estuary to Laikovschina village is apparent, 1-2 km wide. High-water bed is discontinuous, generally 0.5-0.8 km wide; downstreamNovoprudy village and up to the estuary is covered by drainage canals. The riverbed is canalled along 20 km, 6-12 meters wide. Banks are steep.

There is a sanatorium on the Lidea river bank near Minoity village.

The probability of ground and surface water contamination resulting from PCB migration from the polluted soil of the former power substation in village Minoity is rather high. The information on PCB impact in the area is rather scarce although samples of soil taken at the agricultural private land plots 30 m away from the PCB site at the depth of 10 cm from the surface revealed that the PCB concentration exceeds the approximate allowable level by 38 times! [30]

3000 PCB containing capacitors are stored at the site located in Minoity village (the Lida district of the Grodno oblast). The capacitors used to be stored improperly resulting in leakages of PCB to soil. Two years ago local branch of the State Concern “Belenergo” – RUE “Grodnoenergo” – started to package the leaking capacitors in containers (one container can hold 175 capacitors). The total (gross) weight of containers nowadays is approximately 7 tons. Soils around concrete slabs where containers are placed are contaminated. Although some clean soil was used to cover vivid oily spots on the ground of the site, nowadays the level of contamination is still estimated at 70 g/kg. Such level can be explained by both direct leakages and contaminated rainfall run-off. **The findings of PCB inventory suggest that it is the highest**

contamination level in Belarus. It can be therefore concluded that this PCB containing equipment storage site requires urgent environmental protection measures.

5. PROJECT ALTERNATIVES

5.1 Zero scenario or Not having a project

The main alternative considered is “not having a project” option in terms of the general assessment of the environmental condition in Belarus. NIP measures will certainly be implemented and budget financing will continue. However, given the considerable total amount of POPs accumulated in Belarus, its should be noted that currently Belarus does not have a sufficient capacity allowing, in the immediate future, to considerably reduce POPs stockpiles, to mitigate environmental contamination risks and harmful impact of POPs on human health by its own efforts. The main limitations to addressing the issue include lack of installations for OPs and PCBs destruction, insufficient capacity of the existing Chechersk Hazardous Waste Management Facility (the only one in the country, Section 1.2) to secure environmentally sound storage of POPs for a long time as well as technical capacity limitations to eliminating POPs. Therefore, “not having a project” scenario will entail deterioration of the environment around POPs storage sites with ground waters being the most affected. Increased migration of pesticides from burial sites into ground waters is apparent; though its scope is not yet significant but already raises concerns and requires immediate response because unlike other environmental media, clean-up of ground waters is almost unfeasible. It can be thus concluded that **«not having a project» option is unacceptable.**

5.2 Regional alternatives

5.2.1 The Slonim obsolete pesticide burial site

The following main alternatives for the Slonim obsolete pesticide burial site have been considered:

1. Repackaging and transshipment of the obsolete pesticides recovered from the burial site to an EU country for final destruction through incineration (selected option); - The benefit of this alternative is that POPs will be destroyed at a registered well-monitored facility that meets EU standards. Some temporary environmental impacts still exist with this selected project option and are mainly related to possible POPs leakages and potential contamination of air, soil and water during POPs burial openings, excavations and transportation (e.g. accidents, spillages). The Environmental Management Plan prepared as part of the EIA report for this option presents comprehensive prevention and mitigation measures for such possible impacts, including implementation of occupational, health safety and emergency preparedness requirements to be followed during project activities.

2. OPs repackaging and burial at the Chechersk Hazardous Waste Management Facility – this option is unacceptable due to organizational constraints and limited capacity of the Chechersk Facility.

3. Consideration of an option of OPs destruction at the burial site using a mobile facility for pesticide incineration This option was rejected because using a modern mobile incinerator for POPs destruction requires considerable preparatory efforts including high costs and possible public opposition for selection of a plant, its transportation to the burial site, arrangement of additional structures, agreeing the procedure of works with the local authorities and lack of experimental data on environmental safety of such works. Also, the incinerators burning POPs (pesticides and PCBs) and other related waste are associated with the spread of undestroyed and newly formed POPs (e.g., dioxins and furans) into the environment, contaminating air, soil, vegetation, an human population.

4. Cancellation of pesticide repackaging and disposal and improvement of the burial site - this option is unacceptable as it does not allow to considerably reducing the risk of environmental contamination in long term.

Assessment of impact on the environmental media

Given that pesticides have begun to migrate from the burial site into ground waters, standard measures are unable to prevent this process. It is needed to recover and to repackage pesticides and provide their either environmentally sound long-term storage or ultimate destruction at a certified specialized facility. It can be therefore concluded that all options would involve opening of the burial site and recovery of powdered and liquid pesticides. Before opening the trenches with pesticides some preliminary arrangement will take place, such as improvement of the access road and cutting down the trees and bushes on the site and nearby (for temporary storage of recovered and repackaged pesticides, equipment storage and a site for organizing rest facilities for working staff). The road will be improved by cutting down some trees that grew within the boundaries of the road and covering the uneven parts of it with crushed stone. This work will be done by specialized building organizations – Slonim Crushing Sorting Plant (provision of crushed stone), and Slonim Department of Reclamation Works. The trees will be cut by District branch of the Ministry of Forestry – Slonim Forestry. The forest that grows on the territory of the landfill does not have any special value, the wood is not likely to be contaminated with POPs as these substances have lipophilic nature and are not likely to accumulate in wood fiber. After the trees are cut down the wood will be collected by the Slonim Forestry and disposed of by environmentally sound methods. While there is no transfer of POPs through roots and there is no risk of trees contamination, some comfort analysis will be undertaken. Trees will be moved to the central hazardous waste storage facility if they are considered to be contaminated material.

Opening and recovery works may entail release of some part of pesticides into the air and adjacent soils, if relevant preventive measures are not taken in time. Pesticides may also penetrate into ground waters with rainfall. Pesticide releases into the air pose an exposure risk for personnel involved in opening of the burial site and, in case of a strong wind, for residents of the nearby villages, surface waters and the adjacent protected areas because POPs are not accumulated in the air but are transported with it [32]. Thus, if environmental and preventive measures are not taken the risk of pesticides penetration in soil and ground waters beyond the boundaries of the burial site as well as personnel and local people exposure is significant. In case relevant protective interventions are undertaken (in accordance with the suggested environmental plan and national regulation on such kind of work) air and soil contamination risk can be estimated as insignificant; risk for health of personnel is also insignificant and the risk for other environmental media is negligible.

Containers may be accidentally damaged during loading and transportation thus entailing potential release of pesticides into air and soils. Secondary contamination of other environmental media is also possible as described above. Therefore, in case of an accidental damage to containers the estimated risk is rather significant for air and soils and insignificant for other environmental media.

Improper use of a mobile facility for destruction of pesticides or the use of a facility that does not meet the required international standards [33] may entail release of part of pesticides into air and potential secondary contamination of other environmental media. In this case the risk can be estimated as significant for air, insignificant for personnel and negligible for other environmental media.

There are two options of arranging the burial site. The first option is to arrange the new burial site of a similar type close to the existing one. The second option is to improve the existing burial site by means of surface runoff drainage to reduce outwash of pesticides into ground waters. Both options would involve high risk of groundwater contamination due to the recorded increased migration of pesticides into ground waters [12-15] at the existing burial site while a short-range transfer of the burial site and the use of the same pattern of pesticide disposal will create a similar situation in future. Risk of contamination of drinking water in wells located in the nearby villages is estimated as insignificant because there are ways of pesticide migration from the burial site to the ground waters and further on in wells [15]. The estimated risk for households is the same. For other environmental media the estimated risk is marginal.

A summary table has been compiled to help select the most appropriate option.

Table 4: Estimated Risks for Alternative Options for the Slonim Obsolete Pesticide Burial Site

№	Risk for air	Risk for soils	Risk for ground waters	Risk for protected areas	Risk for surface waters	Risk for public health	Risk for personnel	Risk of organizational impediments	Points, total
1	1	1	1	1	1	1	1	1	8
2	1	1	1	1	1	1	1	3	10
3	3	3	1	3	1	2	1	1	15
4	2	3	4	1	2	2	1	1	16

Estimated cost of the alternative options

Cost estimates for the alternative options are based on the following data:

1. Destruction of 1 ton of obsolete pesticides in an EU country is estimated to cost US$ 2000 including cost of transportation from Belarus to Europe.
2. Landfill disposal of 1 ton of pesticides at the Chechersk Facility is estimated to cost about US$2000-2300 (including the cost of the establishment of additional storage capacity).
3. Transportation of 1 ton of pesticides to the Chechersk Facility is estimated to cost US$ 200.
4. Destruction of 1 ton of obsolete pesticides using a mobile facility is estimated to cost US$ 2100 [33].
5. Recovery and repackaging of OPs stockpiled in the Slonim burial site are estimated to cost US$ 1 million (total weight of pesticides is about 892 tons plus about 108 tons of contaminated soil and other wastes)
6. The burial site arrangement works are estimated to cost US$ 1.5-2 million.

The resulting cost of Option 1 is US$ 3.086 million (including the required elimination of 43 tons of obsolete pesticides stockpiled in the warehouse at the Gutno railway station (the Lida district).

Option 2 is estimated to cost US$ 3.500 million.

Option 3 is estimated to cost US$ 3.100 million.

Option 4 is estimated to cost US$ 1.5 -2.0 million.

The option of OPs landfill disposal at the Chechersk Facility has the lowest cost.

As seen from Table 4, taking full account of the aggregate estimated risks, **the option of OPs repackaging and transshipment for destruction through incineration in an EU country is the most appropriate**. Public consultations held in Slonim (Annexes 5-6) have demonstrated that local authorities and households give an utmost support to ultimate disposal of the obsolete pesticides. In terms of environmental impact, the first two options are equivalent. The choice would depend on financial constraints and potential organizational impediments. Implementation

of the second option may face serious organizational impediments due to the fact that elimination of the Petrikov obsolete pesticide burial site started in 2008. 136 tons of OPs out of 1473 tons stockpiled in the burial site were recovered, repackaged and transported to the Chechersk Facility during 2008. In 2009 and subsequent years it is intended to continue these works which will be financed from the National Environmental Protection Fund. Considering that timing coincides with the project time frame, it is very likely that it would be unfeasible to accommodate the repackaged pesticides from the Slonim burial site at the Chechersk Facility because its capacity is strictly limited.

5.2.2 The PCB containing equipment storage site in Minoity village (the Lida District)

The following main alternatives for the PCBs storage site in Minoity village have been considered:

1. Improvement of the site to enhance reliability of PCB containing equipment storage;

2. Elimination of the site by removal of PCB contaminated soils and transportation of containers with PCBs for secure storage at the Chechersk Hazardous Waste Management Facility;

3. Elimination of the site by transshipment of containers with PCBs to an EU country for destruction.

Assessment of impact on the environmental media

Option 1 involving improvement of the site may potentially entail further, though smaller, release of PCBs to soils and, subsequently, to ground waters. The estimated risk of soil contamination is considerable; the estimated risk for ground waters and human health is insignificant because contamination and impact will be secondary; the estimated risk for other environmental media is negligible.

Containers may be accidentally damaged during loading and transportation thus entailing potential release of PCBs into air and soils. Secondary contamination of other environmental media is also possible as described above. Therefore, the estimated risk is insignificant for air and soils and negligible for other environmental media.

Table 5: Estimated Risks for Alternative Options for the PCB containing equipment storage site in Minoity village

№	Risk for air	Risk for soils	Risk for ground waters	Risk for protected areas	Risk for surface waters	Risk for public health	Risk for personnel	Risk of organizational impediments	Points, total
1	1	3	2	1	1	2	1	1	12
2	1	1	1	1	1	1	1	3	10
3	1	1	1	1	1	1	1	1	8

Estimated cost of the alternative options

Cost estimates for the alternative options are based on the following data:

1. Destruction of 1 ton of PCBs in an EU country is estimated to cost US$ 2200 including cost of transportation from Belarus to Europe.

2. Landfill disposal of 1 ton of PCBs at the Chechersk Facility is estimated to cost about US$ 2300.

3. Transportation of 1 ton of PCBs to the Chechersk Facility is estimated to cost US$ 200.

4. The landfill arrangement works are estimated to cost US$ 0.1-0.2 million.

The resulting cost of Option 1 is. US$ 18.1 thousand

Option 2 is estimated to cost US$ 0.25-0.28 million.

Option 3 is estimated to cost US$ 0.25-0.28 million.

Option 1 (improvement of the site to enhance reliability of PCB containing equipment storage) is the most cost-effective but the least effective from the point of view of environmental protection and the Stockholm Convention compliance.

The assessment of the condition of the environment under all options has suggested that taking full account of the aggregate risks, **the option of elimination of the site by transporting containers with PCBs for destruction to an EU country having industrial plants for PCB destruction is the most appropriate.** Public consultations held in Lida (Annexes 5-6) have demonstrated that local authorities and households explicitly support this option. The second option is less preferable due to high risk of organizational impediments associated with limited capacity of the Chechersk Facility.

6. ENVIRONMENTAL MANAGEMENT PLAN

6.1 Beneficiary's capacity to implement the EMP

6.1.1 Regulatory and institutional capacity

The implementation of the EMP is stipulated by a system of legal acts, including hazardous waste management regulations. These are the major documents:

- Law of the Republic of Belarus "On Waste Management" (2007)
- Law of the Republic of Belarus "On Transportation of Hazardous Cargo" (2001)
- "Regulations on transportation of hazardous cargo by automobile transport in the Republic of Belarus" (Approved and amended by Resolutions of the Ministry of Emergency Situations of Belarus in 2004 and 2008)
- "Regulations on obsolete pesticides management" (Approved by Joint Resolution of the Ministry of Environment and Ministry of Agriculture and Food of Belarus in 2005)
- "Sanitary Regulations of Organization of Technological Processes and Hygienic Requirements to Equipment" (1994)
- "Methodology of Waste Sampling" (2002).

As far as Belarus has a long story of dealing with the consequences of such anthropogenic catastrophe as the Chernobyl Nuclear power plant accident the regulatory framework on accidents prevention, control and liquidation is very well developed.

The specialized Unit of the Ministry of Emergency Situations – the Center of Radiation and Chemical Safety is very well trained and equipped to deal with any risk or accident related to hazardous chemicals management. This organization will be the Contractor for the work on elimination of the Slonim obsolete pesticides landfill (a relevant waiver was received by the Government of Belarus from the World Bank). The Ministry of Emergency Situations will bear the major responsibility for all the risks related to emergencies prevention, personnel safety and environmental protection.

The experts who will be hired by the Ministry of Natural Resources and Environmental Protection will be overseeing the general implementation of the EMP and report on any needs to make amendments to it or to initiate some definite actions envisioned by the EMP.

In case of elimination of the Slonim obsolete pesticides burial site the Slonim District Executive Committee with support of local branches of the Ministry of Environment, the Ministry of Emergency Situations and the Ministry of Health will execute overall control of the works and will coordinate actions in case of implementation of the measures of the Risk Mitigation Plan. The implementation of the measures of the Risk Mitigation Plan related to PCB waste stored in Minoity village will be taken care of by the local branch of Grodnoenergo – owner of the PCB-waste stored in Minoity, a divisional branch of the State Concern

“Belenergo”. The Lida District Executive Committee will coordinate any actions that might be taken in the framework of the Risk Mitigation Plan.

6.1.2 Monitoring capacity

The Republic of Belarus has very well established systems of montioring related to environment, health and emergency situtations issues. The current capacity of these systems will provide for the implementation of the Monitoring Plan of the EMP.

In order to reveal the sources of natural and anthropogenic emergencies, emergencies forecasting, possible scale and nature of their development to undertake urgent actions to prevent and liquidate the emergencies, minimize their social and economic aftereffects a System of Monitoring and Forecasting of Emergency Situations was established in the Government of Belarus in 2004. The Ministry of Emergency Situations of Belarus is the responsible body for the maintenance of the System of Monitoring and Forecasting of Emergency Situations

A Program of Social Hygienic Monitoring has been established to monitor and study the state of health of people affected by various anthropogenic factors. This Program comprises a component on POPs health monitoring, which currently includes monitoring of all chlorine-organic pesticides in food products, drinking water and breast milk, it is being expanded to PCB analysis and monitoring in food products and breast milk, as well as dioxin monitoring in breast milk. The Ministry of Public Health is implementing Social Hygienic Monitoring.

There is a National System of Environmental Monitoring in the Republic of Belarus, which currently includes 11 independent kinds of monitoring (POPs monitoring as well). The Ministry of Natural Resources and Environmental Protection of the Republic of Belarus is responsible for the maintenance of this System.

The development and maintenance of environmental monitoring is supported by the Governmental Program of Development of the National System of Environmental Monitoring in the Republic of Belarus for the period of 2006-2010 (approved by Decree of the President of the Republic of Belarus of 18 April No.251). At present a Concept of similar Program for the period 2011-2015 is being developed by the Ministry of Environment.

In the framework of the National System of Environmental Monitoring (NSEM) and Information System of NSEM has been established, which provides informational exchange between kinds of monitoring, analysis of the data on environment and forecast of its changes caused by natural and anthropogenic factors. These data are also provided to governmental bodies, legal entities and citizens as well as international organizations in accordance with the international treaties of the Republic of Belarus.

There is a net of territorial laboratories of analytical control of the state of the environment united by the centralized laboratory of the Ministry of Environment.

The current Monitoring Plan of the EMP is mostly based on the capacity of the two laboratories – the laboratory of the Central Research Institute of Complex Use of Water Resources under the auspices of the Ministry of Natural Resources and Environmental Protection of Belarus and the Grodno regional analytical laboratory of the system of the Center of Hygiene and Epidemiology.

The laboratory of physical-chemical studies of the Central Research Institute of Complex Use of Water Resources is accredited in the Agency for Accreditation of Calibration and Test Laboratories of the Republic of Belarus (registration No. BY/112 02.1.0.0514 of 19.11.2007).

The accreditation scope of the laboratory is planned to be expanded to POPs analysis in soil and water in 2009-2010. Currently the laboratory receives technical assistance from the Central analytical laboratory of the Ministry of Natural Resources and Environment Protection to analyze POPs.

The laboratory equipment comprises the following:

- Liquid chromatograph "Styer";
- Microwave system of decomposition MARS-5;
- Water purification system Direct-Q3;
- Atom-absorption spectrophotometer "Saturn-3-P1" with the attachment Graphite-2;
- Atom-absorption spectrophotometer AAS-3;
- Liquid analyzer "Fluorite 02-2M" with the attachment "Termion".

In October 2009 the following equipment will be additionally procured and installed:

- Gas-chromatographer, Agilent Technologies (MOD 7890A) with flame-ionization and thermionic detector;
- Manual analytical equipment – WTW (System);
- Portable laboratory set – WTW (System);
- Orbital shaker – GFL (Mod 3005);
- Laboratory refrigerator – Angelantoni (Mod FCL 300/2TS-FO).

It is also planned to complete the gas-chromatographer with mass-spectrometer 5975 inert XL or mass-select detector to analyze POPs; procure necessary standards, chemical reagents; to organize training for personnel.

There are also methods of POPs detection and analysis in Belarus, apart from some methods of PCB and dioxins detection in some environmental media and biota. In such cases analogous international methods are used.

The Grodno regional analytical laboratory of the system of the Center of Hygiene and Epidemiology as most of the regional laboratories of the Ministry of Health has the necessary equipment for analysis of POPs in food products and drinking water, the laboratory received

technical assistance of the central laboratory of the Republican Research Practical Center of Hygiene to analyze POPs in biological material – blood and breast milk. The laboratory can also undertake passive air sampling on the territory of the landfill. There are necessary methods and the staff is well trained and qualified.

6.2 Risk mitigation plan

Environmental mitigation management plan contains information related to mitigation aspects of the proposed environmental impacts during project implementation and monitoring activities reflecting the implementation of mitigation aspects. The mitigation plan is presented below for activities on elimination or mitigation of harmful health and environmental impacts of obsolete pesticides (Table 1) and PCBs (Table 2).

A. RISK MITIGATION PLAN

Component III: POPs stockpiles and waste associated risk mitigation

Sub-component III.1.1: POPs obsolete pesticide stockpiles

Phase	Environmental Impact	Risk mitigation measures	Cost, US$ thousand	Institutional Responsibility
Preparatory				
• Improvement of a sand-gravel access road to the Slonim obsolete pesticide burial site	Cutting down some trees and bushes along the existing forest road		10	The Slonim District Executive Committee, Department of Capital Construction Works
• Cutting and removal of trees at the place of works within the Slonim obsolete pesticide burial site	Removal of vegetation (trees and bushes)	1. The trees will be cut down by a specialized local branch of the Ministry of Forestry (Slonim Forestry) with the minimum impact on adjacent vegetation; 2. After the works are completed and the body of the removed landfill is filled with clean soil Slonim Forestry will re-plant trees and bushes to preserve the same species of vegetation (trees) that grow on the territory of the landfill	20	The Slonim District Executive Committee, Slonim Forestry Contractor (Specialized Unit of MES)
• Opening of the Slonim obsolete pesticide burial site • Removal of the natural soil over the bunkers to uncover the covering structure and	1. Penetration of pesticides into soil and ground waters in case of precipitation during the opening of	1.1. Planning the recovery works in accordance with the weather forecast to exclude the possibility to work in unfavorable weather conditions	50	The Grodno Department of MES; oversight by MNREP, Contractor (Specialized Unit of MES)

lateral boundaries of the bunker; • Stockpiling of this soil on site • Undertaking sampling to confirm the absence of POPs pesticide contamination (Convention low POPs level – lower than 50 mg/kg); • Undertaking soil sampling in situ along the bunker boundaries to check if there is any soil contamination beyond the boundaries. • Removal of the covering structure (concrete) ; its storage in a secure location (covered and with ground surface protection), sampling to determine if it is contaminated and subsequently if mechanical cleaning (like a vacuum cleaner) would remove it; • Removal of the contents of the bunker, its re-packaging with ground cover for repackaging and temporary cover where the bunker site is open to prevent	the landfill 2. Distribution of dry powder pesticides by air (in dry and windy weather)	1.2 Proper arrangement of places for repackaging, rejected excavation and storage of containers – cover the ground with plastic film which should be changed after evident spillages of pesticides appear on it, polluted plastic film should be packaged and disposed of as low-concentration POPs waste. 1.3 Opening a limited part of the landfill for pesticides recovery so that a proper shed can be installed to protect this area from sunlight and precipitation. 2. Wetting of dry fine-dispersed chemicals and soil.		

infiltration of precipitation; • Repackaging of the soil and residuals with POPs contamination level above 50mg/ kg and treating them as POPs waste; • Repackaging of the lower POPs contamianted soil and taking it to Chechersk Hazardous Waste Storage Facility as low POPs content waste • Backfilling the bunker with uncontaminated stockpiled soil and imported soil as required, and with 10 cm compacted clay placed on top, followed by addition of native top soil and native grass planted.				
	3. Impact of chemicals on personnel (direct exposure to POPs, chemical poisoning)	3.1 Check-up of the personnel before and after works in accordance with the Resolution of the Ministry of Public Health of Belarus No.33 "On the Procedure of Compulsory Medical Examinations of Personnel" (2000). 3.2 Compulsory instruction of personnel about safe working procedures (in accordance with the	4	The Grodno Department of MES; oversight by MoH, Contractor (Specialized Unit of MES)

		Regulations on Obsolete Pesticides Management, (2005)). 3.3 Compulsory use of protective clothes and face masks. 3.4 Decontamination of protective clothes after completion of works. 3.5 Compulsory provision and use of machinery (bulldozers, excavators, scrapers) to cover burning pesticides with a layer of sand or soil in case of emergency.		
Operation				
• Repackaging of pesticides, contaminated soil and other contaminated materials into containers • Placement of containers at the temporary storage site • Loading of containers on trucks • Transportation of containers by trucks to one of the countries in Western Europe for disposal	1. Surface soil pollution caused by accidental spillages of pesticides during repackaging 2. Pollution of ground water caused by accidental spillages of pesticides during recovery and repackaging	1.1 Use of polyethylene film (make 10204-003, 10803-020) to cover the ground where pesticides are repackaged. 1.2 Provision of overpack recover drum during liquid pesticide pumping out. 1.3 Immediate transportation of containers with pesticides to the temporary storage site. 1.4 Storage of empty containers outside the zone where pesticides are repackaged. 2.1 Dyking and arrangement of an isolated network of storm collectors with a separate drain to prevent contamination of ground waters. 2.2 Regular sampling (after	890	The Grodno Department of MES; oversight by MNREP Contractor (Specialized Unit of MES), Laboratory of the Central Research Institute of Complex Use of Water Resources

		finishing every open part of the landfill, 4 samples of ground water shall be taken from each observation well situated on the perimeter of the landfill)		
	3. Spread of POPs pollution by air and soil caused by contaminated waste, soil and other materials	3.1 Preventive measures to account for potential dangerous hydro-meteorological conditions (strong wind or rain), including cessation of work and putting on a shed above the open part of the landfill. 3.2 Repackaging of all contaminated waste and used accessory materials. 3.3 Suspension of works and additional preventive measures in case considerable contamination of environmental media is recorded. 3.4 Degasifying treatment of sealed drums with recovered pesticides before loading and transportation	20	The Grodno Department of MES; oversight by MNREP, Contractor (Specialized Unit of MES)
	4. Potential personnel exposure	4.1 Check-up of the personnel before and after works in accordance with the Resolution of the Ministry of Public Health of Belarus No.33 “On the Procedure of Compulsory Medical Examinations of Personnel” (2000).	8	The Grodno Department of MES; oversight by MoH Contractor (Specialized Unit of MES)

		4.2 Compulsory instruction of personnel about safe working procedures(in accordance with the Regulations on Obsolete Pesticides Management, (2005)). 4.3 Compulsory use of protective clothes and face masks. 4.4 Decontamination of protective clothes after completion of works. 4.5 Compulsory provision and use of machinery (bulldozers, excavators, scrapers) to cover burning pesticides with a layer of sand or soil in case of emergency.		
	5. Local people exposure (the area can be easily reached by local people, especially in berry and mushroom season)	5.1. Surrounding of the territory of works with the fence and providing the guard during the night 5.2. Ban of access to the area of works for all people accept involved staff and control personnel 5.3. Provision of additional medical tests (blood tests) for local people in case they apply to the doctor with the symptoms of POPs impact	50	Contractor (Specialized Unit of MES) Chief Sanitary Doctor of the Slonim District
	6.Possible accidents during which trucks transporting toxic materials could be	Preparation and implementation of emergency plan including provisions for mitigating accidental hazardous materials		Contractor

	overturned or damaged lending to spillage on public roads	releases		
Decommissioning				
Improvement of the burial site territory	Potential spread of POPs residual contamination; Degradation of the area of the recovered landfill	1. Implementation of sampling programme (soil, ground waters and surface water in nearest wells) to identify residual contamination; if soil contamination goes beyond 50 mg/kg – this soil has to be extracted, repackaged and put to secure storage as low concentration POPs waste 2. Develop a long-term monitoring plan for the ground water to trace how residual contamination alters (should fade away with time). 3. In case some residual POPs contamination is found in wells – their use should be banned for people and a new source of pure drinking water should be provided 4. To rehabilitate the area of the recovered landfill a layer of clay should be put in place of the extracted pesticides and clean soil should be brought to the site to cover the clay lock. Trees and other vegetation typical for that part of the forest shall be	60	The Slonim Forestry Enterprise; local branch of MNREP, Laboratory of the Central Research Institute of Complex Use of Water Resources

		planted and taken care of (for the animals not to ruin newly planted trees and bushes)		
		Total	1112	

Sub-component III.1.2 PCBs management and phasing out

Phase	Environmental Impact	Risk mitigation measures	Cost, US$ thousand	Institutional Responsibility
Operation				
• Repackaging of contaminated soil and other PCB contaminated materials into containers • Loading of containers with PCB containing materials on trucks • Transportation of containers by trucks to the place of destruction	1.Soil pollution with PCB in case of accidental damage of the containers of capacitors during loading 2. Soil pollution with PCB in case of unfavorable weather conditions	1.1 Keeping in stock absorbents (sawdust of peat) to apply immediately after a spill from the damaged capacitor occurs; extraction and repackaging of contaminated absorbents; extraction of less contaminated soil and repackaging as low-concentration PCB waste; 1.2. Keeping in stock additional containers to replace the damaged ones in case of an accident 2.1 Installation of sheds to protect the place of loading and contaminated soil excavation places from precipitation. 2.2 Dyking and arrangement of an isolated network of storm collectors with a separate drain at the place of contaminated soil excavation in case of long period of excavation. 2.3 Storage of empty containers outside the zone of works to prevent potential contamination of containers.	80	Contractor for PCB collection and disposal, Lida District Executive Committee, RUE "Grodnoenergo" the Grodno Department of MES; oversight by MNREP
	3. Exposure risk for personnel	3.1 Check-up of the personnel before and after works in accordance with the Resolution of	4	Contractor for PCB collection and disposal, Lida District Executive

		the Ministry of Public Health of Belarus No.33 "On the Procedure of Compulsory Medical Examinations of Personnel" (2000). 3.2 Compulsory instruction of personnel about safe working procedures (In accordance with the Regulations on the Management of Equipment and Waste containing PCB, approved by Resolution of the Ministry of Natural Resources and Environmental Protection on 24 June 2008 No. 62 – hereinafter Resolution No.62). 3.3 Compulsory use of protective clothes and face masks (in accordance with Resolution 62). 3.4 Decontamination of protective clothes after completion of works.(in accordance with Resolution No.62)		Committee, RUE "Grodnoenergo the Grodno Department of MES; Chief Sanitary Doctor of the Lida District
	4.Possible accidents during which trucks transporting toxic materials could be overturned or damaged lending to spillage on public roads	Preparation and implementation of emergency plan including provisions for mitigating accidental hazardous materials releases		Contractor for PCB collection and disposal
Decommissioning				
Elimination of residual contamination spots	4. Residual PCB contamination of soil, vegetation expansion, spread of residual	4.1. Extraction of contaminated soil (it can be revealed by oil black spots and spots of "burnt" vegetation) 10 cm away from the	12	Contractor for PCB collection and disposal, Lida District Executive Committee,

	contamination to ground and surface waters	edge of the spot and 10 cm deeper than the PCB penetrations, packaging of contaminated soil, and auxiliary materials into a container and further disposal as PCB waste 4.2 Covering extracted spots with clean soil or crusted stone, planting trees or other plants where appropriate		RUE "Grodnoenergo, the Grodno Department of MES; oversight by MNREP The Lida Forestry
		Total	101	

6.3 Monitoring Plan

Monitoring plan is correlated with the risk mitigation plan and contains two tables.

Table 1 lists the project monitoring activities during OPs elimination; Table 2 lists the project monitoring activities during elimination of the site for storage of PCB containing materials.

B. MONITORING PLAN

Component 1: POPs stockpiles and waste associated risk mitigation

Sub-component 1.1: POPs obsolete pesticide stockpiles

							Responsibility	
Phase	**What** *parameter is to be monitored?*	**Where** *is the parameter to be monitored?*	**How** *is the parameter to be monitored/type of monitoring equipment?*	**When** *is the parameter to be monitored? – frequency or conditions of measurements?*	**Why** *is the parameter to be monitored?*	**Cost,** US$ thousand	**Installation**	**Operation**
Baseline	• Soil quality • Air quality • Ground water quality • Quality of drinking water in wells • Health of personnel	• Quality of air, soils and ground waters at OPs storage sites • Monitoring of drinking water quality in wells in villages close to POPs sources • Personnel health monitoring	• Chemical tests • Medical check-up • Blood tests for personnel	Before the start of project activities	Identification of baseline conditions before the start of project activities	15	Certified analytical laboratory, Center of Hygiene and Epidemiology	Certified analytical laboratory, Center of Hygiene and Epidemiology
Preparatory	• Soil quality • Air quality Health of personnel	• Quality of air, soils and ground waters at OPs storage sites • Personnel health monitoring	• Chemical tests • Medical check-up	• Daily • Daily, before the start and after completion of project activities	Monitoring of impact on the environment and health of personnel	15	Certified analytical laboratory, Center of Hygiene and Epidemiology	Certified analytical laboratory, Center of Hygiene and Epidemiology

Operation	• Soil quality • Air quality • Ground water quality • Quality of drinking water in wells • Health of personnel	• Quality of air, soils and ground waters at OPs storage sites • Monitoring of drinking water quality in wells in villages close to POPs sources • Personnel health monitoring	• Chemical tests • Medical check-up	• Daily • Daily, before the start and after completion of project activities	Monitoring of impact on the environment and health of personnel	25	Certified analytical laboratory, Center of Hygiene and Epidemiology	Certified analytical laboratory, Center of Hygiene and Epidemiology
Decommissioning	• Ground water quality • Quality of drinking water in wells	• Quality of ground waters at OP storage sites • Monitoring of drinking water quality in wells in villages close to pesticide burial sites	• Chemical tests	Annually, for at least three years	Implemented activities efficiency monitoring	20	Certified analytical laboratory, Center of Hygiene and Epidemiology	Certified analytical laboratory, Center of Hygiene and Epidemiology
					Total	75		

Component 1: POPs stockpiles and waste associated risk mitigation
Sub-component 1.1: PCBs management and phasing out

							Responsibility	
Phase	**What** *parameter is to be monitored?*	**Where** *is the parameter to be monitored?*	**How** *is the parameter to be monitored/type of monitoring equipment?*	**When** *is the parameter to be monitored? – frequency or conditions of measurements?*	**Why** *is the parameter to be monitored?*	**Cost,** US$ thousand	**Installation**	**Operation**
Baseline	• Soil quality • Air quality • Ground water quality • Quality of drinking water in wells • Health of personnel	• Quality of air, soils and ground waters at PCBs storage sites • Monitoring of drinking water quality in wells in villages close to POPs sources • Personnel health monitoring	• Chemical tests • Medical check-up • Blood tests for personnel	Before the start of project activities	Identification of baseline conditions before the start of project activities	10	Chemical tests – laboratory of the Central Research Institute of Complex Use of Water Resources medical tests and drinking water tests - Certified analytical laboratory, Center of Hygiene and Epidemiology	Chemical tests – laboratory of the Central Research Institute of Complex Use of Water Resources medical tests and drinking water tests - Certified analytical laboratory, Center of Hygiene and Epidemiology

Preparatory	• Soil quality • Air quality Health of personnel	• Quality of soils at PCBs storage sites • Personnel health monitoring	• Chemical tests • Medical check-up	• Daily • Daily, before the start and after completion of project activities	Monitoring of impact on the environment and health of personnel	2	Chemical tests – laboratory of the Central Research Institute of Complex Use of Water Resources medical tests and drinking water tests - Certified analytical laboratory, Center of Hygiene and Epidemiology	Chemical tests – laboratory of the Central Research Institute of Complex Use of Water Resources medical tests and drinking water tests - Certified analytical laboratory, Center of Hygiene and Epidemiology
Operation	• Soil quality • Air quality • Ground water quality • Quality of drinking water in wells • Health of personnel	• Quality of air, soils and ground waters at PCBs storage sites • Monitoring of drinking water quality in wells in villages close to POPs sources • Personnel health monitoring	• Chemical tests • Medical check-up	• Daily • Daily, before the start and after completion of project activities	Monitoring of impact on the environment and health of personnel	10	Chemical tests – laboratory of the Central Research Institute of Complex Use of Water Resources medical tests and drinking water tests - Certified analytical laboratory, Center of Hygiene and Epidemiology	Chemical tests – laboratory of the Central Research Institute of Complex Use of Water Resources medical tests and drinking water tests - Certified analytical laboratory, Center of Hygiene and Epidemiology

Decommissioning	• Quality of soils • Quality of drinking water in wells	• Quality soils at PCBs storage site • Monitoring of drinking water quality in wells in villages close to PCBs storage sites	• Chemical tests	Annually, for at least three years	Monitoring of the implemented activities efficiency	20	Chemical tests – laboratory of the Central Research Institute of Complex Use of Water Resources medical tests and drinking water tests - Certified analytical laboratory, Center of Hygiene and Epidemiology	Chemical tests – laboratory of the Central Research Institute of Complex Use of Water Resources medical tests and drinking water tests - Certified analytical laboratory, Center of Hygiene and Epidemiology
					Total	42		

7 PUBLIC PARTICIPATION

Significance of environmental impact assessment is determined by the provisions of the international conventions and the national legislation and also by the fact that EIA procedure allows to engage all stakeholders including local authorities and NGOs in preparation and implementation of the project activities. Therefore, EIA helps identify the most environmentally appropriate solutions and ensures project ownership and commitment at the local level thus allowing achieving the project objectives at the lowest cost.

Article 4 «Main principles of environmental protection» of the **Law of the Republic of Belarus «On Environmental Protection»** requires for EIA of the intended economic and other activity which may entail the harmful impact on the environment and may threaten life, health and property of individuals and, also, provides for compulsory engagement of the government agencies, non-governmental organizations, other legal entities and individuals in environmental protection activities. Article 12 «Rights and duties of individuals with regard to environmental protection» articulates the right of individuals to participate in elaboration and discussion of materials on EIA of the intended economic and other activity; to make proposals on carrying out public ecological expert examination and to participate in it in accordance with the procedure specified in the Belarusian legislation. Article 15 articulates the «Rights and duties of non-governmental organizations dealing with environmental protection» with regard to elaboration and discussion of materials on EIA of the intended economic and other activity.

In accordance with the national legislation and WB requirements, at the project **preparation** and implementation stages it is intended to engage local communities and local authorities of the project areas in implementation of the project activities and to broadly inform all stakeholders about the project through the mass media.

7.1. Public participation in project preparation

The following forms of public participation are envisaged during EIA of the project:

- presentation of information about the intended project activities in mass media;
- assessment of acceptability of the intended activities and presentation of alternative proposals during public consultation meetings in the areas of the intended project activities;
- evaluation of the adjusted EIA report based on the proposals made.

Two rounds of public consultation in the key project areas (Slonim and Lida) were planned and held during elaboration of EIA report (Annexes 3-6). The information materials covering the intended project activities, the list of alternative options and preliminary EIA were elaborated. The information was posted on websites of the Slonim and Lida District Executive Committees and published in local media (Annex 15). Local TV channel in Slonim prepared a short video clip on the issue of the Slonim obsolete pesticides burial elimination; the video clip

was circulated during several news releases. Public consultations demonstrated high level of interest of local households and local authorities in addressing the problem of POPs in these communities. In Slonim participants urged the implementation of the planned work, their major concern was that financing may not be allocated for this work. It was explained that in case of approval of the project proposal by the World Bank and the GEF the necessary funds will be allocated and there will be no interruptions with the payments if the work is properly done. Public consultations proved to be highly effective: based on the results of public consultations in Lida, the elimination of POPs obsolete pesticide warehouse at the Gutno railway station was included in the list of priority project activities. The Minutes of the Public hearings, list of participants and copies of news releases from the Internet sites and local newspapers are annexed to this report (Annexes 3-6, 15).

7.2 Public participation in project implementation

Community engagement in project implementation is envisaged by Sub-components 2.2 and 3.4. Success of the project would largely depend of the scope of engaging NGOs, local communities and local authorities in project activities. Experience of the environmental projects implemented in Belarus has demonstrated that NGOs can be active supporters and full participants in project monitoring but can also be «destroyers» of projects in case of inappropriate policy of interaction with them. To secure successful implementation of the first option, the following steps are envisaged at the project implementation stage:

- prompt dissemination of comprehensive information about the project activities and their effectiveness. Important role should be played by a specialized website www.soz.minpriroda.by (MNREP official website covering the Stockholm Convention implementation progress in Belarus) which already presents information about the project and some other information materials related to POPs management in Belarus;

- engagement of NGOs, local communities and local authorities primarily in the Slonim and the Lida districts in project activities related to various aspects of the project implementation (regular publication in the local media of the information about the project implementation progress, condition of the environment and further steps; workshops to discuss implementation progress with a view of possible adjustment of local level activities and etc.);

These efforts would allow to convince local communities and authorities that the project will result in elimination or considerable mitigation of the risk of POPs impact on public healthand the environment.

8. CONCLUSION

Persistent Organic Pollutant Stockpile Management and Technical/Institutional Capacity Upgrading Project is of strategic importance for Belarus. Its approval and implementation will help Belarus build up the required technical, institutional and expert capacity which would allow the country to undertake further measures, mainly with its own efforts, aimed at elimination of health and environmental risks associated with POPs stockpiles. The proposed project options provide for general capacity-building and adoption of international best practices of both addressing POPs stockpiles and eliminating prioritized POPs storage sites which already produce harmful impact on the environment.

Obviously, the adopted options for the elimination of OPs and PCB stockpiles create a certain risk of potential contamination of the environment. Risk mitigation plan and monitoring plan have been developed to minimize this risk. Comprehensive implementation of these plans would allow to ensure safe performance of works and to achieve project objectives with minimal damage for the environment and public health.

Implementation of the project would allow making a considerable step forward in achievement of the strategic objective specified in the Stockholm Convention and the National Implementation Plan, notably protection of human health and the environment from harmful impacts of persistent organic pollutants.

ANNEX 1. EIA REPORT PREPARATION TEAM

1. Alexander Stankevich, Consultant on Environmental Impact Assessment
2. Marina Belous, Consultant on Preparation of detailed Monitoring and Evaluation Plan for FSP
3. Saveliy Kuzmin, PhD, Consultant on POPs monitoring network
4. Tamara Kukharchik, Doctor of Science. Consultant on PCB management
5. Sergei Kakareka, Doctor of Science, Consultant on unintentional releases of POPs
6. Galina Mikhalap, Deputy Head of the Specilaized Inspectorate of Waste management of the MNREP
7. Yuri Soloviev, Consultant on Strengthening the beneficiary's institutional capacity to implement the FSP
8. Svetlana Utochkina, Head of the Specialized Inspectorate of Environmental Monitoring and Analytical Control

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ANNEX 3. MINUTES OF PUBLIC CONSULTATIONS

(round 1)

12.00
6 May 2009

The **Lida** District Executive Committee

Chairman: Yuri V. Soloviev, Project Consultant

Persons present: participants of the public consultations, residents of the town of Lida and the Lida District (the registration list is attached)

Agenda: Discussion of the planned activities on transferring the dismantled PCB containing capacitors temporary stored at the storage site in the Minoity village for ESM destruction/secure storage and the Terms of Reference for Environmental Impact Assessment of the planned project activities

Mr. Soloviev informed the participants of the public consultations about the international obligations of the Republic of Belarus under the Stockholm Convention on Persistent Organic Pollutants and Belarus' National Implementation Plan of the Stockholm Convention. The participants were briefed about the key objectives of the large-scale POPs management project, the planned activities, implementing agencies and available funding.

Mr. A. Stankevich presented a more detailed overview of the planned activities on management of PCB containing equipment temporary stored at the site in the Minoity village and alternative options of addressing the issue. He briefed the participants of the public consultations about the content of the Terms of Reference for Environmental Impact Assessment of the planned project activities.

The participants of the public consultations asked the following questions and made the following comments:

1. Dismantled PCB containing equipment has been delivered to the storage site in the Minoity village from almost all parts of the Oblast; obviously, the residents do not need this storage site.

2. Is there a guarantee that the planned activities will be implemented in full and will not be suspended? Is there a risk that funding will be discontinued?

3. Who is designing the project?

4. When will the project activities start?

5. Can we be sure that we will get rid of PCBs for 100% and that they will not be longer present in the environment? So far not everybody knows about the storage site, we should not frighten people to avoid speculations and unreasonable panic.

6. Three years ago 43 tons of obsolete pesticide mixtures containing DDT were placed in the storehouse in the Gutno village according to the archival documents of collective farms which used these chemicals in the past. The storehouse is located in the third zone of a water intake and

water from the water intake is supplied to half of municipal districts of Lida. This issue has been repeatedly raised, but there is no funding available, though it is very important to eliminate this source of potential contamination of drinking water with obsolete pesticides including POPs pesticides.

7. We know that 4 containers and BYR 7 million are needed for packaging of capacitors which have been recently delivered and are stored at the site in the Minoity village. When will it be done, by whom and who will provide funding?

8. A representative of the GrodnoEnergo answered the previous question: the funding is already available; in June 2009 the remaining capacitors will be packaged, like all other capacitors.

9. Preliminary work on informing local residents about the project activities is needed to establish sound contacts with local communities to support the project implementation. It is also important to compare the findings of the analysis of samples which are collected and tested by local agencies against the findings of the analysis of samples collected and tested by other organizations.

10. There was an incident when a one-year-old child got sick, his skin became of chocolate color; some people associated this incident with the fact that sovol had been used at the "Lakokraska" enterprise. Is it possible?

11. How quickly will the planned activities be implemented?

Chairman	(signed)	Y.V. Soloviev
Secretary	(signed)	A.E. Khlevinsky

Participants registration list

1. Vladimir Vashchuk, Chief Sanitary Doctor of the Lida Zonal Center of Hygiene and Epidemiology
2. Ruslan Melnik, chide specialist of the Department on Youth Affairs of Lida District Executive Committee
3. Elena Valyuk, Chair of the Tretyakovskiy Rural Executive Committee
4. Inessa Belush, Chief of Ideological department of Lida Executive Committee
5. Sergey Lunya, Head of :Lida City-District Inspectorate of Natural Resources and Environment Protection
6. Svetlana Baboshenkova, Chief of Department on Youth Affairs of Lida District Executive Committee
7. Andrei Semenov, second secretary of City Committee of Public Organization "BRSM"
8. Nadezhda Burakevich, chief agronomist of Agriculture and Food Department of Lida District Executive Committee
9. Valentin Ostrovets, chief engineer of Agriculture and Food Department of Lida District Executive Committee
10. Yuri Yasko
11. Irina Tur, Director of City Palace of Culture
12. Vil Detskiy
13. Petr Gordeyenok
14. Alexander Khvoinitskiy

15. Yevgeniy Orekhvo
16. Genrikh Paleichik
17. Ivan Bychek, Head of Processing Sector of Agriculture and Food Department of Lida District Executive Committee
18. Yevgeniy Stepanuyk, Chief specialist on Labor Protection of Agriculture and Food Department of Lida District Executive Committee
19. Irina Zdanovich, Secretary of the Tretyakovskiy Rural Executive Committee
20. Valery Boyarovskiy, Deputy chief engineer of Lida electrical networks
21. Andrei Khlevinskiy, Chair of the Council of Public Organization "Development – XXI Century", consultant of the project
22. Marina Belous, consultant of the project
23. Yuri Solovjev, consultant of the project
24. Alexander Stankevich, EIA consultant of the project

ANNEX 4. MINUTES OF PUBLIC CONSULTATIONS

(round 1)

14.00
7 May 2009

The **Slonim** District Executive Committee

Chairperson: Marina V. Belous, Project Consultant

Persons present: participants of the public consultations, residents of the town of Slonim and the Slonim District (the registration list is attached)

Agenda: Discussion of the planned activities on the elimination of the Slonim obsolete pesticide burial site and the Terms of Reference for Environmental Impact Assessment of the planned project activities

V.A. Apanovich, Deputy Chairman of the Slonim District Executive Committee, welcomed the participants of the public consultations and emphasized importance of the planned activities on the elimination of the Slonim obsolete pesticide burial site for the district.

M.V. Belous informed the participants about the international obligations of the Republic of Belarus under the Stockholm Convention on Persistent Organic Pollutants, harmful impacts of POPs and Belarus' National Implementation Plan of the Stockholm Convention. The participants were briefed about the key objectives of the large-scale POPs management project, the planned activities, implementing agencies, available funding and the content of the Terms of Reference for Environmental Impact Assessment of the planned project activities.
A video reel about the burial site and its elimination produced by a local TV channel was demonstrated to the participants of the public consultations.

The participants of the public consultations asked the following questions and made the following comments:

1. Stop saying that it is the burial site of Slonim, let's admit that chemicals have been delivered to it from at least four districts and now we have to solve the problem but we are unable to allocate funds to finance the elimination. So, if you can help us, let's proceed from words to deeds. I am confident that the area of the burial site is not 3.5 ha as the expert (A.P. Stankevich) said but is already much larger.

2. We have been talking about the burial site and its elimination for already 15 years, but nothing has been done so far.

3. Given health impacts of chemicals buried here, the activities on their recovery and elimination should start immediately.

4. People pick up mushrooms near the burial site, is it dangerous?

5. The expert claims that pesticides were buried in sacks, but during engineering works drums were found out at depth of 60-70 cm.

6. There is a forest aged 35-40 years within the site, who will cut and root out? How wood will be used? Is this wood hazardous?

Chairperson (signed) M.V. Belous

Secretary (signed) A.E. Khlevinsky

Participants registration list

1. Marina Belous, project consultant
2. Pavel Shurko, Deputy Director of OJSC “Slonimskiy Agroservice”
3. Leonid Khvesenya, Leading agronomist of OJSC “Slonimskiy Agroservice”
4. Sergey Yushkevich, head of department of ideological work of the District Executive Committee
5. Konstantin Dyatchik, deputy head of department of ideological work of the District Executive Committee
6. Vadim Eremeichik, chief forester of “Slonimskiy Leskhoz”
7. Vyacheslav Apanovich, Deputy Chair of District Executive Committee
8. Valeriy Poznyak, head of Land use and Geodesy Service of the Slonim District
9. Sergey Goronovskiy, acting head of the Slonim District department of the Ministry of Emergency Situations
10. Anatoly Tepin, Chief Sanitary Doctor of the Slonim District
11. Ivan Tikhanovich, Director of OJSC “Slonimskiy Agroservice”
12. Alexei Kuleshevich, leading specialist of the Slonim City-District Inspectorate of Natural Resources and environmental Protection
13. Elena Sidorenko, leading specialist of the Slonim City-District Inspectorate of Natural Resources and environmental Protection
14. Sergey Zhersh, Director of Slonim Reclamation systems
15. Tatiana Deshko, journalist of newspaper “Slonimskiy Vestnik”
16. Nikolai Degtyaryov, head of the Slonim City-District Inspectorate of Natural Resources and environmental Protection
17. Vadim Tsvikevich, First Secretary of the Council of Public Organization “BRSM”
18. Olga Fidrin, chief specialist of Public Organization “BRSM”
19. Olga Khreshchin, chief specialist of Public Organization “BRSM”
20. Elena Rusan, chief accountant of the district branch of “Belarusian Society of Hunters and Fishermen”
21. Alexander Khvedchenya, member of Council of NGO “Development – XXI Century”

Alexander Stankevich, EIA consultant of the projec

ANNEX 5. MINUTES OF PUBLIC CONSULTATIONS

(the second round)

12.00
7 July 2009

The **Lida** District Executive Committee

Chairman: Yuri V. Soloviev, Project Consultant

Persons present: participants of the public consultations, residents of the town of Lida and the Lida District (the registration list is attached)

Agenda: Discussion of the activities on transferring dismantled PCB containing capacitors temporary stored at the storage site in the Minoity for ESM destruction/secure storage; removal of POPs obsolete pesticides from the storehouse in the Gutno village (the Lida District) and the draft EIA report.

Mr. Soloviev briefed the participants about the activities of the intended large-scale project on transferring dismantled PCB containing capacitors temporary stored at the storage site in the Minoity for ESM destruction/secure storage and removal of POPs obsolete pesticides from the storehouse in the Gutno village (the Lida District) which have been elaborated based on the results of the first round of the public consultations held in Lida on 6 May 2009. Mr. Soloviev presented a draft EIA report.

The participants of the public consultations asked the following questions and made the following comments:

1. If the project starts, it will be needed to actively inform local communities about the implementation progress and achievements.

2. The Belarusian Non-Governmental Association "Development-XXI Century" should assist local communities in organizing information events related to POPs management.

3. When and who will approve a project?

4. Is it expected to involve departments of the Ministry on Emergency Situations in performance of works to ensure safety?

5. What will happen to the Minoity site after removal of PCB containing capacitors? Does the project provide for clean up and rehabilitation of soils within the site?
6. Does the budget on removal of PCB containing capacitors include the cost of road police escort to avoid potential traffic accidents?

7. Who will conduct local environmental monitoring at the project site?

Based on the results of the discussion, the participants of the second round of the public consultations in Lida supported the proposed project activities on transferring PCB containing capacitors stored at site in the Minoity village for ESM destruction/secure storage and the activities on removal and subsequent ESM destruction/secure storage of POPs obsolete pesticides stored at the temporary storage site in the Gutno village (the Lida district).

Chairman (signed) Y.V. Soloviev

Secretary (signed) A.E. Khlevinsky

Participants registration list

1. Yuri Solovjev, consultant of the project
2. Alexander Khvedchenya, member of Council of NGO “Development – XXI Century”
3. Genrikh Paleichik, chief lawyer of Agriculture and Food Department of Lida District Executive Committee
4. Vladimir Vashchuk, Chief Sanitary Doctor of the Lida Zonal Center of Hygiene and Epidemiology
5. Valery Boyarovskiy, Deputy chief engineer of Lida electrical networks
6. Vil Detskiy, Chair of Belarusian Public Association of Veterans
7. Svetlana Baboshenkova, Chief of Department on Youth Affairs of Lida District Executive Committee
8. Alexander Novik, invited
9. Sergey Lunya, Head of :Lida City-District Inspectorate of Natural Resources and Environment Protection
10. Ivan Yushkevich, chief engineer of OJSC “Lida-Agrokhimservice”
11. Sergey Velichko, engineer of CJSC “Kaskad”
12. (handwriting cannot be deciphered)

ANNEX 6. MINUTES OF PUBLIC CONSULTATIONS (the second round)

14.00
30 June 2009

The **Slonim** District Executive Committee

Chairperson: Marina V. Belous, Project Consultant

Persons present: participants of the public consultations, residents of the town of Slonim and the Slonim District (the registration list is attached)

Agenda: Discussion of the planned activities on the elimination of the Slonim obsolete pesticide burial site and the draft EIA report

M.V. Belous informed the participants about the activities on the elimination of the Slonim obsolete pesticide burial site which have been developed based on the results of the first round of the public consultations held on 7 May 2009 in Slonim and presented the draft EIA report.

The participants of the public consultations asked the following questions and made the following comments:

1. Is it expected to clean up and rehabilitate the territory of the burial site after its elimination is completed?

2. Is it expected to involve local authorities in elaboration of the Regulation "Organization and performance of works on opening, recovery, repackaging and transportation of the obsolete pesticides at the Slonim burial site"?

3. Is it expected to inform the public about the implementation of the activities on the elimination of the Slonim burial site? Who will be responsible for this?

4. An information center should be established during the project implementation to provide the information to all stakeholders about the activities on the elimination of the burial site.

Based on the results of the discussion, the participants of the second round of the public consultations in Slonim supported the proposed project activities on the elimination of the Slonim obsolete pesticide burial site including repackaging, removal and subsequent ESM destruction of POPs obsolete pesticides recovered from the burial site.

Chairperson (signed) M.V. Belous

Secretary (signed) A.E. Khlevinsky

Participants registration list

1. Oleg Vrublevskiy, Director of "Slonimskiy Leskhoz"
2. Vladimir Zhomudo, representative of CUE "Slonim Crushing Sorting Plant"
3. Ivan Tikhanovich, Director of OJSC "Slonimskiy Agroservice"
4. Olga Fidrin, chief specialist of Public Organization "BRSM"
5. Olga Khreshchik, chief specialist of Public Organization "BRSM"

6. S. Sygantovich, Deputy Head of Slonim District department of the Ministry of Emergency Situations
7. A. Shiderskiy, leading specialist of Land use and Geodesy Service of the Slonim District
8. Tatiana Deshko, journalist of newspaper “Slonimskiy Vestnik”
9. Elena Sidorenko, leading specialist of the Slonim City-District Inspectorate of Natural Resources and environmental Protection
10. Ivan Krinchik, leading specialist of the Slonim City-District Inspectorate of Natural Resources and environmental Protection
11. Alexei Kuleshevich, leading specialist of the Slonim City-District Inspectorate of Natural Resources and environmental Protection
12. Pavel Shurko, Deputy Director of OJSC “Slonimskiy Agroservice”
13. Alexander Ivkevich, chief specialist of OJSC “Slonimskiy Agroservice”
14. Leonid Khvesenya, Leading agronomist of OJSC “Slonimskiy Agroservice”
15. Sergey Zhersh, Director of Slonim Reclamation systems
16. Marina Belous, project consultant

ANNEX 7. MAP OF PESTICIDES MONITORING POINTS

Figure 3. Network of pesticide monitoring points

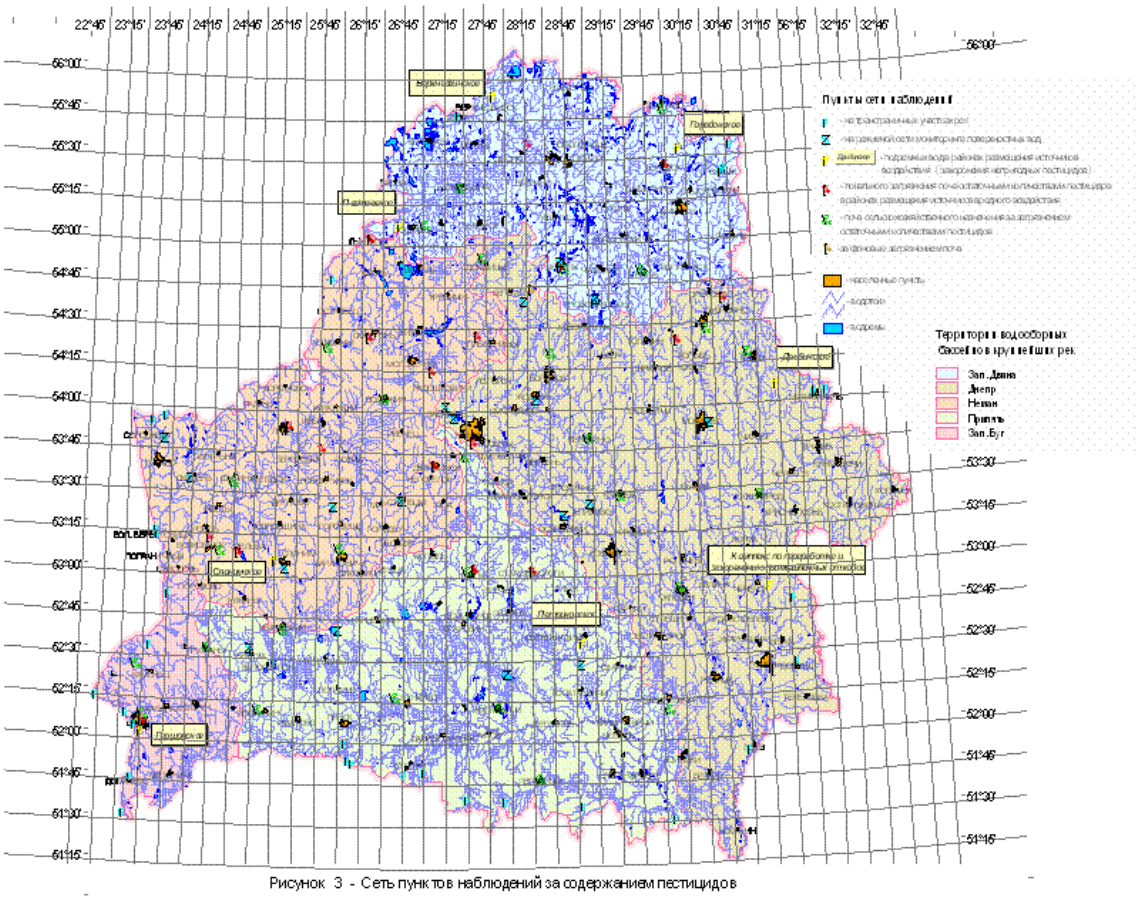


Рисунок 3 - Сеть пунктов наблюдений за содержанием пестицидов

ANNEX 8. MAP OF PCB MONITORING POINTS

Figure 4. Network of PCBs monitoring points

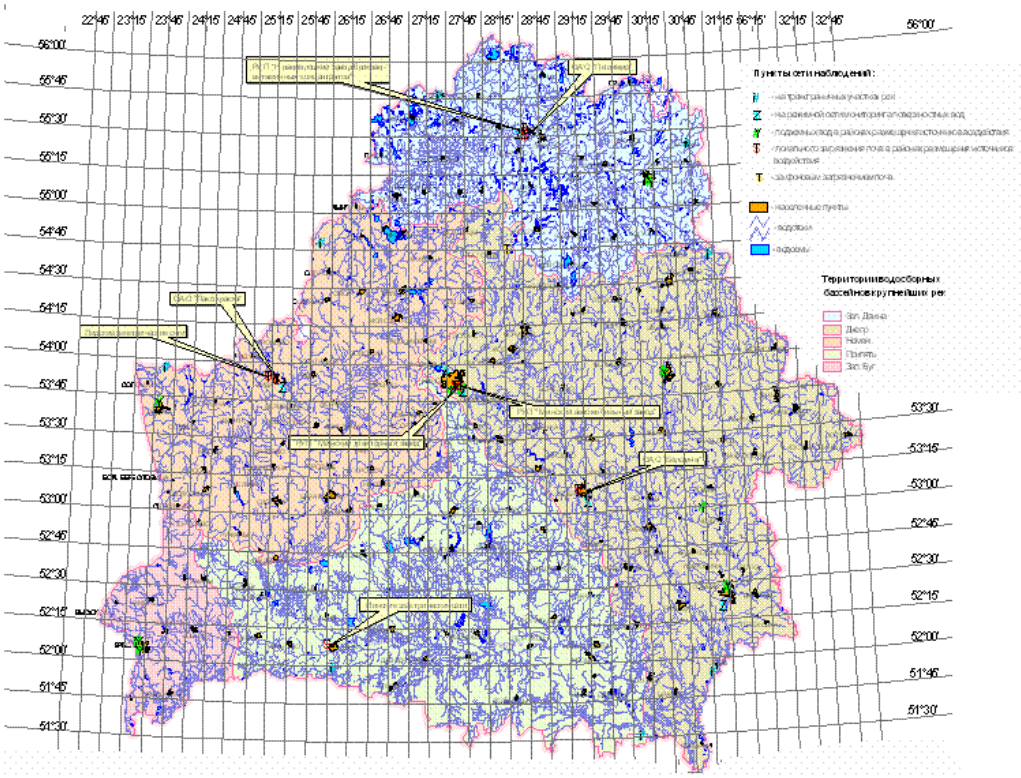
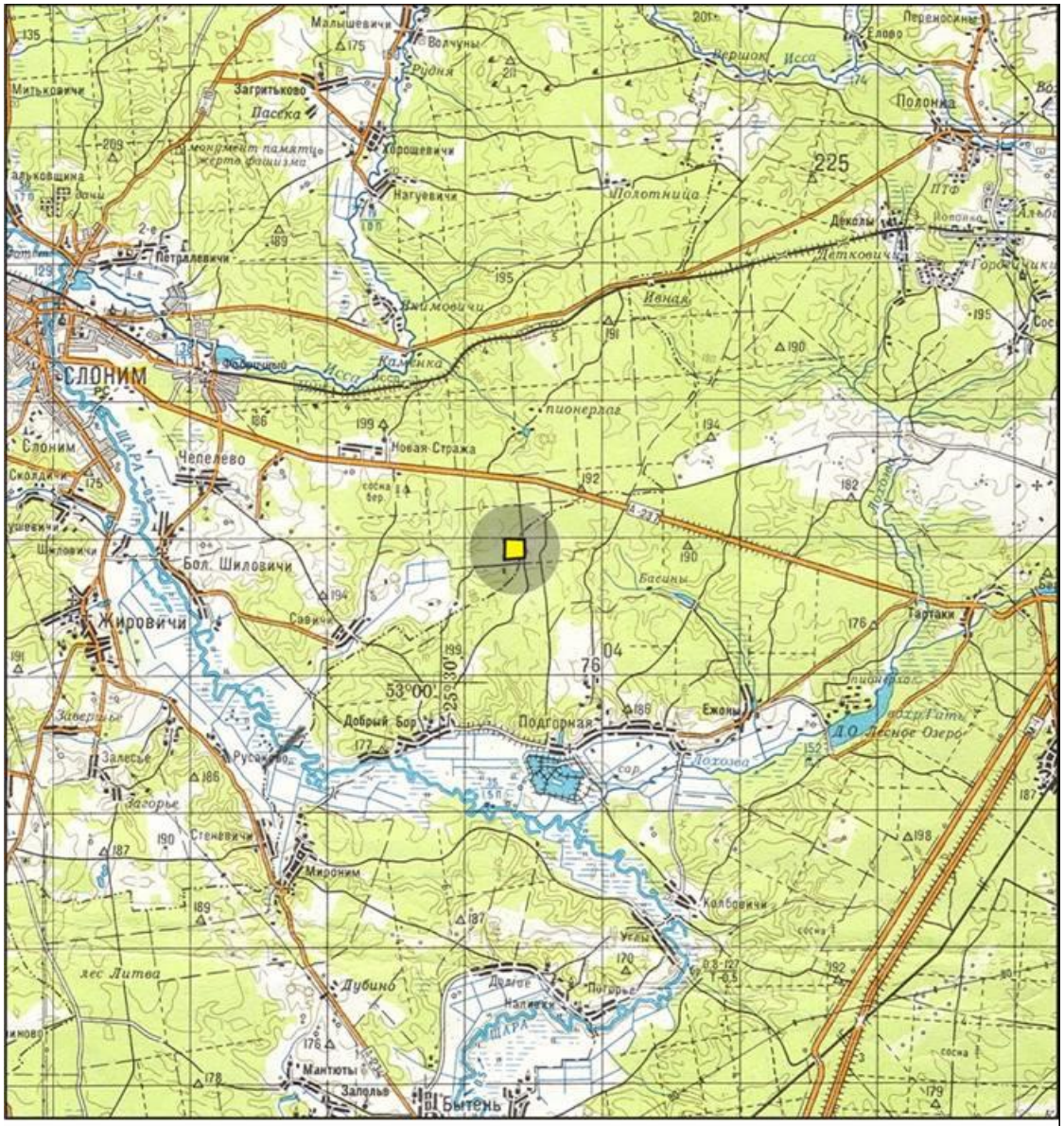


Рисунок 4 - Сеть пунктов наблюдений за содержанием ПХБ

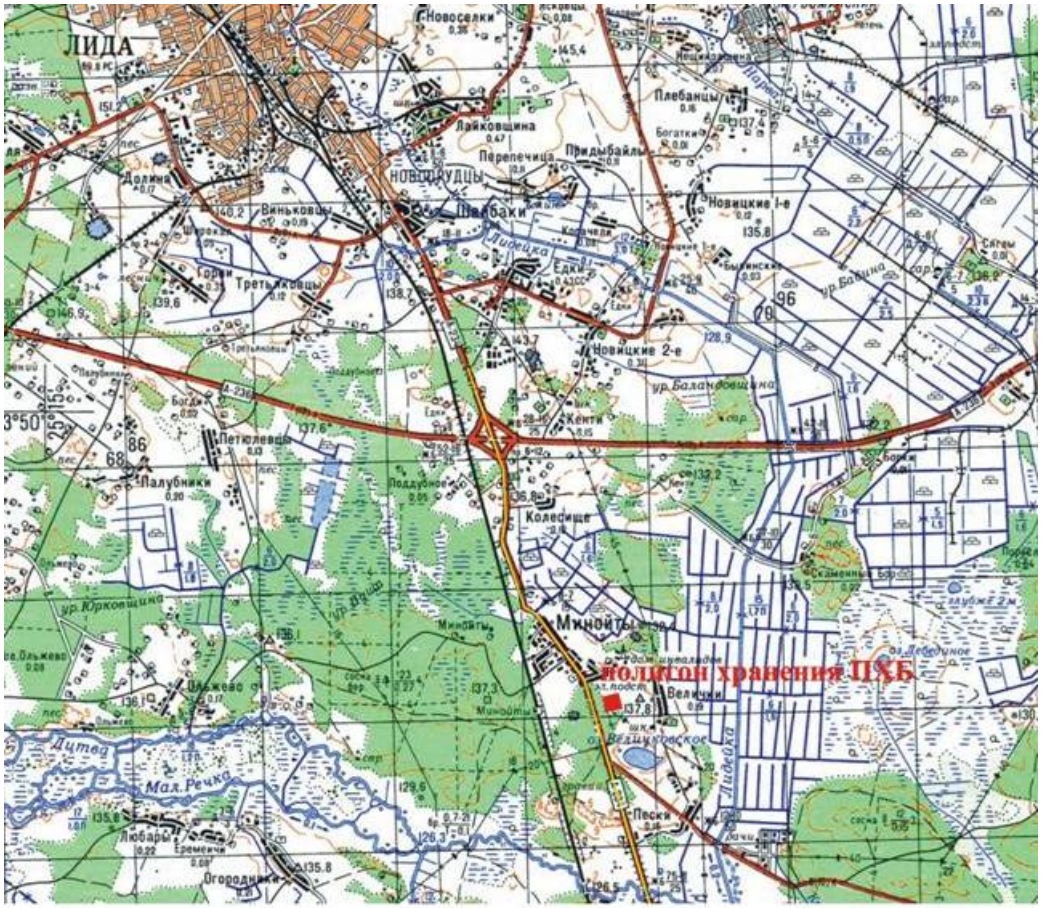
ANNEX 9. MAP OF THE SLONIM OBSOLETE PESTICIDE BURIAL SITE

Figure 5. Map of the Slonim obsolete pesticide burial site



ANNEX 10. MAP OF THE PCB CONTAINING EQUIPMENT STORAGE SITE IN THE MINOITY VILLAGE (THE LIDA DISTRICT)

Figure 6. Map of the PCB containing equipment storage site in the Minoity village (the Lida district)



ANNEX 11. DATA OF THE INVENTORY OF POPS OBSOLETE PESTICIDES STOCKPILED IN WAREHOUSES IN THE REPUBLIC OF BELARUS

Oblast/ District	Residential settlement	Total amount of pesticides, tons	including POPs pesticides			Aggregate state	Method of storage
			DDT	mixtures	liquids		
1	2	3	4	5	6	7	8
The Brest Oblast							
The Baranovichy district	Baranovichi	11.845	0.000	11.845	0.0	Solid, powdered	At trays; paper and plastic sacks
The Berioza district	Berioza	5.586	0.000	1.620		Liquid	Metal drums
Brest City	Household Chemistry Factory	0.829	0.829	0.000	0.0	Solid, powdered	Plastic sacks
The Gantsevichi district	Malkovichi	1.000	0.000	0.792	0.0	Solid, powdered	Plastic sacks
The Gantsevichi district	Radzialovichi	1.000	0.000	1.000	0.0	Solid, powdered	Paper sacks
The Liakhovichi district	Liakhovichi	2.182	0.000	0.900	0.0	Powdered	Plastic sacks
The Liakhovichi district	Gorodische	0.210	0.000	0.120	0.0	Powdered	Plastic sacks
The Pinsk district	Krainovichi	2.649	0.000	0.860	0.0	Powdered	Plastic sacks
The Pruzhany district	Pruzhany	0.030	0.000	0.030	0.0	Solid, powdered	Plastic sack sealed in a drum
The Pruzhany district	Dolki	0.580	0.000	0.580	0.0	Solid, powdered	Plastic sacks
The Pruzhany district	Yundely	0.200	0.000	0.200	0.0	Solid, powdered	Plastic sacks
The Stolin district	Bukhlichi	0.100	0.000	0.100	0.0	Powdered	Plastic sacks
The Stolin district	Mankovichi	0.080	0.000	0.080	0.0	Powdered	Plastic sacks
The Grodno oblast							
The Volkovysk district	Lapenitsa	4.2695	0	2.545	0	Solid	Plastic bags
The Volkovysk district	Dubichi	3.987	0	2.5183	0	Solid	Plastic bags
The Volkovysk district	Neverovichi	3.5363	0	2.302	0	Solid	Plastic bags
The Volkovysk district	The Ros Station	232.276	0.097	232.179	0	Powdered / unknown	Drums
The Voronovo district	Bastuny	36.2	0	36.2		Unknown	Drums
The Grodno district	Kvasovka	15.0927	0	15	0	Solid	In bulk
The Grodno district	Malakhovichi	3.977	0	3	0	Solid	In bulk
The Grodno district	Aricultural farms in the Grodno district	90.247	0	90.247		Unknown	Drums
The Grodno district	The Grodno District Agro Service OJSC	14.853	0	14.853		Unknown	Drums
The Zelva district	The Zelva Agricultural Chemistry	404.952	0.166	404.952		Unknown	Drums

The Ivie district	OJSC The Ivie Agricultural Machinery OJSC, the Gavia station	34.2835		34.2835		Unknown	Drums
The Ivie district	The Ivie Agricultural Machinery OJSC, the town of Ivie	36.6235		36.6235		Unknown	Drums
The Ivie district	Eigerdy	10.467		10.467		Unknown	Drums
The Ivie district	Dailidy	4.883		4.883		Unknown	Drums
The Lida district	The Lida Agricultural Technical Services OJSC, the Gutno village	42.536		42.536		Unknown	Drums
The Novogrudok district	The Leschanka village (a hangar of a military unit)	218.399		218.399		Unknown	Drums
The Smorgon district	The Smorgon Agro Service OJSC (a hangar of a military unit), the Belkovschina village	211.453		211.453		Unknown	Drums
The Lida district	Berdovka	0	0	3	0	Solid	In bulk
The Vitebsk oblast							
The Braslav district	Barkovschina	10	0	10	0	Solid, powdered	Polypropylene sacks
The Verkhnedvinsk district	Zelki	19.794	2.28	14.956	0	Solid, powdered	Polypropylene sacks
The Vitebsk district	Verkhovie	8.455	0	8.455	0	Solid, powdered	Wooden boxes
The Glubokoie district	The District Agro Service, Glubokoie	5.28	0	3.63	0.4	Powdery, liquid	Polypropylene sacks, drums
The Gorodok district	The District Agro Service, Gorodok	66.4	0	41.7	1	Powdery, liquid	Polypropylene sacks, metal drums
The Dokshitsy district	The Parafianovo station	7.12	0	7.12	0	Powdered	Polypropylene sacks
The Dubrovno district	The Osinovka station	34.74	0	34.74	0	Powdered	Polypropylene sacks
The Lepel district	The District Agro Service, Lepel	43.05	0	41.465	0	Powdered	Polypropylene sacks
The Liozno district	The District Agro Service, Liozno	35.5	0	4	0	Powdered	Polypropylene sacks

The Miory district	Volkovschina	0.3	0	0	0.3	Liquid	Metal containers
The Miory district	Driguchi	0.6	0	0	0.6	Liquid	Metal containers
The Miory district	Pereborodie	0.2	0	0	0.2	Liquid	Metal containers
The Miory district	Podyeltsy	0.3	0	0	0.3	Liquid	Metal containers
The Miory district	Marinki	2	0	0	2	Liquid	Metal containers
The Miory district	The District Agro Service, Miory	0.52	0	0.52	0	Powdered	Wooden boxes
The Polotsk district	The District Agro Service, Polotsk	1.3	0	0	1.3	Liquid	Drums
The Orsha district	Balbasovo	23	0	23	0	Powdered	Polypropylene sacks
The Postavy district	The District Agro Service, Postavy	21.35	0	18.98	2.37	Powdery, liquid	Paper sacks, metal drums
The Rossony district	The District Agro Service, Kliastitsy	3.485	0	3.485	0	Powdered	Polypropylene sacks
The Senno district	The District Agro Service, Burbin	14.15	0	8.665	0.6	Liquid, powdery	Drums, polypropylene sacks
The Tolochin district	The District Agro Service, Ozertsy	76.4	0	17.23	0	Powdery	Cemented
The Usha district	Kublishino	8.77	0	7.5	0	Powdery	Paper sacks
The Sharkovshina district	Agricultural Enterprise named after Markov (an airfield)	16.439	0	14.573	0	Powdery	Wooden boxes
The Shumilino district	The District Agro Service, Shumilino	14.7	0	14.7	0	Powdery	Polypropylene sacks
The Minsk Oblast							
The Berezina district	Sloboda	14.36	0	14.36	0	Solid, powdered	Paper and plastic sacks
The Borisov district	Zembin	5.483	0	5	0	Solid, powdered	In bulk
The Borisov district	Khokholitsa	0.863	0	0.258	0.2	Solid, powdered; liquid	Paper sacks; drums
The Borisov district	Timki	0.596	0	0.3	0.096	Solid, powdered; liquid	In bulk, paper sacks; drums
The Borisov district	Demidovka	4.518	0	3.531	0	Solid, powdered	In bulk
The Borisov district	Bolshie Novoselki	3.005	0	1.6	0.25	Solid, powdered, liquid	In bulk, drums
The Borisov district	Ozdiatichi	3.145	0	3	0	Solid, powdered	Wooden containers
The Borisov district	Borki	5.849	0	5	0	Solid, powdered	In bulk
The Borisov district	Staroborisov	1.867	0	1.48	0	Solid, powdered	Paper sacks

The Borisov district	Veliatichi	1.305	0	0.3	0	Solid, powdered	In bulk
The Borisov district	Zabashevichi	0.8	0	0.4	0	Solid, powdered	In bulk
The Borisov district	Metcha	0.2	0	0.2	0	Liquid	Drums
The Borisov district	Loshnitsa	1.58	0	0.38	0	Solid, powdered	In bulk
The Borisov district	Nemanitsa	0.66	0	0.5	0.16	Solid, powdered, liquid	In bulk; drums
The Borisov district	Korsakovichi	0.59	0	0.09	0.5	Solid, powdered, liquid	Paper sacks; drums
The Borisov district	Kostiuki	0.22	0	0.22	0		
The Borisov district	Peresady	3	0	2	1	Solid, powdered, liquid	In bulk; drums
The Borisov district	Chernevichi	0.31	0	0.09	0.22	Solid, powdered, liquid	Paper sacks; drums
The Borisov district	Mstizh	0.985	0	0.44	0	Solid, powdered	Paper sacks
The Borisov district	Novosioly	0.18	0	0.05	0.13	Solid, powdered; liquid	Paper sacks; drums
The Vileika district	Selische	2.65	0	2.65	0	Solid, powdered	In bulk
The Vileika district	Snezhkovo	7.687	0	7.687	0	Solid, powdered	In bulk
The Volozhin district	Bobrovichi	1	0	1	0	Powdered	Sacks
The Volozhin district	Mankovschina	0.688	0	0.688	0	Powdered	Cellophane sacks
The Volozhin district	Podberez	0.977	0	0.977	0	Powdered	Cellophane sacks
The Volozhin district	Rodniki	1.105	0	1.105	0	Powdered	Cellophane sacks
The Volozhin district	Zabrezie	0.12	0	0.12	0	Powdered	Cellophane sacks
The Volozhin district	Losk	0.6	0	0.6	0	Powdered	Cellophane sacks
The Volozhin district	Sugvozdy	3	0	3	0	Powdered	Cellophane sacks
The Dzerzhinsk district	The District Agro Service, Dzerzhinsk	20.006	0	19.423	0	Solid, powdered	Double sacks placed in metal containers
The Kletsk district	Lazovichi	0.4	0	0.4	0	Solid, powdered	Paper sacks
The Kletsk district	Golynka	0.567	0	0.287	0	Solid, powdered	In bulk
The Kletsk district	Gritsevichi	0.492	0	0.292	0.2	Solid, powdered; liquid	In bulk; cans
The Kletsk district	Oreshnitsa	0.23	0	0.23	0	Solid, powdered	In bulk
The Kletsk district	Tucha	0.35	0	0.35	0	Solid, powdered	In bulk
The Kopyl district	Bobvnia	1.5	0	1.5	0	Solid, powdered	Paper sacks
The Kopyl district	Butachino	2	0	2	0	Solid, powdered	Paper sacks
The Kopyl district	Bystritsa	1.5	0	1.5	0	Solid, powdered	Paper sacks
The Kopyl district	Grozovo	0.2	0	0.2	0	Solid, powdered	Paper sacks
The Kopyl district	Gulevitchi	1.2	0	1.2	0	Solid, powdered	Paper sacks
The Kopyl district	Dusaevschina	0.3	0	0.3	0	Solid, powdered	Paper sacks
The Kopyl	Novosiolki	0.3	0	0.3	0	Solid, powdered	Paper sacks

district							
The Kopyl district	Osovo	2	0	2	0	Solid, powdered	In bulk
The Kopyl district	Pesochnoie	0.4	0	0.4	0	Solid, powdered	Paper sacks
The Kopyl district	Presniaki	0.3	0	0.3	0	Solid, powdered	Paper sacks
The Kopyl district	Raevka	0.56	0	0.56	0	Solid, powdered	Paper sacks
The Kopyl district	Rudnoie	0.2	0	0.2	0	Solid, powdered	Paper sacks
The Kopyl district	Sloboda-Kuchinka	0.3	0	0.3	0	Solid, powdered	Paper sacks
The Kopyl district	Timkovichi	8.5	0	8.5	0	Solid, powdered	Wooden boxes
The Krupski district	Gapanovichi	0.1	0	0	0.1	Liquid	Drums
The Krupski district	Dubrovka	0.6	0	0	0.6	Liquid	Drums
The Krupski district	Igrushka	0.8	0	0	0.8	Liquid	Drums
The Krupski district	Kosenichi	0.2	0	0	0.2	Liquid	Drums
The Krupski district	Krupski	15.029	0	11.034	0	Powdered	Sacks, wooden boxes
The Krupski district	Obchuga	0.2	0	0	0.2	Liquid	Drums
The Krupski district	Ukhvala	0.968	0	0	0.968	Liquid	Drums
The Krupski district	Khudovtsy	0.6	0	0	0.6	Liquid	Drums
The Logoisk district	Malye Nestanovichi	21.938	0	20.603	0	Solid, powdered	Polypropylene sacks
The Minsk district	The District Agro Service, Koliadichi	52.251	0	35.421	0	Solid, powdered	Paper, cellophane and polypropylene sacks
The Molodechno district	Molodechno	57.41	0	20.748	0	Solid, powdered	Sacks, metal drums, wooden boxes
The Miadel district	Kniaginin	20.536	0	12.936	3.69	Solid, powdered, liquid	In bulk
The Pukhovichi district	The District Agro Service, Rudensk	3.045	0	3.005	0	Solid, powdered	Wooden boxes filmed inside
The Slutsk district	The District Agro Service, Slutsk	274.9471	0	50.2188	0	Solid, powdered	Wooden boxes
The Smolevitchi district	The Zhodino Hothouse	1.56	0	1.56	0	Solid, powdered	Plastic sacks
The Starodorozhski district	Agricultural Complex "Asvitsa", Gorki	0.497	0	0.297	0	Solid, powdered	Paper packs
The Starodorozhski district	The District Agro Service, the Starye Dorogi village	18.243	0	18.243	2.5	Liquid, powdered	Metal containers, plastic sacks
The Starodorozhski district	Shapnitsy	0.305	0	0	0.2	Liquid	A metal drum
The Starodorozhski district	Yazyl	1.35	0	0.04	1.3	Liquid, powdered	A metal drum, paper bags
The Stolbtsy district	The District Agro Service, Stolbtsy	9.355	0	9.15	0	Powdery	Cellophane sacks
The Stolbtsy	Liubkovschina	0.2	0	0	0.2	Liquid	A metal drum

district							
The Stolbtsy district	Tesnovaia	0.5	0	0	0.5	Liquid	A metal drum
The Uzda district	Anufrovo	2.401	0	2.401	0	Powdered	Paper sacks
The Uzda district	Kamenka	0.7	0	0.7	0	Powdered	Plastic sacks
The Uzda district	Korma	0.4	0	0.2	0	Powdered	Paper sacks
The Uzda district	Kostiuki	0.41	0	0.16	0.18	Powdered	Paper sacks
The Uzda district	Kukhcitsy	0.5	0	0.26	0.24	Powdered, liquid	Plastic sacks, metal drums
The Uzda district	Sloboda	1.08	0	1.08	0	Powdered	Plastic sacks
The Uzda district	Markovtsy	1	0	1	0	Powdered	Paper sacks
The Uzda district	Teplen	1.285	0	1.135	0.15	Powdered, liquid	Paper sacks, metal drums
The Uzda district	Tolkachevichi	2.01	0	1.61	0	Powdered	Paper sacks
The Uzda district	Khotliany	0.89	0	0.624	0	Powdered	Plastic sacks
The Uzda district	Churilovo	0.301	0	0.2	0	Powdered	Paper sacks repacked in plastic sacks
The Cherven district	Luch	0.8	0	0.8	0	Powdered	Metal containers
The Cherven district	Tadulichi	15.995	0	11.7	0	Solid, powdered	Wooden boxes, metal containers
The Mogilev oblast							
The Klimovichi district	Klimovichi	2.319	0	2.319	0	Hardened powdered mass, water solution	Paper sacks, metal drums
The Klichev district	The Patoka village, the Klimovichi Agricultural Enterprise	15.48	0	15.48	0	Soil mixed with pesticides	Packed and sealed in metal containers
The Kostiukovichi district	Kostiukovichi, near OJSC “Rapts”	1.12	0	1.12	0	Liquids, hardened powders	Paper sacks, metal drums
The Krasnopolie district	Krasnopolie	0.2	0	0.2	0	Solid powdered mass	Cellophane and paper sacks
The Krichev district	Krichev	0.3	0	0.3	0	Solid powdered	Paper sacks
The Dribin district	Pudovka, the Domany Agicultural complex	0.3	0	0.3	0	Solid powder	Paper sacks
The Kirov district	Agricultural enterprise named after Kirov	0.8	0	0	0.8	Liquid	Metal drums
The Shklov district	The District Agro Service, Gorodets	2.5	0	2.5	0	Solid powdered mass	In bulk

ANNEX 12. DATA OF LOCAL GROUNDWATER MONITORING IN THE VICINITY OF THE SLONIM OBSOLETE PESTICIDE BURIAL SITE IN 2008

Measured parameter	Background monitoring point (a shaft well near a lodge in the Gutka-Paslovskaia village)	Monitoring wells at the burial site				MAC (Sanitary Rules and Norms СанПиН 10-124 РБ 99 − for non-organic substances, ГН 7-68 РБ 98 − for pesticides)
		№ 1	№ 2	№ 3	№ 4	
Non-organic substances, mg/dm^3						
pH (in pH units)	7.1	7.8	7.65	7.6	7.8	6-9
Dry residues	300.2	301.0	349.2	312.4	298.8	1000
Ammonium nitrogen	0.26	0.36	0.52	0.6	0.36	2.0
Nitrite nitrogen	**15.5**[1]	1.4	1.3	1.2	1.2	10.2
Sulfates	7.8	7.8	49.2	21.4	5.4	500
Chlorides	12.0	6.2	80.0	35.0	8.2	350
Iron	0.2	**8.6**	**1.1**	**3.1**	**1.6**	0.3
Zink	0.285	0.224	0.345	0.576	0.203	5.0
Copper	0.584	0.005	0.004	0.006	0.010	1.0
Arsenic	0.008	0.007	0.009	0.006	0.007	0.05
Lead	< 0.001	< 0.001	0.001	< 0.001	< 0.001	0.03
Pesticides, mg/dm^3						
α-HCCH	**0.065**	<0.006	**0.047**	**0.037**	<0.006	0.002 (total)
β-HCCH	<0.006	<0.006	<0.006	<0.006	<0.006	0.002 (total)
γ-HCCH	<0.006	<0.006	<0.006	<0.006	<0.006	0.002
4,4′-DDD	<0.006	<0.006	*0.349*	*0.199*	*0.013*	0.1
4,4′-DDE	<0.006	<0.006	<0.006	<0.006	<0.006	0.1
4,4′-DDT	<0.006	<0.006	*0.07*	<0.006	<0.006	0.1
Aldrin	<0.006	<0.006	<0.006	<0.006	<0.006	0.002
Dildrin	<0.006	<0.006	<0.006	<0.006	<0.006	nn[2]
Heptachlor	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	0.001
Metoxiclor	<0.006	<0.006	<0.006	<0.006	<0.006	0.02

Notes:
15,5[1] − concentrations above MAC are highlighted in bold;
nn[2] − there is no norm for this substance concentration in the environmental medium (water in water bodies).

Annex 13. TERMS OF REFERENCE AND SCOPE OF SERVICES

Environmental Impact Assessment of the planned FSP activities on the reduction, secure storage and elimination of POPs stockpiles

Individual Consultant

1. BACKGROUND

1. The Government of Belarus (GoB) requested the World Bank to assist the country addressing the solid waste and disposal problems and reducing environmental and health impacts from poor solid waste management. Specifically, the GoB is interested in investments to support the development of sustainable systems for separate collection and processing and recycling of municipal solid waste as there are no adequate facilities for this in the country. The proposed Solid Waste Management Project (SWMP) seeks to help the GoB improve public health and quality of life and reduce environmental risks by (i) developing environmentally and financially sustainable systems for municipal solid waste management in the country and (ii) securing currently accessible POPs stockpiles of POPs pesticides and PCBs and eliminating highest priority stocks presenting the greatest risks to communities and environment. The total estimated available funds for the proposed project[1] is about US$ 65.5 million, of which US$5.5 million represent a GEF grant targeting POPs investments.

2. The project preparation grant is aimed at preparation of the POPs stockpile and institutional strengthening project described in a separate project identification form (PIF) submitted for Global Environment Facility for pipleline entry. The full-size project will address the priority actions identified in Belarus' National Implementation Plan of the Stockholm Convention, namely the capture and secure containment of existing PCB, DDT, and POPs containing pesticide mixture stockpiles including establishing the physical and technical capacity to manage these stockpiles for ultimate destruction, and in the longer term POPs contaminated sites and unintentional POPs releases. It also includes technical assistance and institutional strengthening required to support the country's capability to meet its current and future obligations under the Stockholm Convention. The PPG along with the national co-financing will support the detailed work necessary for development of the necessary GEF project documents for submission of the full-size project.

3. The overall objective of the project is to reduce environmental and health risks to Belarus' population associated with the presence of POPs in the environment through: i) securing currently accessible POPs stockpiles of POPs pesticides and PCBs and to the degree practical eliminating them; ii) mitigation of critical impacts from POPs contaminated sites, and iii) supporting development of the required technical, administrative and regulatory tools required to sustain effective management of POPs into the future. It is an integral part of the country's ongoing activities program following the Action Plan contained in its National Implementation Plan for the Stockholm Convention and specifically those priority activities associated with management of POPs stockpiles and building sustaining long term capacity in POPs and chemicals management.

4. The Belarus SWMP main components propose the following infrastructure investments: (i) finance the construction of a new environmentally and economically sustainable household solid waste processing plant in Grodno Oblast, including also infrastructure and equipment for

[1] The proposed project loan (US$ 60 million) will be fully blended with a US$5.5 million GEF grant

separation and recycling activities; (ii) activities related to repackaging, transferring to secure storage facilities and further transporting for final destruction outside the country of hazardous chemicals (e.g., DDT) contained at the burial site in Slonim, and (iii) activities related to secure estimate 900 tons of PCB stockpiles in the form of PCB liquids and contaminated equipment as well as the clean-up of site residuals. The project will also finance strengthening of national and local capacity in relation to solid waste management and will address institutional, technical and regulatory strengthening related to POPs management in the country.

5. In accordance with the World Bank's safeguard policies and procedures OP/BP 4.01 on *Environmental Assessment* the proposed project investments should meet the requirements of an environmental Category A project. This will entail the preparation by the Government of Belarus of a detailed Environmental Impact Assessment (EIA) report including an appropriate Environmental Management Plan (EMP) that will meet both the current related Belarusian environmental legislation and the Bank's Category A requirements (detailed provided in *Annex*). In accordance with the local environmental laws, the GoB already prepared several key documents that could be used in the process of the new project EIA development: (i) EIA for Chechersk temporary storage of toxic industrial wastes (1993); (ii) risk assessment and monitoring reports related to nine identified obsolete pesticides burial sites (2008); (iii) other project investment related technical documents (e.g., feasibility study for the construction of solid waste processing plant). A complete list of background technical documents related to the proposed SWMP are attached will be provided by MNREP.

2. OBJECTIVES OF THE ASSIGNMENT

6. This ToR describes the assignment that an EIA Consultant accredited in Belarus by the MNREP is expected to carry out in order to meet the national and Bank's requirements on environmental protection for the proposed POPs management investments. Specifically, the purpose of this study is (a) to determine the environmental baseline condition at proposed project sites; (ii) assess the likely impact that the construction and operation of the selected infrastructure investments may have on the environment, local economy and public health; this will include determining the nature of distribution of pollutants expected with the proposed technology; (iii) identify and estimate cost related mitigation measures and monitoring activities, including those affiliated with environmental/air pollution monitoring during project implementation; and (iv) consult the public and main stakeholders in relation with the project benefits and the related environmental and social issues.

7. An early thorough consultation process with project affected population and stakeholders will contribute to an effective project environmental assessment development. Consequently, the Consultant is encouraged to hold coordination meetings with the international and local consultants involved in the preparation of related technical documents and with the local environmental authorities, to consult with and exchange information on local environmental issues. One brief public meeting at the launch of the EIA process and another one once the draft document is ready are expected during the finalization of this EIA report.

8. The organization of the environmental assessment and the content of the report will be specified by: (i) the national Environmental Protection Law (latest update), the National Waste Management Law, and other project investment related national and international legislation and obligations (Basel Convention, Stockholm Convention); (ii) the World Bank Operational and Safeguard Policies OP/BP 4.01 on Environmental Assessment; World Bank Guidelines on Hazardous and Toxic Materials; and (iii) any local and international environmental assessment and construction standards and regulations.

3. SCOPE OF WORK

Consistent with the above general scope, the following specific tasks will be undertaken in cooperation with the international and local consultants:

9. For the tasks detailed below, the EIA Consultant will visit the project locations as many times as needed to collect necessary information and will be in constant coordination with appropriate local government authorities (Water, Environment, Public Health institutions) and/or research institutes for collecting and reviewing necessary environmental and social data (e.g., noise; air, water/groundwater, and soil quality; land use and cultural heritage aspects, land ownership, etc.). During the project site visits particular attention should be paid to the local public (affected people) views on environmental and social effects imposed during the proposed operations.

Task 1 Brief outline of project locations' characteristics and description of proposed POPs decontamination investments

10. The Consultants should provide a brief description of typical features of project sites and their corresponding region in terms of current population, economic activities, geography, and environment. Then, from site visits and available technical documents (e.g., preliminary designs, feasibility study, environmental studies and approvals, environmental monitoring reports, permits, etc.) the Consultants should provide a brief description of the relevant aspects of the investment (e.g., the project infrastructure investments), using maps (at appropriate scale) where necessary.

11. For the POPs component, the Consultant should provide background information related to the history of POPs usage and disposal in country, current situation on the NIP implementation, analysis of existing obsolete/POPs pesticide stocks, and brief description of Chechersk storage facility.

12. MNREP will provide to the Consultants copies of all the relevant technical documentation available. The Consultants shall be responsible for obtaining all necessary field data that are missing in previous studies and required for the complete description of the proposed plant construction and POPs decontamination sites. The bibliography of prior work will be referenced in the EIA document.

Task 2 Description of Existing Ecological Baseline Conditions

13. The Consultants will review, assemble, evaluate and present baseline data on the relevant environmental characteristics within the project area taking into account the present industrial/private and population activities. Specifically, the baseline conditions should include information on:

(a) Physical environment: geology, topography, sediments/soils, surface and ground water hydrology, water resources, land pollution and drainage, water/groundwater quality, air quality and sources of air emissions, integration of the investment in its urban environment (e.g., the sewage network and wastewater treatment plant, rail/roads, cement industry, other local activities);

(b) Meteorology conditions: wind patterns, monthly average temperatures, rainfall, snowfall and runoff characteristics; extreme storm and precipitation events and other natural disasters (e.g., earthquake);

(c) Biological environment: existing terrestrial flora and fauna at the sites; particular rare and endangered species; sensitive habitats, in areas likely to be affected by construction and/or transportation of hazardous chemicals; species of commercial importance;

(d) Socio-cultural environment: community structure around the investment area; inventory of community activities (e.g., industry, agriculture, energy sector); distribution of income, goods and services; cultural assets, health and education aspects;

(e) Current pesticides and PCBs related information: current baseline of environmental contamination with POPs; investigations of environmental pathways of POPs pesticides; soil contamination with PCBs; risk assessment related to storage sites, proximity to residential areas, forests, surface and groundwater, and transportation.

Task 3 Legislative framework and Regulatory considerations

14. The Consultants shall review new government legislation, decisions and/or guidance notes relevant to the environment quality, health and safety, waste management, hazardous substance storage and handling; noise emissions; protection of sensitive areas and endangered species, land-use planning, involuntary resettlement and expropriation; public information; etc. determining their relevance to the project. The Consultants shall present all related national policies, strategies and programs (e.g., waste, health, energy, construction industry). The Consultants shall assess the institutional arrangements for EA including the mechanisms and responsibilities for environmental screening and the review of EA results. This should include a review of institutional capacity for the supervision and enforcement of EMPs during construction and operation. The consultants shall reference any international and relevant legislation or agreement applicable to the project (e.g., the Stockholm Convention, Basel Convention, Aarhus Convention, Convention on Long Range Trans-boundary Air Pollution, Espoo Convention, procedures for chemicals, POPs in International Trade, Helsinki Convention, etc.) including applicable national and international standards.

Task 4 Determination of potential impacts of the proposed investments

15. The Consultant shall identify the major issues of environmental concern and indicate their relative importance to the design of the project. The Consultants shall identify significant positive and negative impacts, direct, indirect and cumulative impacts, and immediate and long-term impacts related to the proposed investments. For this task the Consultant will review the environmental aspects related to the repackaging, temporary storage and transport of POPs, as well as other relevant environmental and technical documents;

16. For the POPs investments impacts may be discussed in relation with each proposed activity (e.g., repackaging, transport, final disposal, proposed clean-up).

17. The Consultant shall propose mitigation measures and affiliated estimated costs for each of the above identified impacts that will represent the content/summary of an Environmental Mitigation Plan for the proposed investments during the project implementation and afterwards. The Mitigation Plan is part of the overall project Environmental Management Plan (Task 6).

Task 5 Analysis of Alternatives to the Proposed Construction Design and POPs activities

18. The Consultant shall review the available technical documents (FS) and summarize alternatives proposed during the investments' design, including the alternative of not having the

project. Such alternatives could be related to different options in terms of design, selection of sites and facilities, construction techniques, different technologies and affiliated performances, POPs disposal options (e.g., local long-term storage, local landfill or chemical treatment/incineration, transshipment to a third country for final destruction), methods of POPs collection, packaging and storage, and project phasing, operating and maintenance activities. The Consultant shall briefly compare these alternatives in terms of potential environmental impacts, cost and benefits.

Task 6 Environmental Management Plan (EMP)

19. The Consultant shall prepare the investments Environmental Management Plan (EMP) including a clear Mitigation Plan and a Monitoring Plan according to the Bank requirements of the OP 4.01 (*Annex*). The EMP should clearly present estimated costs affiliated with proposed mitigation and monitoring actions as well as the institutions responsible for the EMP implementation. Also, the EMP should include proposed staffing and training requirements related to EMP implementation, institutional needs, and other necessary support for proper EMP implementation.

20. The Mitigation Plan shall present the mitigation measures related to prevent or reduce the possible project environmental impacts as well as the approximate costs for these measures (related to project preparatory as well as operation and decommission phases). The list of mitigation measures should be recommended based on existing and new regulations and enforcement incentives, installation of control equipment, implementation of new procedures, landscaping of the areas directly and indirectly affected by the project, etc. The Mitigation Plan shall identify any residual impacts that might exist after mitigation.

21. The Monitoring Plan should propose a plan of feasible actions to monitor the implementation of the mitigation measures proposed in the Mitigation Plan and the impacts of the project during the construction and specially operation of the plant as well as during the preparatory phase and transport of POPs. Specifically, the Monitoring Plan should include a proper sampling program for the monitoring of the environmental and health indicators since the beginning of the operation and in accordance with the local permits. Such program should include sampling on air, water and soil quality. The Monitoring Plan should include an estimate of costs required to successfully implement such program as well as the parties responsible to carry out this plan.

22. The overall project EMP shall be prepared in such a way that could be easily integrated in the tender documents for the Contractors who will perform the proposed civil works affiliated with the project investments. This will assure proper implementation of such EMP during the course of the project civil works.

Task 7 Public Consultations

23. The Consultant will assist the MNREP in carrying-out the public consultation and disclosure process for this EIA report to allow public awareness of the selected investments and the envisaged related environmental and social impacts. The Consultant will organize in collaboration with MNREP one public meeting to present the draft EIA when available. Minutes including questions and answers from this meeting (as well as other discussions held during the EA process) should be included in the final draft EIA report. The public meeting should be announced in mass-media one week ahead of the meeting, and active NGOs as well as local authorities should be invited. The draft EIA should be made publicly accessible by posting it on the MNREP website in Russian language before the date of the public meeting.

4. EXPECTED OUTPUTS

24. The outputs of this assignment should comprise study reports as described below. Annexes including updated maps of zones of the project, pictures taken during the site visits and/or public consultation meetings as well as any relevant information should be attached to the final report. The content of the report should follow the format proposed in the Bank OP 4.01 (*Annex*). The main text should include information supported by references listed in appendices.

5. REPORTING REQUIREMENTS

- The Consultant will work in close co-operation with the international and national consultants and will report to appointed Deputy Minister;
- The Reports must be presented in the format: Times New Roman, 12, single space;
- The language of the prepared documents must be Russian and English;
- All reports and prepared documents must be presented in electronic and 3 (two) printed copies.

6. TIME SCHEDULE

The Scope of Work will be performed over the 10 weeks' period beginning in March 2009.

The contract will cover 50 working days

Milestone	**Date**
(1) Start of work	March 2009
(2) Inception EIA report	Within 2 weeks from the date for the commencement of services
(3) Draft EIA including Executive Summary requested information as outlined in the present ToR discussed with the public to be submitted for Bank's review and comments	Within 7 weeks from the date for the commencement of services
(4) Public consultation on the draft EIA	Within 9 weeks from the date for the commencement of services
(5) Input to Final Report including final results for all tasks to be submitted for Bank's review and comments	Within 10 weeks from the date for the commencement of services

7. INSTITUTIONAL ARRANGEMENTS

Duty station: Kollektornaya Str.10, office 537, Minsk, Republic of Belarus

8. CLIENT'S INPUT

The Employer will provide the Expert with:

- office, computer and other office equipment and supplies for the assignment's implementation if necessary;

- access to the available reports and data on special request within the framework of the Ministry's competence.

9. QUALIFICATIONS REQUIRED

Education and Experience

- University degree in Environmental Studies, Technical Sciences, Geography, Geology;
- Advanced degree in the related field is an asset;
- Knowledge of the current national environmental legislation and procedures as well as the Bank EA requirements, including experience on organizing public consultations;
- A broad experience in environmental management aspects related to POPs management operations is an asset;
- Expertise in water and soil pollution control from hazardous chemicals contamination;
- Experience in hydrology/hydrogeology, soil contamination modeling is an asset;
- Knowledge of and experience with implementation of the Stockholm Convention and its detailed requirements;
- Good knowledge of English is an asset.
- Computer proficiency in basic programs (MS Word, Excel), e-mail skills.

ANNEX 14. MINUTES, LISTS OF PARTICIPANTS, MASS MEDIA EVIDENCE COPIES OF PUBLIC HEARINGS IN RUSSIAN

Приложение 3

ПРОТОКОЛ

общественных слушаний по мероприятиям проекта ГЭФ/Всемирного банка «Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь» (GEF PPG TF092596)

6 мая 2009 года, 12:00 г. Лида, районный исполком

Председательствовал: Соловьев Ю.В., консультант проекта

Присутствовали: участники общественных слушаний, жители г. Лида и района, согласно прилагаемому регистрационному списку

Повестка дня: Обсуждение планируемых мероприятий по обеспечению вывоза на экологически безопасное уничтожение/хранение выведенных из эксплуатации ПХБ-содержащих конденсаторов, временно размещенных на площадке в д. Минойты и технического задания на проведение экологогической оценки воздействия мероприятий проекта на окружающую среду.

Выступили:

Соловьев Ю.В. проинформировал присутствующих о международных обязательствах Республики Беларусь по Стокгольмской конвенции о стойких органических загрязнителях, негативных свойствах стойких органических загрязнителей, а также о разработанном Национальном плане выполнения указанной конвенции. Участники общественных слушаний были ознакомлены с основными задачами планируемого полномасштабного проекта по обращению с СОЗ, информацией о мероприятиях проекта, его исполнителях и выделяемом финансировании.

Станкевич А.П. более подробно осветил мероприятие по обращению с ПХБ-содержащим оборудованием, временно хранящимся на площадке в д. Минойты, представив вниманию участников и альтернативные решения проблемы; ознакомил

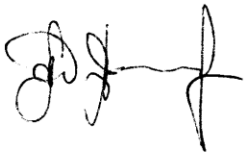
участников общественных слушаний с содержанием технического задания на проведение экологогической оценки воздействия мероприятий проекта на окружающую среду.

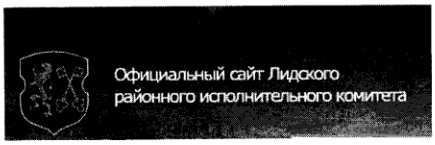
Вопросы и комментарии участников слушаний:

1. ПХБ-содержащее оборудование, выведенное из эксплуатации, свезено на площадку в д. Минойты практически со всей области, конечно, нам не нужен здесь такой склад.
2. Есть ли гарантия того, что планируемое мероприятие будет доведено до конца, а не будет брошено на полпути? Вдруг не выделят деньги?
3. Кто готовит проект?
4. Когда будет начата реализация мероприятия?
5. Можно ли быть уверенными, что мы избавимся от ПХБ на 100%, что эти вещества не останутся в окружающей среде? Пока не все люди знают об этом складе, не хотелось бы их пугать, так как могут пойти разные домыслы, люди могут начать беспричинно паниковать.
6. Три года назад на складе в д. Гутно было собрано 43 тонны смесей непригодных пестицидов, содержащие ДДТ, согласно архивным данным тех хозяйств, которые в свое время использовали эти химикаты. Данный склад находится в 3-ем поясе водозабора, половина города Лида получает воду из данного водозабора. Этот вопрос неоднократно поднимался, однако все упирается в финансирование, несмотря на то, что очень важно ликвидировать этот потенциальный источник загрязнения питьевой воды непригодными пестицидами, в том числе СОЗ.
7. Нам известно, что необходимо 4 контейнера и 7 млн. бел. руб. для упаковки недавно привезенных конденсаторов, которые находятся на площадке в д. Минойты, когда и кто это сделает и кто выделит на это деньги?
8. Ответ на предыдущий вопрос со стороны представителя Гродноэнерго: деньги на это мероприятие уже есть и в июне месяце этого года оставшиеся конденсаторы будут упакованы, как и все остальные.

9. Необходимо провести предварительно работу с населением по информированию о конкретных мероприятиях проекта для создания устойчивых контактов с местным населением в сфере реализации проекта. Также важно сравнить результаты анализов проб, которые отбираются и анализируются местными организациями с пробами, отобранными и проанализированными другими организациями.
10. У нас в районе был случай, когда заболел годовалый ребенок, его кожа стала шоколадного цвета, некоторые думали, что это оттого, что когда-то на «Лакокраске» использовался совол. Возможно ли это?
11. Как быстро будет реализовано планируемое мероприятие?

Председательствующий  Ю.В.Соловьев

Секретарь  А.Е.Хлевинский



2009.04.21 О проведении общественных слушаний

6 мая 2009 г. в 12.00 час. в Лидском районном исполнительном комитете совместно с Министерством природных ресурсов и охраны окружающей среды Республики Беларусь состоится совещание по общественному обсуждению мероприятий проекта Международной технической помощи «Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь».

Одним из планируемых направлений деятельности проекта являются меры по утилизации ПХБ-содержащего оборудования, выведенного из эксплуатации, находящегося на территории ПС «Лида» д. Минойты.

Приглашаются все желающие принять участие в обсуждении.

Вопросы и предложения можно также направить в районный исполнительный комитет лично или по факсу 3 40 03, а также в Минприроды по факсу (8 0172) 289 38 88 или по электронной почте popsbelarus@sml.by.

Глобальный экологический фонд (далее – ГЭФ) выразил согласие на предоставление Республики Беларусь гранта в размере 5,5 млн. долларов США на реализацию мероприятий Национального плана выполнения обязательств, принятых Республикой Беларусь по Стокгольмской конвенции, о стойких органических загрязнителях, на 2007-2010 годы и на период до 2028 года, утвержденного Указом Президента Республики Беларусь от 12 июня 2007 г. № 271.

В рамках подготовки проекта ГЭФ «Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала ресурсов в Республике Беларусь» специалистами Министерства природных ресурсов и охраны окружающей среды Республики Беларусь при содействие Всемирного банка разработан проект плана мероприятий указанного проекта, который включает в себя меры по решению вопроса утилизации ПХБ-содержащего оборудования, выведенного из эксплуатации, находящегося на территории ПС «Лида», д. Минойты.

Обеспечение безопасного для населения и окружающей среды хранения полихлорированных бифенилов на площадке ПС «Лида»

Описание проблемы стойких органических загрязнителей.

Стойкие органические загрязнители (далее – СОЗ) – химически прочные соединения, являющиеся первичными и пробочными продуктами промышленности. СОЗ имеют следующие общие характеристики: высокая токсичность, склонность к накапливанию в объектах окружающей среды и организме человека и животных, способность перемещаться на большие расстояния потоками воздуха и воды, а также путем миграции живых организмов.

В связи с этим, международным сообществом проблема СОЗ определена как глобальная экологическая угроза, требующая принятия немедленных мер по ее ликвидации. 16 мая 2004 года вступила в действие Стокгольмская конвенция о стойких органических загрязнителях (далее – Стокгольмская конвенция), главной целью которой является охрана окружающей среды и здоровья человека от воздействия СОЗ. Республика Беларусь официально присоединилась в Стокгольмской конвенции в феврале 2004 года, приняв на себя соответствующие обязательства по ее выполнению.
В список СОЗ Стокгольмской конвенции кроме пестицидов, диоксинов и фуранов, включены полихлорированные бифенилы, (далее – ПХБ), которые на протяжении длительного времени производились и применялись во многих странах мира практически без ограничений и контроля за их обращением.

ПХБ изначально не рассматривались как опасные вещества. Прошло много десятилетий, прежде чем были получены свидетельства долговременного воздействия ПХБ на человека и окружающую среду. С тех пор начался процесс постепенного введения запретов и ограничений на применение ПХБ. Однако и сегодня обращение с ПХБ остается одной из самых актуальных проблем химической безопасности, поскольку большая часть произведенных полихлорированных бифенилов до сих пор используется или находится на хранении на различных промышленных объектах.

Все те физические и химические свойства, которые сделали ПХБ полезными в промышленности, сделали их одними из опаснейших загрязнителей окружающей среды. Обладая термической и химической стабильностью, ПХБ оказались чрезвычайно устойчивы к воздействию биотических и абиотических факторов. Поступая в окружающую среду, ПХБ распределяются во все компоненты (воздух, вода, почва и т.д.). Они способны включаться в глобальный круговорот и перемещаться с водными и воздушными потоками на большие расстояния. В настоящее время ПХБ обнаруживаются повсеместно, в том числе на территориях, находящихся на значительном удалении от мест их производства и использования, опасность ПХБ заключается в их способности к передаче по пищевой цепи (биоконцентрации) и аккумуляции в жиросодержащих компонентах (биоаккумуляции). Даже при низких концентрациях ПХБ в компонентах природной среды, имеется опасность их накопления в организме человека, как высшем звене пищевой цепи.

ПХБ признаны приоритетными загрязнителями в глобальном масштабе наряду с такими веществами как диоксины и ртуть. В бывшем СССР выпускались следующие виды промышленных ПХБ: совол, совтол-10 и трихлородифенил. Первоначально ПХБ использовались в качестве диэлектрической и охлаждающей жидкости в силовых трансформаторах и конденсаторах. В дальнейшем ПХБ стали применяться в качестве добавок в производстве красок и других видов промышленной продукции.
В настоящее время в Республике Беларусь уже ведется активная работа, направленная на выполнение требований Стокгольмской конвенции.

Для реализации эффективных мер по решению проблемы СОЗ в Республике Беларусь был разработан Национальный план выполнения обязательств, принятых Республикой Беларусь по Стокгольмской конвенции о стойких органических загрязнителях, на 2007-2010 годы и на период до 2028 года (далее Национальный план), утвержденный Указом Президента республики Беларусь от 12 июня 2007 года № 271. Среди основных направлений деятельности Национального плана – осуществление экологически безопасного хранения и обезвреживания существующих в республике отходов, содержащих стойкие органические загрязнители.

Республики Беларусь, как Сторона Стокгольмской конвенции, приняла на себя следующие обязательства в отношении ПХБ:
- прекратить использование ПХБ к 2025 году;
- обеспечить обезвреживание отходов, содержащих ПХБ , к 2028 году;
- выявить и промаркировать оборудование, содержащее ПХБ;
- не применять оборудование, содержащее ПХБ, на предприятиях по производству кормов и продуктов питания;
- обеспечить контроль за использованием оборудования и своевременным выявлением утечек полихлорированных бифенилов;
-способствовать выявлению и восстановлению нарушенного состояния территорий, загрязненных ПХБ.

В рамках выполнения Национального плана для предотвращения распространения ПХБ в окружающей среде запланировано на ближайшие годы извлечение и упаковка в герметичные контейнеры загрязненных грунтов в местах хранений ПХБ и обеспечения их экологически безопасного хранения (п. 16 мероприятий к Национальному плану). Также запланирован на 2008-2010 гг. вывоз на хранение вывезенного из эксплуатации оборудовании, материалов и отходов, содержащих ПХБ, на КУП «Комплекс по переработке и захоронению токсичных отходов в Гомельской области», что позволит сократить число объектов размещения опасных отходов, содержащих ПХБ.

П. 18 мероприятий Национального плана предусмотрено осуществление в 2009-2010 гг. проведение мероприятий по очистке территорий, загрязненных ПХБ, на распределительной подстанции «Лида».

Описание площадки хранения ПХБ-содержащего оборудования в д. Минойты Гродненской области

На территории Лидского района ПХБ-содержащее оборудование применялось Лидскими электросетями. Кроме того, ПХБ (совол) использовались при производстве красок и лаков на ОАО «Лакокраска». Данное предприятие являлось крупнейшим потребителем совола на территории бывшего СССР. В настоящее время ПХБ не применяются при производстве красок, а на ОАО «Лакокраска» внедрен и ведется мониторинг почв с целью определения возможного их загрязнения, а также накопления материала для оценки последствий их применения. Лидские электрические сети вывели из эксплуатации все контейнеры, содержащие ПХБ, и разместили их в специальных изолированных контейнерах на территории высоковольтной подстанции в д. Минойты Лидского района. Все контейнеры герметично закрыты. На территории площадки накоплено 3000 ПХБ-содержащих конденсаторов. Емкость контейнера составляет примерно 175 конденсаторов. Общая масса контейнеров (брутто) составляет примерно 7 тонн.

Воздействие на окружающую среду
Почвы в местах хранения ПХБ-содержащих конденсаторов загрязнены. По результатам обследований площадки установлен уровень загрязнения возле бетонных плит площадки – 70 г/кг. Такой уровень загрязнения объясняется как непосредственными утечками, так и за счет загрязненного дождевого стока.

Для реализации выше перечисленных мероприятий Национального плана по снижению и дальнейшему прекращению негативного воздействия ПБХБ на здоровье людей и окружающую среду необходимо привлечение значительных финансовых средств и высококвалифицированных специалистов, имеющих необходимый опыт и знаний в области утилизации ПХБ и ведения мониторинга эффективности данных работ. Значительную помощь в данном направлении может оказать международное техническое сотрудничество. Одним из приоритетных направлений Глобального экологического Фонда (ГЭФ) является снижение и ликвидация СОЗ. В республике Беларусь планируется выполнение полномасштабного проекта ГЭФ/Всемирного банка по обращению со стойкими органическими загрязнителями и укреплению технического и институционального потенциала в Республике Беларусь. Проект будет реализовываться Минприроды. В рамках выполнения данного проекта применительно к площадке хранения ПХБ в Минойтах планируется выполнение следующих мероприятий:
1. комплексное обследование площадки;
2. определение масштабов загрязнения почв и грунтовых вод;
3. разработка и реализация мероприятий по изъятию и упаковке загрязненного грунта в герметичные контейнеры;
4. проведение исследований по оценке целесообразности дальнейшего обустройства площадки хранения ПХБ либо в качестве альтернативного решения – ликвидация площадки путем вывоза контейнеров с ПХБ и загрязненными грунтами на КУП «Комплекс по переработке и захоронению токсичных отходов Гомельской области» (Чечерский полигон).
5. проведение комплекса работ по ведению мониторинга окружающей среды в районе площадки для оценки эффективности предлагаемых мероприятий и контроля безопасности при проведении работ на площадке.

Конечная цель проекта по данному объекту – добиться практически полного гарантированного отсутствия воздействия на здоровье населения и состояние окружающей среды площадки хранения ПХБ-содержащего оборудования в Минойтах.

Версия для печати

Последние новости:

2009.07.20	О проведении цикла международных семинаров
2009.07.15	Семинар «Ценообразование в Республике Беларусь».
2009.07.14	Приглашаем в город мастеров
2009.07.08	Проведение открытого аукциона
2009.07.07	Программа проведения «ЛИДА-РЕГИОН-2009»

ОБЩЕСТВЕННЫЕ СЛУШАНИЯ
по мероприятиям проекта ГЭФ/Всемирного банка
«Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь»
(GEF PPG TF092596)
Место проведения: г. Лида, районный исполком
6 мая 2009 года, 12:00

РЕГИСТРАЦИОННЫЙ СПИСОК

№	Фамилия, имя, отчество, организация, должность	Подпись
1	Вишук Владимир Владимирович. ГУ «Лидский зональный центр гигиены и эпидемиологии» - главный врач	
2	Мельник Руслан Владимирович Лидский РИК отдел по делам молодёжи гл. специалист.	
3	Ламок Елена Анатольевна Третьяковский сельский исполнительный комитет, председатель	
4	Белуни Инесса Викторовна, начальник отдела гигиенического работы райгигиена	
5	Луня Сергей Михайлович начальник Лидского горрайинспекции ПРиОС	
6	Бабаненкова Светлана Николаевна начальник отдела по делам молодежи	
7	Семенов Андрей Владимирович (2-й секретарь ГК ОО «БРСМ»)	
8	Буракевич Надежда Петровна гл. агроном УСХ и продовольствия	
9	Островская Валентина Семеновна гл. инженер УСХ	
10	Усенайть Юрий Гаджуткисович	
11	Шур Ирина Эдуардовна отдел культуры Лидского РИК, директор ЦКД	
12	Вечерний Виктор Леонтьевич	

№	Фамилия, имя, отчество, организация, должность	Подпись
13	Горденок Петр Григорьевич	
14	Хвойницкий Ф.Н.Ф. Евгеньевич	
15	Орехво Евгений	
16	Палейчук Геннадий Марьянович	
17	Бигун Иван Федорович Управление с/х и прод. зав сектора переработки	
18	Степанюк Евгений Евгеньевич Управление с/х и продовольствия гл. специалист по охране труда	
19	Здановец Ирина Юрьевна Жиделяновский сельский совет, секретарь	
20	Боровский Валерий Иванович Зам. главного инженера Лидских ЭС	
21	Хлевинский Андрей Евгеньевич, Председатель Правления БОО «Развитие-XXI век», эксперт проекта	
22	Белоус Марина Владимировна, технический консультант проекта	
23	Соловьев Юрий Васильевич, инженер, монтажник проекта	
24	Станкевич Александр Петрович ЦНИИКИВР, зам. директора.	
25		
26		
27		
28		

Приложение 4.

ПРОТОКОЛ

общественных слушаний по мероприятиям проекта ГЭФ/Всемирного банка «Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь» (GEF PPG TF092596)

7 мая 2009 года, 14:00 г. Слоним, районный исполком

Председательствовал: Белоус М.В., консультант проекта

Присутствовали: участники общественных слушаний, жители г. Слоним и района, согласно прилагаемому регистрационному списку

Повестка дня: Обсуждение мероприятий по ликвидации Слонимского захоронения непригодных пестицидов и технического задания на проведение экологогической оценки воздействия мероприятий проекта на окружающую среду.

Выступили:

Апанович В.А., заместитель председателя Слонимского райисполкома, поприветствовал участников слушаний, особо отметив важность для района планируемого мероприятия по ликвидации Слонимского захоронения непригодных пестицидов.

Белоус М.В. проинформировала присутствующих о международных обязательствах Республики Беларусь по Стокгольмской конвенции о стойких органических загрязнителях, негативных свойствах стойких органических загрязнителей, а также о разработанном Национальном плане выполнения указанной конвенции. Участники общественных слушаний были ознакомлены с основными задачами планируемого полномасштабного проекта по обращению с СОЗ, информацией о мероприятиях проекта, его исполнителях и выделяемом финансировании, а также содержанием

технического задания на проведение экологогической оценки воздействия мероприятий проекта на окружающую среду.

Участникам слушаний был продемонстрирован видеоролик о захоронении и мерах по его ликвидации, подготовленный местным информационным ТВ каналом.

Вопросы и комментарии участников слушаний:

1. Хватит говорить, что это – Слонимское захоронение, хватит играть в кошки-мышки, свозили сюда химикаты, как минимум с четырех районов, а решать теперь вопрос нам, а денег мы выделить на ликвидацию не можем, так что если вы можете нам помочь, то давайте не говорить, а делать. Я уверен, что площадь загрязнения не 3,5 га, как сказал эксперт (А.П. Станкевич), а гораздо больше уже.
2. Уже 15 лет говорим об этом захоронении и его ликвидации, а воз и ныне там.
3. Зная о воздействии на здоровье человека химикатов, захороненных у нас, считаю, что работы по их извлечению и обезвреживанию надо проводить незамедлительно.
4. Люди собирают грибы около захоронения опасно ли это?
5. Эксперт говорит, что ядохимикаты захоронены в мешках, а когда там проводили инженерные работы, то вскрыли бочки на глубине 60-70 см.
6. На участке находится лес возрастом 35-40 лет, кто будет рубить и корчевать? Как будет использоваться древесина? Не опасна ли эта древесина?

Председательствующий М.В.Белоус

Секретарь А.Е.Хлевинский

УВАЖАЕМЫЕ НАШИ РАБОТНИКИ, ПЕНСИОНЕРЫ И ВЕТЕРАНЫ!

Горячо и сердечно поздравляем вас с наступающим Праздником труда!

Будьте всегда здоровыми, веселыми, жизнерадостными, бодрыми и трудолюбивыми! Мира, счастья, долголетия вам и вашим близким и родным. Искренне благодарим за добросовестный труд в нашем коллективе.

Пусть в делах всегда и всюду
Вам сопутствует успех!
И сегодня, в праздник майский,
Будьте вы счастливей всех!

Праздничного всем настроения и дальнейших трудовых успехов!

Правление и профком РУСП "НОВОДЕВЯТКОВИЧИ".

УВАЖАЕМЫЕ РАБОТНИКИ ПРЕДПРИЯТИЯ, ПЕНСИОНЕРЫ И ВЕТЕРАНЫ!

С огромной радостью поздравляем вас с Праздником труда!

Желаем вам крепкого здоровья, мира и согласия, доброты и тепла, трудовых успехов. Пусть жизнь дарит вам много счастливых дней, пусть настроение всегда будет светлым и радостным, дела успешными, а удача никогда не покидает вас.

От души благодарим за работу в нашем коллективе!

Правление и профком СПК им. СУВОРОВА.

ПАВОДОК ЗАТОПИЛ ШАХТУ С АМЕРИКАНСКОЙ ЯДЕРНОЙ УСТАНОВКОЙ

В американском штате Северная Дакота паводковые воды затопили одну из 165 пусковых шахт с ядерной установкой.

Зимой в этом районе выпало рекордное количество снега, а когда он начал таять, ракетная площадка оказалась подтоплена. Военные всячески пытались спасти ситуацию, в частности, строили заградительные барьеры из мешков с песком, однако стихию это не остановило — шахта пришла в негодность, а ракету оттуда пришлось вывозить в экстренном порядке, передают «Вести».

Стоит заметить, что в конце марта 2007 года в Вашингтоне был распространен доклад под заголовком «Американская система противоракетной обороны не может противостоять дождю», в котором впервые была обнародована информация о том, что из-за сильных дождей на Аляске администрация Джорджа Буша лишилась 25% своего противоракетного потенциала. Тогда «утонули» семь из 26 подземных шахт для размещения ракет-перехватчиков ПРО на военной базе «Форт Грили». В одной из шахт глубина воды достигала 19 м, а в другой — 15-ти. Их ремонт занял больше года и обошелся казне в $38 миллионов. «Известия».

ФУТБОЛ: ПЕРШАЯ ЛІГА

АБАРОНА "НАМУДРЫЛА"

"Камунальнік" (Слонім) — "Верас" (Нясвіж) — 0:2

5 красавіка, стадыён "Юнацтва", сонечна. Пачатак у 17 гадзін 30 мінут.

Суддзі: Смірных (1 к) (Мінск), Хевук, Маслянка (Брэст).

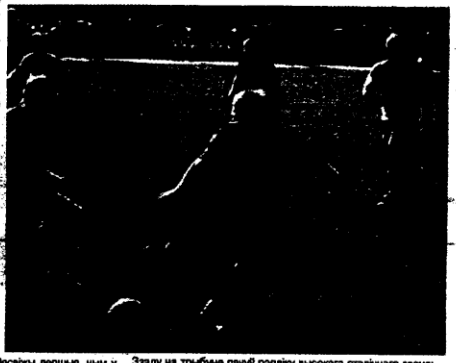
Інспектар: Вайцянкоў (Магілёў).

"Камунальнік": Зароўскі, Снапко, Ярмоленка, Куцко, Дабрыян, Аначенка (к), (Лужанкоў, 59), Астапчык, Вышынскі, Звонкоў (Гусар, 80), Коцін (Гарэст, 87), Нарковіч.

"Верас": Міхайлаў, Гаркуша, Кулікоў (Трындзюк 46), Равіна, Цёхончык, Дзянісюк, (Пыжык, 80), Альшэўскі, Палазнік, Крывальцэвіч (Мышнік, 64), Азява, Лукашэнка (Лазюк, 90).

Папярэджанні: Ярмоленка, Коцін, Галы: Дзянісюк (22), Цёхончык (71).

Стартаваў чарговы чэмпіянат рэспублікі ў першай лізе. Адкрыццё яго ў Слоніме было незвычайна ўрачыстым. У разгар перадматчавай размінкі футбалістаў самадзейныя артысты Слонімшчыны парадавалі балельшчыкаў і ігракоў добрым песняй. На адкрывальй чэмпіянату ў Слонім прыехаў кіраўнік асацыяцыі "Беларуская федэрацыя футбола" Генадзь Невыглас. Прыехаў з віншавальным словам і падарункам для юных футбалістаў — прафесіянальный мячыкі. У гэтым чэмпіянаце федэрацыя асабліную увагу канцэнтруе на першай лізе і як адзначыў старшыня асацыяцыі, невыпадкова на першым мятчы ў Слонім, Пінск, Мазыр раз'ехаліся кіраўнікі футбольнай арганізацыі. Ганаровы госць зрабіў першы ўдар па мячу. І спектакль пад назвай "ніз вялікасць футбол" пачаўся. Як аказалася, на гэты дзень футбольныя акцёры ў Нясвіжы лепшыя, чым у Слоніме. Хоць за адсутнасць самазданасці слонімскіх футбалістаў і не папракнеш, матч прайграла найперш абарона. Госці праявілі сябе больш майстаравітымі. І ўжо на 6-й мінуце Цёхончык згуляў у штрафной гаспадароў на апярэджанне. Не забіў. Абарона "Камунальніка" трывожны званочак не пачула, тым больш, што мінуты праз тры ўжо ля варот Міхайлава падобны выпад зрабіў Нарковіч. І таксама без лагічнага завяршэння.



Ззаду на трыбуне пачуў рэпліку высокага сталічнага госця:

— Такія мячы траба забіваць...

На 22-й мінуце нявінавацца абароны гаспадароў і вартара дазволілі Дзянісюку без праблем адкрыць лік забітым мячам у 19-ым чэмпіянаце. Ледзь гаспадары поля развялі мяч з цэнтра, як у іх штрафной зноў "запахарыла" і абарона нагадвала сіта. Мяч цудам не трапіў у сетку варот. У першым тайме гаспадары поля маглі зраўняць лік. Аднак ад Нарковіча і на гаты раз падвярнулася ўдача. А шкадуйны нас у штрафную выйду мяч Снапко, яўген, бадай, адзіны з абаронцаў-слонімцаў, хто згуляў не толькі самаадданна, але і даволі надзейна.

У другім тайме сапернікі мелі на аднаму моманту для ўзяцця варот. Калі далёкі ўдар Коціна Міхайлаў парыраваў, ды яго візаві Зароўскі быў менш фартовым. Чарговым падарункам абаронцаў "Камунальніка" Цёхончык скарыстацца не праміну. 2:0 — і тры ачкі ў актыў "Вераса".

У другім туры "Камунальнік" правядзе матч 3 мая ў Светлагорску.

Астатнія матчы першага тура завяршыліся так: Белкард (Гродна) - Баранавічы (Баранавічы) - 1:5, ДСК-Гомель (Гомель) - Белшына (Бабруйск) - 0:0, Ліда (Ліда) - СКВІЧ (Мінск) - 0:0, Ведрыч-97 (Рэчыца) - Хімік (Светлагорск) - 0:0, Славія-Мозыр (Мозыр) - Спартак (Шклоў) - 0:0, Хваля (Пінск) - Полацк (Полацк) - 5:1.

Васіль Афанасік.
Фота Алены Лынько.

ЗАХОРОНЕНИЕ ПЕСТИЦИДОВ ПЛАНИРУЕТСЯ ЛИКВИДИРОВАТЬ

Недавно глобальный экологический фонд (ГЭФ) выразил согласие на предоставление Республике Беларусь гранта в размере 5,5 млн. долларов США на реализацию мероприятий Национального плана выполнения обязательств, принятых Республикой Беларусь по Стокгольмской конвенции о стойких органических загрязнителях, на 2007-2010 годы и на период до 2028 года, утвержденного Указом Президента Республики Беларусь от 12 июня 2007 г.

В рамках подготовки проекта ГЭФ "Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь" специалистами Министерства природных ресурсов и охраны окружающей среды Республики Беларусь при содействии Всемирного банка разработан проект плана мероприятий указанного проекта, который включает в себя меры по ликвидации Слонимского захоронения непригодных пестицидов.

7 мая 2009 года в 14.00 в здании Слонимского районного исполнительного комитета совместно с Министерством природных ресурсов и охраны окружающей среды пройдет совещание по общественному обсуждению мероприятий проекта международной технической помощи "Обращение со стойкими органическими загрязнителями и укреплении технического и институционального потенциала в Республике Беларусь". Одним из планируемых направлений деятельности проекта являются меры по ликвидации Слонимского захоронения непригодных пестицидов.

Приглашаются все желающие принять участие в обсуждении. Вопросы и предложения можно также направить в районный исполнительный комитет лично по телефону или по факсу 2-39-87, а также в Минприроды по факсу(8 017)289-38-88 и электронной почте poosbelarus@sml.by

С информацией о планировании мероприятий по ликвидации Слонимского захоронения непригодных пестицидов можно ознакомиться на сайте Слонимского райисполкома www.slonim.grodno-region.by, на доске объявлений или непосредственно в Слонимской горрайинспекции природных ресурсов и охраны окружающей среды.

ОПИСАНИЕ СЛОНИМСКОГО ЗАХОРОНЕНИЯ НЕПРИГОДНЫХ ПЕСТИЦИДОВ

Что представляет собой Слонимское захоронение пестицидов, насколько оно безопасно для близлежащих деревень — этот вопрос интересует многих слонимчан.

По данным горрайинспекции, захоронение пестицидов находится юго-восточнее г. Слонима, в 10 км от него. Здесь хранятся непригодные к применению пестициды 38 наименований, II-IV классов опасности. Пестициды находятся в твердом и жидком состоянии. Порошкообразные уложены в мешки в две траншеи, жидкие — размещены в 2 бункерах. На дно траншей уложен слой глины толщиной до 10см, наверх насыпан местный грунт. Бункеры сверху залиты бетоном и также засыпаны грунтом. Места нахождения траншей и бункеров хорошо видны. Их поверхность возвышается на 0,8-1,0 м. Общая масса хранящихся под землей пестицидов составляет 892 тонны.

За Слонимским захоронением ведется постоянное наблюдение, с четырех сторон от захоронения размещены четыре скважины, из которых периодически берутся для контроля поверхностные и подземные воды, почва. Контроль осуществляют органы Минприроды и Минздрава Республики Беларусь. По состоянию на 01.01.2009 г. захоронение не представляет резко выраженной угрозы для здоровья людей, животных и растений. Загрязнение грунтовых вод и почвы является локальным и происходит в радиусе не превышающем 200 метров от площадки захоронения, а ближайшие населенные пункты находятся в радиусе 5-8 км.

Также в 2008 году проведены некоторые профилактические меры по защите окружающей среды и снижению вредного воздействия непригодных пестицидов, находящихся под землей: вырыт ров вокруг захоронения, установлено ограждение и таблички с предупредительными знаками. Финансировал проведенные работы республиканский фонд охраны природы

Но основное и главное направление по защите окружающей среды — это комплекс мероприятий по ликвидации Слонимского захоронения. Данные мероприятия планируется провести в рамках выполнения полномасштабного проекта ГЭФ/Всемирного банка по обращению со стойкими органическими загрязнителями, проект будет реализовываться Минприроды.

Во время проведения работ по ликвидации пестицидов обязательной мерой будет обеспечение безопасности, поэтому пройдет много подготовительных работ. В их числе и определение специализированной организации по перепаковке и перевозке пестицидов, а также организации, которая будет следить за состоянием окружающей среды во время проведения работ. Будут сделаны временная подъездная дорога к захоронению пестицидов, вырубка леса в местах проведения работ, а также будут обустроены площадки для ремонта и хранения инженерной техники, для проведения работ по перепаковке и хранению контейнеров. Во время мероприятий по вскрытию места захоронения специальная аккредитованная лаборатория будет определять токсичность всех слоев грунта, который будет вывезен вместе с пестицидами.

После завершения загрузки пестицидов и загрязненного грунта в контейнеры, они будут отправлены в одну из стран Европы для дальнейшего уничтожения путем сжигания или на долгосрочное экологически безопасное хранение в специально оборудованном хранилище.

На заключительном этапе выполнения проекта пройдет восстановление территории захоронения, а в дальнейшем еще некоторое время будут проводиться работы по исследованию загрязнения почвы и воды для подтверждения факта полного уничтожения запасов пестицидов.

Елена Сидоренко,
специалист Слонимской горрайинспекции природных ресурсов и охраны окружающей среды.
Татьяна Дешко, корреспондент.

ОБЩЕСТВЕННЫЕ СЛУШАНИЯ
по мероприятиям проекта ГЭФ/Всемирного банка
«Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь»
(GEF PPG TF092596)
Место проведения: г. Слоним, районный исполком
7 мая 2009 года, 14:00

РЕГИСТРАЦИОННЫЙ СПИСОК

№	Фамилия, имя, отчество, организация, должность	Подпись
1	Белоус Марина Владимировна координатор проектов НПП Леонприрода	[signature]
2	Шурко Павел Павлович зам. директора по агрохим обслуживанию ОАО „Слонимский агросервис"	[signature]
3	Квесеня Людмила Иосиф. ведущ. агроном ОАО „Сл. агро"	[signature]
4	Юшкевич Сергей Викторович нач. отдела идеологической работы райисполкома	[signature]
5	Дятчик Константин Константинович зам. нач. отдела идеологич. работы райисполкома	[signature]
6	Еремейчик Вадим Вячеславович гл. лесничий ГЛХУ „Слонимский лесхоз"	[signature]
7	Ананович Вячеслав Александрович зам. председателя райисполкома	[signature]
8	Позняк Валерий Николаевич нач. землеустроительной и геодезической службы Слонимского р-на	[signature]
9	Гороновский Сергей Александрович и.о. нач. Слонимского районного отдела по ЧС	[signature]
10	Тетин Анатолий Михайлович гл. государственный санитарный врач Слонимского р-на	[signature]
11	Тихонович Иван Владимирович директор ОАО „Слонимский агросервис"	[signature]
12	Ведущий специалист Слонимской горрайинспекции ПР и ООС Кулешевич А.И.	[signature]

№	Фамилия, имя, отчество, организация, должность	Подпись
13	Сидоренко Елена Владимировна, вед. специалист горрайинспекции ПРиОС	
14	Жерин Сергей Матвеевич директор Слонимского управления мелиоративных систем	
15	Денисо Татьяна Несторовна ГУ "Редакция объединенной газеты "Слонимский вестник"	
16	Дектярев Николай Михайлович нач. Слонимской горрайинспекции ПРиОС	
17	Цвикевич Вадим Васильевич первый секретарь ГК ОО "БРСМ"	
18	Федрин Ольга Анатольевна гл. спец. ГК ОО "БРСМ"	
19	Хрусцин Ольга Геннадьевна гл. специалист ГК ОО "БРСМ"	
20	Русак Елена Николаевна гл. дох Слонимск. РОС РГОО "БООР"	
21	Хведченя Александр Викторович член Правления БОО "Развитие-XXI век"	
22	Станкевич Александр Петрович, зам. директора ЦНИИКИВР, эколог-проектировщик	
23		
24		
25		
26		
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Приложение 5

ПРОТОКОЛ

общественных слушаний по мероприятиям проекта ГЭФ/Всемирного банка «Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь» (GEF PPG TF092596)

(второй раунд)

7 июля 2009 года, 12:00 г. Лида, районный исполком

Председательствовал: Соловьев Ю.В., консультант проекта

Присутствовали: участники общественных слушаний, жители г. Лида и района, согласно прилагаемому регистрационному списку

Повестка дня: Обсуждение мероприятий по обеспечению вывоза на экологически безопасное уничтожение/хранение выведенных из эксплуатации ПХБ-содержащих конденсаторов, временно размещенных на площадке в д. Минойты; вывоз непригодных пестицидов, относящихся к СОЗ, со склада в д. Гутно (Лидский район); обсуждение проекта отчета по экологогической оценке воздействия мероприятий проекта на окружающую среду.

Выступили:

Соловьев Ю.В. проинформировал присутствующих о разработанных с учетом результатов первого раунда слушаний, проведенных в г. Лида 6 мая 2009 года, мероприятиях планируемого полномасштабного проекта по обеспечению вывоза на экологически безопасное уничтожение/хранение выведенных из эксплуатации ПХБ-содержащих конденсаторов, временно размещенных на площадке в д. Минойты, а также вывозу непригодных пестицидов, относящихся к СОЗ, со склада в д. Гутно (Лидский район); предоставил вниманию участников слушаний проект отчета по экологогической оценке воздействия мероприятий проекта на окружающую среду.

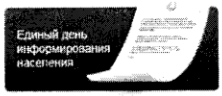
Вопросы и комментарии участников слушаний:.

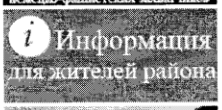
1. В случае начала реализации проекта, необходимо активно информировать местную общественность о ходе его реализации и достигнутых результатах.
2. Белорусскому общественному объединению «Развитие-XXI век" оказать содействие местной общественности в проведении информационных мероприятий по вопросам обращения с СОЗ.
3. Когда и кем будет принято решение об утверждении проекта?
4. Будет ли привлекаться для выполненения работ в целях обеспечения безопасности при их проведении соответствующие подразделения МЧС?
5. Как будет использоваться площадка в д. Минойты после вывоза оттуда ПХБ-содержащих конденсаторов? Предусмотрены ли мероприятиями проекта меры по рекультивации и восстановлению почв на территории площадки?
6. Предусмотрены ли в смете расходов на вывоз ПХБ-содержащих конденсаторов средства на оплату сопровождения данного опасного груза патрулем ГАИ для избежания возможных дорожно – транспортных проишествий?
7. Какой организацией планируется осуществление локального мониторинга окружающей среды на проектной территории?.

По результатам обсуждения, участниками второго раунда общественных слушаний в г. Лида были поддержаны предложенные в рамках проекта мероприятия по вывозу и дальнейшему экологически безопасному уничтожению/хранению ПХБ-содержащих конденсаторов с территории площадки в д. Минойты, а также мероприятия по вывозу и дальнейшему экологически безопасному уничтожению/хранению непригодных СОЗ-пестицидов со склада временного хранения в д. Гутно (Лидский район).

Председательствующий Ю.В.Соловьев

Секретарь А.Е.Хлевинский





2009.06.22 Второй раунд общественного обсуждения

7 июля 2009 г. в 12.00 в здании Лидского районного исполнительного комитета совместно с Министерством природных ресурсов и охраны окружающей среды будет проводиться второй раунд общественного обсуждения мероприятий проекта международной технической помощи «Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь» и материалов оценки воздействия на окружающую мероприятий по утилизации ПХБ-содержащего оборудования, выведенного из эксплуатации, находящегося на территории ПС «Лида», д. Миноиты.

Приглашаются все желающие принять участие в обсуждении. Вопросы и предложения можно также направить в районный исполнительный комитет лично или по тел/факсу 34004, а также в Минприроды по факсу (8 017) 289 38 88 и электронной почте popsbelarus@sml.by.

Оценка воздействия на окружающую среду (ОВОС) при проведении мероприятий на площадке хранения выведенных из эксплуатации ПХБ-содержащих конденсаторов в
д. Миноиты (Лидский район).

В Республике Беларусь планируется с 2010 г. выполнение полномасштабного проекта ГЭФ/Всемирного банка «Обращение с запасами стойких органических загрязнителей и укрепление технического/институционального потенциала». Проект будет реализовываться Минприроды при финансовой поддержке Глобального экологического фонда и Всемирного банка.

Один из приоритетных объектов по проведению мероприятий проекта – площадка хранения выведенных из эксплуатации ПХБ-содержащих конденсаторов в д. Миноиты (Лидский район).

На территории площадки в Миноитах накоплено 3000 ПХБ-содержащих конденсаторов. Емкость контейнера составляет примерно 175 конденсаторов. Общая масса контейнеров (брутто) составляет примерно 7 тонн. Почвы, непосредственно примыкающие к бетонным плитам, на которых размещены контейнеры, загрязнены ПХБ. Уровень загрязнения оценивается в 70 г/кг. Такой уровень загрязнения почв объясняется как непосредственными утечками ПХБ, так и за счет загрязненного дождевого стока, и по результатам инвентаризации ПХБ считается самым высоким в Беларуси. Из этого факта вытекает приоритетность данной площадки хранения ПХБ-содержащего оборудования для реализации проектных решений, направленных на защиту окружающей среды.

В качестве основных проектных решений рассматривались три альтернативных варианта. Оценка приемлемости предлагаемых альтернативных проектных решений производится на основе анализа снижения (либо увеличения) риска загрязнения окружающей среды. Выполненный анализ оценки состояния окружающей среды в окрестности захоронения для всех вариантов показал, что по совокупности учитываемых рисков ликвидация площадки путем вывоза контейнеров с ПХБ для уничтожения в одну из стран Западной Европы, обладающую промышленными установками по уничтожению ПХБ, является наиболее предпочтительным.

Проведенные 6 мая 2009 г. в г. Лида общественные слушания показали, что местные власти и население также поддерживают данный вариант.

При проведении общественных слушаний была поднята проблема, связанная с тем, что в Лидском районе на складе в д. Гутно размещено 43 тонны неидентифицированных смесей непригодных пестицидов, содержащие ДДТ согласно архивным данным тех хозяйств, которые в свое время использовали эти химикаты. Данный склад находится в 3-ем поясе зоны санитарной охраны (ЗСО) водозабора, половина населения города Лида пользуются водой из данного водозабора. Согласно СанПиН 10-113 РБ 99. второй и третий пояса (пояса ограничений) ЗСО включают территорию, предназначенную для предупреждения загрязнения воды источников водоснабжения. Размещение данного объема непригодных пестицидов в ЗСО водозабора безусловно несет повышенный риск для возможного загрязнения подземных вод и для здоровья людей, проживающих в г. Лида, численность населения которого составляет на 01.01.2009 г. 95,8 тыс. человек. В качестве первого шага решения данной проблемы необходимо провести переупаковку данного объема непригодных пестицидов в соответствии с положениями «Правил обращения с непригодными пестицидами», утвержденными Минприроды. Второй шаг – осуществить вывоз переупакованных непригодных пестицидов для уничтожения в одну из стран ЕС, обладающую промышленными установками по уничтожению непригодных пестицидов.

При ликвидации площадки в д. Миноиты и непригодных пестицидов на складе в д. Гутно возможны различные варианты воздействия на окружающую среду и население, связанные с регламентом проведения работ.

Подготовительные мероприятия:

1. Обустройство подъездной дороги из песчано-гравийных смесей к площадке хранения ПХБ в Миноитах;
2. Устройство площадки для временного хранения контейнеров с пестицидами в д. Гутно.

Данные подготовительные мероприятия не повлекут значительного воздействия на окружающую среду и особых компенсационных мер не предусматривается.

Производственные мероприятия:

1. Переупаковка непригодных пестицидов;
2. Погрузка и транспортировка контейнеров с непригодными пестицидами и ПХБ-содержащих конденсаторов.

При проведении данных работ возможны нештатные ситуации:

1. Распыление и рассеяние сухих пестицидов при переупаковке;
2. Возможное возгорание пестицидов;
3. Возможное влияние вскрытых пестицидов на здоровье населения;
4. Возможное вскрытие контейнера с ПХБ-содержащих конденсаторами и попадание ПХБ на грунт;
5. Возможная авария автотранспорта при перевозке.

С целью нейтрализации данных вероятных ситуаций предусматриваются следующие мероприятия:

1. Для предотвращения попадания пестицидов и ПХБ на грунт, площадку, на которой производятся работы по их пересыпке, рекомендуется застилать полиэтиленовой пленкой или другим материалом, способным предотвратить заражение грунта;
2. В обязательном порядке предусматривается наличие и применение инженерной техники (бульдозеры, экскаваторы, скреперы), с помощью которой горящие пестициды необходимо покрыть слоем песка или земли;
3. В обязательном порядке персонал использует средства индивидуальной защиты (защитная одежда и фильтрующий противогаз). Гражданское население не допускается на площадку в ходе проведения работ.
4. Контейнеры для пестицидов и ПХБ-содержащих конденсаторов должны соответствовать международным стандартам и выдерживать внутреннее давление, развивающееся при обычных условиях перевозки.

В обязательном порядке все эти мероприятия войдут в регламент «Организация и проведение работ по переупаковке и транспортировке непригодных пестицидов на складе в д. Гутно и площадке хранения выведенных из эксплуатации ПХБ-содержащих конденсаторов в д. Минойты (Лидский район)», который подлежит утверждению Гродненским облисполкомом.

Версия для печати

Последние новости:

2009.07.20	О проведении цикла международных семинаров
2009.07.15	Семинар «Ценрообразование в Республике Беларусь».
2009.07.14	Приглашаем в город мастеров
2009.07.08	Проведение открытого аукциона
2009.07.07	Программа проведения «ЛИДА-РЕГИОН-2009»

ВТОРОЙ РАУНД ОБЩЕСТВЕННЫХ СЛУШАНИЙ
по мероприятиям проекта ГЭФ/Всемирного банка
«Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь»
(GEF PPG TF092596)
Место проведения: г. Лида, районный исполком
7 июля 2009 года, 12:00

РЕГИСТРАЦИОННЫЙ СПИСОК

№	Фамилия, имя, отчество, организация, должность	Подпись
1	Соловьев Юрий Васильевич, Минприроды, консультант проекта ГЭФ/Всемирного банка	
2	Хведченя Александр Викторович, член Правления ООО „Развитие-XXI век"	
3	Палейчик Георгий Марьянович главный специалист управления сельского хоз-ва и прод	
4	Банцук Владимир Владимирович главный врач — Лидской зональный центр гигиены и эпидемиологии	
5	Боровский Валерий Иванович зам. главного инженера Лидских электрических сетей	
6	Дайский Вячеслав Леонтьевич председатель районного совета БОВ	
7	Набоченкова Светлана Николаевна начальник отдела по делам молодежи Лидского райисполкома	
8	Новик Александр Петрович гл/специалист НИБГИ.	
9	Луня Сергей Михайлович Начальник Лидского горрайонного ПРиОДС	
10	Юшкевич Иван Эдуардович гл. инж. ООО „Неман-агроинсервис"	
11	Велигко Сергей Николаевич, инженер ЗАО „Каскад"	
12	Черепко Элла Александровна,	

Приложение 6.

ПРОТОКОЛ

общественных слушаний по мероприятиям проекта ГЭФ/Всемирного банка «Обращение со стойкими органическими загрязнителями и укрепление технического и институционального потенциала в Республике Беларусь» (GEF PPG TF092596)

(второй раунд)

30 июня 2009 года, 14:00 г. Слоним, районный исполком

Председательствовал: Белоус М.В., консультант проекта

Присутствовали: участники общественных слушаний, жители г. Слоним и района, согласно прилагаемому регистрационному списку

Повестка дня: Обсуждение мероприятий по ликвидации Слонимского захоронения непригодных пестицидов и проекта отчета по экологогической оценке воздействия мероприятий проекта на окружающую среду.

Выступили: .

Белоус М.В. проинформировала присутствующих о мероприятиях проекта по ликвидации Слонимского захоронения непригодных пестицидов, разработанных с учетом итогов первого раунда общественных слушаний, состоявшихся 7 мая 2009 года в г. Слоним, а также представила вниманию участников слушаний проект отчета по экологогической оценке воздействия мероприятий проекта на окружающую среду.

Вопросы и комментарии участников слушаний:

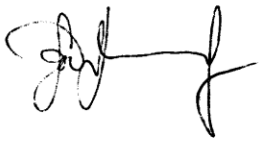
1. Будут ли предусмотрены мероприятиями проекта восстановление и рекультивация территории захоронения после завершения работ по его ликвидации?.
2. Будут ли привлекаться к разработке регламента «Организация и проведение работ по вскрытию, извлечению, переупаковке и транспортировке

непригодных пестицидов на Слонимском захоронении» местные органы власти?

3. Будет ли проводиться работа по информированию населения о ходе реализации мероприятий по ликивидации Слонимского захоронения? Кто будет ответственным за эту работу?.
4. Необходимо создать в ходе реализации проекта общественный информационный центр, где все заинтересованные смогут получить информацию о реализуемых мерприятиях по ликвидации захоронения.

По результатам обсуждения, участниками второго раунда общественных слушаний в г. Слоним были поддержаны предложенные в рамках проекта мероприятия по ликвидации Слонимского захоронения непригодных пестицидов, в частности, по переупаковке, вывозу и дальнейшему экологически безопасному уничтожению извлеченных из захоронения СОЗ-содержащих непригодных пестицидов.

Председательствующий  М.В. Белоус

Секретарь  А.Е.Хлевинский

ФУТБОЛ: ПЕРВАЯ ЛІГА

ПРОПУСТИЛИ НА ПОСЛЕДНИХ МИНУТАХ

В среду, 10 июня, футбольный клуб «Коммунальник» встречался на выезде с Мозырским клубом «Славия-Мозырь».

В рамках очередного 9-го тура у тренерского штаба слонимской команды возникла серьезная проблема в адекватной замене травмированного в игре с «Лидой» Михаила Котина. Дмитрий Вышинский в отчетном матче был выдвинут на позицию под нападающего. За «Коммунальник» играли четыре защитника, два опорных защитника, три полузащитника и один нападающий. В этой игре дебютировал Юрий Левошик на позиции опорного полузащитника, и весь матч отыграл на достойном уровне.

Игра получилась обоюдоострой: обе команды старались быстро переходить от обороны к нападению. Мяч в центре поля подолгу не задерживался.

На 11-й минуте мяч уже побывал в сетке ворот хозяев поля. Левошик сделал пас в разрез защитников «Славии» Алексею Звонкову и тот успешно завершил комбинацию. Однако, по мнению судейской бригады, в положении «вне игры».

Хозяева в первом тайме могли открыть счет на 15-й и 20-й минутах. На 35-й минуте в нашей штрафной очень эффектно падает нападающий «Славии», но выпросить пенальти у судьи матча Дмитрия Дигилевича (Жодино) у него не получается.

Все основные события, как обычно, стали происходить во второй половине матча.

На 54-й минуте ошибается в передаче защитник «Славии». Мяч перехватывает Николай Добриян, отдает его Данису Нарковицу, который сближаясь по центру со штрафной соперника делает пас влево. Мяч осмотрительно пропускает Дмитрий Вышинский, а Алексей Звонков сильным ударом в дальний угол вратарику со штангой отправляет мяч в сетку ворот «Славии».

Хорошо разыгранная комбинация и красивый гол выводят «Коммунальник» вперед. «Славия» бросилась отыгрываться. Но мяч в наши ворота не шел.

На 66-й минуте опять мог отличиться Звонков, но мяч в сетку ворот «Славии» попал с внешней стороны.

И только за 2 минуты до окончания основного времени хозяева смогли отыграться. Максим Суховеев, находясь в штрафной гостей, получает пас от своего товарища и просто и надежно пробивает по воротам «Коммунальника», забивая гол.

Напряженный и интересный футбольный поединок завершился боевой ничьей.

Остальные матчи 9-го тура завершились так:
СКВИЧ (Минск) - Белшина (Бобруйск) — 2:3; Лида (Лида) - Полоцк (Полоцк) — 1:1; Белкард (Гродно) - Ведрич-97 (Речица) — 3:0; Барановичи (Барановичи) - ДСК-Гомель (Гомель) — 0:1; Спартак (Шклов) - Волна (Пинск) — 0:1; Химик (Светлогорск) - Верас (Несвиж) — 0:0.

Елена Лынько.

ТУРНИРНАЯ ТАБЛИЦА

							О
1.	Волна (Пинск)	9	7	2	0	22-8	23
2.	Верас (Несвиж)	9	6	3	0	10-1	21
3.	Белшина (Бобруйск)	9	5	2	2	15-7	17
4.	ДСК-Гомель	9	3	5	1	8-6	14
5.	Белкард (Гродно)	9	4	1	4	8-10	13
6.	Барановичи	9	3	4	2	15-10	13
7.	СКВИЧ (Минск)	9	3	3	3	6-6	12
8.	Ведрич-97 (Речица)	9	3	3	3	10-13	12
9.	Химик (Светлогорск)	9	2	4	3	10-9	10
10.	Коммунальник	9	2	3	4	9-12	9
11.	Полоцк	9	2	1	6	7-14	7
12.	Лида	9	1	4	4	4-10	7
13.	Славия-Мозырь	9	1	3	5	7-13	6
14.	Спартак (Шклов)	9	1	2	6	2-14	5

СНОВА О ПЕСТИЦИДАХ

30 ИЮНЯ 2009 г. в 12-00 в [illegible] районного исполнительного комитета совместно с Министерством природных ресурсов и охраны окружающей среды будет проводиться второй раунд общественного обсуждения мероприятий проекта международной технической помощи Европейского Союза со стойкими органическими загрязнителями и укреплению технического и институционального потенциала в Республике Беларусь. Будут рассматриваться и обсуждаться материалы по оценке воздействия пестицидов на окружающую среду и мероприятия по ликвидации Слонимского захоронения непригодных пестицидов.

Приглашаются все желающие принять участие в обсуждении.

Вопросы и предложения можно также направить в райсный исполнительный комитет по тел./факсу 2-39-87, а также в Минприроды по факсу 8 (017) 289-36-88 и электронной почте poprobel@tut.by.

Проведенные в Слониме общественные слушания показали, что местные власти и население поддерживают мероприятия по полному удалению непригодных пестицидов.

При ликвидации Слонимского захоронения непригодных пестицидов возможны различные варианты воздействия на окружающую среду и население, связанные с регламентом проведения работ.

Подготовительные мероприятия:

1.Обустройство подъездной дороги из песчано-гравийных смесей к захоронению пестицидов;

2. Вырубка леса в местах проведения работ;

3. Устройство площадок для проведения работ по переупаковке, отвала грунта, хранению контейнеров.

Данные мероприятия, за исключением вырубки леса, не повлекут значительного воздействия на окружающую среду. В качестве компенсационной меры по возмещению ущерба, наносимого окружающей среде вырубкой леса, предусматривается после завершения работ посадка зеленых насаждений.

Производственные мероприятия:

1. Вскрытие и переупаковка непригодных пестицидов;

2.Транспортировка контейнеров с непригодными пестицидами.

При проведении данных работ возможны нештатные ситуации:

1. Распыление и рассеяние сухих пестицидов при вскрытии и переупаковке;

2. Смыв вскрытых пестицидов дождевыми осадками;

3. Возможное возгорание пестицидов;

4. Возможное влияние вскрытых пестицидов на здоровье населения;

5. Возможная авария автотранспорта при перевозке.

Для нейтрализации данных вероятных ситуаций предусматриваются следующие мероприятия:

1.Оборудование мест выемки, переупаковки пестицидов навесами для защиты от солнечных лучей и атмосферных осадков, смачивание сухих мелкодисперсных грунтов;

2.Для предотвращения попадания пестицидов на грунт, площадку, на которой производятся работы по их пересыпке, рекомендуется застилать полиэтиленовой пленкой или другим материалом, способным предотвратить загрязнение грунта;

3.Обвалование и устройство обособленной сети лиственных стоков с отдельным местом стока;

4.В обязательном порядке предусматривается наличие и применение инженерной техники (бульдозеры, экскаваторы, скреперы), с помощью которой горящие пестициды необходимо покрыть слоем песка или земли;

5.В обязательном порядке персонал использует средства индивидуальной защиты (защитная одежда и фильтрующий противогаз). Гражданское население не допускается на площадку в ходе проведения работ.

6.Контейнеры для пестицидов должны соответствовать международным нормам и выдерживать внутреннее давление, развивающееся при обычных условиях перевозки.

Елена Сидоренко,
специалист Слонимской госрайинспекции природных ресурсов и охраны окружающей среды.
Татьяна Дешко.

НОВОСТИ

СОБИРАЕМОСТЬ НАЛОГОВ В РФ УПАЛА НА 32%

Как известно, один из основных критериев эффективности работы Федеральной налоговой службы — это собираемость налогов. С января по май 2009 года она упала на 32% в годовом исчислении.

Замглавы Минфина Сергей Шаталов связал снижение показателя с кризисом и заявил, что планы по снижению ставки НДС (18%) откладываются.

АКЦИЯ ПРОТЕСТА

В Германии студенты и преподаватели провели массовые демонстрации против недостаточного финансирования образования, в особенности высшей школы.

БЕЛТА.

ЗЯМЛЯ — СОТАВЫМ АПЕРАТАРАМ?..

Выкрадзены выпадкі самавольнага захопу зямельсотавымі аператарамі.

Сёння ў рэспубліцы пабудавана і эксплуатуецца 8345 базавых станцый сотавай сувязі. Яны належаць аператарам "Velcom", "МТС", "Бiласт", "БелСел". За 2,5 года земляўпарадкавальная і геадэзічная службы выявілі 28 фактаў парушэння заканадаўства, звязанага з захопам зямель аператарамі сотавай сувязі. Прыклады такіх парушэнняў прывялі ў прэс-цэнтры Генеральнай пракуратуры.

"Звязда".

Паважаная Вольга Савельеўна КРУГЛІК і ўся Ваша сям'я!

Прыміце нашы шчырае спачуванне з прычыны напаткаўшага Вас гора — смерці дарагога Вам чалавека — МУЖА, ДЗЯДУЛІ і ПРАДЗЯДУЛІ Пятра Дзмітрыевіча КРУГЛІКА.

Суседзі.

Калектыў Слонімскай ДаШМ выказвае шчырае спачуванне выкладчыку школы Людміле Пятроўне ПАНСЕВІЧ з прычыны напаткаўшага яе вялікага гора — смерці БАЦЬКІ.

Калектыў работнікаў ААТ "Культтавары" выказвае шчырае спачуванне Людміле Казіміраўне АРЭХАВАЙ і яе сям'і з прычыны напаткаўшага іх вялікага гора — смерці БАЦЬКІ, МУЖА, ДЗЯДУЛІ.

Адміністрацыя і прафкам КУП "Слонімскае ЖРЭА" глыбока смуткуюць з прычыны смерці старшага майстра ЖЭС-3 Уладзіміра Іванавіча ШЫДЛОЎСКАГА і выказваюць шчырыя спачуванні яго сыну Яўгену Уладзіміравічу ШЫДЛОЎСКАМУ, маці Надзеі Іванаўне ШЫДЛОЎСКАЙ і ўсім родным і блізкім нябожчыка.

Второй раунд
ОБЩЕСТВЕННЫХ СЛУШАНИЙ
по оценке воздействия мероприятий проекта ГЭФ/Всемирного банка
«Обращение со стойкими органическими загрязнителями и укрепление
технического и институционального потенциала в Республике Беларусь»
(GEF PPG TF092596)
Место проведения: г. Слоним, районный исполком
30 июня 2009 года, 12:00

РЕГИСТРАЦИОННЫЙ СПИСОК

№	Фамилия, имя, отчество, организация, должность	Подпись
1	Врублевский Олег Валентинович ГЛХУ „Слонимский лесхоз" директор	
2	Жолудо Владимир Владимирович КУП „Слоним[illegible] з-д"	
3	Отиконович И.В. – директор ОАО „Слонимский агросервис"	
4	Рудник О.А. гл. специалист ГКПОО „БРЕМ"	
5	Грецик О.Г. гл. специалист ГКОО „БРСМ"	
6	Сватковец С.Н. зам. нач. Слонимского РОЧС	
7	Шидерский А.Д. вед. спец. Землеустроительной и геодез. службы	
8	Демко Т.Г. корреспондент газ. „Слонімскі веснік"	
9	Федоренко Елена Казимировна вед. спец. Слонимской горрайинспекции ПРиООС	
10	Кригжик Иван Иванович, ведущий специалист Слоним. горрайинспекции ПРиООС	
11	Кулешевич Алексей Иосифович Ведущий специалист Слонимской горрайинспекции	
12	Шурго Павел Павлович зам. директора ОАО „Слонимский агросервис"	

№	Фамилия, имя, отчество, организация, должность	Подпись
13	Иванович вед. др. Николаевич гл. спец. ООО «Сложинский аэросервис»	
14	Иванов Иван Константинович вед. инженер ИВО, ООО «Аэросервис»	
15	Жерш Сергей Матвеевич начальник Сложинского управления метеорологических систем.	
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