

**REPUBLIC OF AZERBAIJAN**

**NATIONAL IMPLEMENTATION PLAN**

**UNDER THE STOCKHOLM CONVENTION ON POPS**

**(2007-2020)**

**Baku - 2007**

## Foreword

Azerbaijan Republic is undergoing transition period and its economy characterized by rapid development in recent years. For that reason state organizations related to the environmental protection face difficult task of minimization of adverse effects on environment.

Transition period and war conditions create problems in implementation of environment related laws and make already existing environmental problems more intensive.

XX century's global problems such as Climate Change, Ozone Layer Depletion, Desertification, Deforestation, Depletion of Biodiversity and etc. show that protection of human health and environment from these impacts is one of the main priorities at present.

Some chemical substances emitted to the environment can spread for thousands km, far from the area of their use, and negatively impact human health and environment.

Persistent Organic Pollutants are one of these problems. Out of these highly persistent compounds, pesticides are used in the agriculture and PCBs are used in the industry. Some of the POPs are byproducts generated as a result of combustion and industrial production processes. Most of the POPs are hazardous for human health and environment.

It is not easy to reduce POPs related risks, but this problem has to be solved. It is important to use the POPs' alternatives to solve the problems. The transition to the POPs' alternatives can be encouraged by the voluntary programs, awareness-raising campaigns and use of economic driving factors.

Taking into account that the problem can spread great hazards for people and environment, Convention on Persistent Organic Pollutants has been adopted by world community in Stockholm in 2001. Countries that ratified the Convention should cease the production, use, import, export of persistent organic pollutants, destruct the obsolete stockpiles and reduce the amount of emissions into the atmosphere.

Unfortunately, the Republic of Azerbaijan has also the problem of Persistent Organic Pollutants. For that reason identification of POPs' stocks, ensuring careful behavior patterns with them and their gradual elimination are of the main tasks.

POPs pesticide that has special place among substances prohibited by the Convention was produced and used in our country during former Soviet time. According to the expert information approximately 25 thousands of tons of DDT pesticide were used in our country annually. As a result of the inventory conducted, it was detected that PCBs are still used in Azerbaijan. PCBs are present in the content of transformers and capacitor oils. One of the problems is incorrect management of communal wastes in big cities, their combustion in landfills which results in pollution of atmosphere with dioxins.

Taking into account that persistent organic pollutants are the source of danger for our country and necessity of preventing this danger, Stockholm Convention on Persistent Organic Pollutants was adopted by Azerbaijan in 9<sup>th</sup> December 2003.

Pursuant to Resolution 329 of 29 July 2004 by the President of the Republic of Azerbaijan, Ministry of Ecology and Natural Resources of the Republic of Azerbaijan was appointed as a National Coordination Centre for information exchange in compliance with Article 9 of Stockholm Convention on Persistent Organic Pollutants

The first step toward the management of the Persistent Organic Pollutants is the preparation of the NIP. The specialists of the MENR, experts from relevant ministries and organizations, representatives of NGOs and other stakeholders were involved in NIP preparation. As a result of their joint efforts the possible sources of POPs in the republic have been identified, the public was informed on safe behavior patterns and action plan for gradual phase-out of these substances has been prepared. The execution of the NIP covers the period up to 2020 year.

I hope that NIP, as the first step toward the meeting of obligations of the Stockholm Convention, will play significant role in protection of human health and environment from adverse effects of POPs.

Huseyn Bagirov

Minister of Ecology and Natural Resources

## ***Acronyms:***

**ACU**-Azerbaijan Consumers Unit  
**AEI**-Azerbaijan Environmental Inspection  
**AR** – Azerbaijan Republic  
**BAT** -Best Available Technology  
**BEP** -Best Environmental Practice  
**BP**-British Petroleum  
**DDT** -1,1,1,-trichloro -2,2, - bis (4-chlorofenyl) etane  
**EIA** -Environmental Impact Assessment  
**EU**-European Union  
**GDP**-Gross Domestic Product  
**GEF**-Global Environmental Facility  
**HCB** -Hexachlorobenzene  
**HPPs**- Heat Power Plants  
**JSC**-Joint Stock Company  
**LEP**- Local Executive Power  
**MA**- Ministry of Agriculture  
**ME**- Ministry of Education  
**MED**-Ministry of Economic Development  
**MES**-Ministry of Emergency Situations  
**MENR**-Ministry of Ecology and Natural Resources  
**MH** - Ministry of Health  
**MIE**- Ministry of Industry and Energetic  
**MM**-Milli Mejlis(Parliament)  
**MT**-Ministry of Transport  
**MJ**-Ministry of Justice  
**MIA**-Ministry of Internal Affairs  
**NAS**-National Academy of Science  
**NFP-POPs** -National focal point for POPs for implementation of Stockholm Convention requirements  
**NGOs** -Non-government Organizations  
**NATO**- North Atlantic Treaty Organization  
**OSC**-Open Stock Company  
**OSCE**-Organization of Security and Cooperation in Europe  
**OECD**-Organization of Economical Cooperation and Development  
**PAH** -Polycyclic Aromatic Hydrocarbons  
**PCBs** -polychlorinated biphenyls  
**PCDD** -Polychlorinated dibenzo-p-dioxins  
**PCDF** -Polychlorinated dibenzofurans-  
**POPs**- Persistent Organic Pollutants  
**SRP**-State Road Policy  
**SC**-Stock Company  
**SRPP**-State Regional Power Plant  
**SOCAR**- State Oil Company of Azerbaijan Republic  
**SSC** – State Statistical Committee  
**UNEP** -United Nations Environmental Program  
**UNDP** -United Nations Development Program  
**UNIDO** -United Nations Industrial Development Organization  
**USSR** -United States of Soviet Republics  
**WWF**-World Wild Foundation

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## **EXECUTIVE SUMMARY**

### ***Introduction***

In recent times persistent organic pollutants (POPs) resulting from human activities have become one of the most serious environmental challenges. This is because their poor biodegradability, high bioaccumulation rate and toxicity as well as their ability to affect areas at long distances. Therefore, the elimination of POPs requires combining efforts of the world community at international level. Presently, there have been two international agreements adopted for the protection of human health and the environment from the harmful impact of POPs:

- The POPs Protocol to the UN ECE Convention on Long-range Trans-boundary Air Pollution (1998) and
- UN Stockholm Convention on POPs (2001)

The Republic of Azerbaijan is a party to both of the above Conventions. Stockholm Convention on Persistent Organic Pollutants was adopted by Law 554-IIQ of 9<sup>th</sup> December 2003 (Annex 1).

Based on Resolution of 13 May 2005 by the President of the Republic of Azerbaijan an Agreement on the Provision of Services on Enabling Activities to Facilitate Early Action on the Implementation of Stockholm Convention on Persistent Organic Pollutants was signed between Ministry of Ecology and Natural Resources and United Nations Industrial Development Organization (UNIDO) (Annex 2).

Pursuant to Resolution 329 of 29 July 2004 by the President of the Republic of Azerbaijan Ministry of Ecology and Natural Resources of the Republic of Azerbaijan was appointed as national coordination centre for information exchange in compliance with Article 9 of Stockholm Convention on Persistent Organic Pollutants (Annex3).

While developing National Implementation Plan as part of commitment under Stockholm Convention UNIDO closely collaborated with Global Environmental Facility (GEF). Developed under Stockholm Convention of GEF guidelines the National Implementation Plan enshrines all the international commitments concerning POPs.

The main objective of the National Implementation Plan is to identify priority issues on POPs in Azerbaijan based on the analysis of the existing situation and taking account of provisions of relevant international agreements and to gradually resolve them within the required timeframe.

The National Implementation Plan was prepared in close cooperation with all institutions concerned with the assistance of Ministry of Ecology and Natural Resources as a coordination centre.

In the course of preparation of the National Implementation Plan particular attention was given to POPs combating issues and raising awareness about them. To this end all means of information dissemination including television, radio, newspapers, brochures, and Internet were widely used.

The National Implementation Plan contains brief information about Azerbaijan, description of the existing institutional and legal system concerning POPs, assessment of present problems

associated with POPs taking account of provisions of international agreements. Based on the aforementioned a multifarious strategy and activities directions were prepared, their implementation timeframe and budget was determined.

Pollutants that are dealt with under the Stockholm Convention have been extensively covered in the National Implementation Plan.

## **POPs pesticides**

### ***Baseline definition:***

As a result of the inventory made, it was revealed that of all POPs pesticides the manufacturing and use of DDT only was the case in the country. At present, the use of the above pesticides is prohibited in Azerbaijan. The inventory revealed in a number of regions stores of pesticides the use of which is prohibited. The inventory was not made in regions constituting 20% of the country's area that are invaded by the Armenia.

During the project implementation 4, 3 thousand tons of POPs pesticides and their mixtures with non-POP pesticides were detected in obsolete stockpiles.

### ***Identification of problems:***

- Poor linkage between institutions concerned;
- Unsatisfactory storage conditions;
- Finding environmentally friendly methodology of decontamination of POPs pesticides;
- No funds earmarked for this area in the state budget;
- Reducing exposure of the community to POPs pesticides.

### ***Action plan:***

<b>Measures</b>	<b>Responsible organizations</b>	<b>Implementation period</b>	<b>Budget ths. manat</b>
1. Continuing inventory of the existing POPs pesticides	MENR, MA	2007-2008	100,0
2. Establishing a POPs pesticides management system meeting safety guidelines	MENR, MA	2007-2010	100,0
3. Phasing out POPs pesticides	MENR, MA	2007-2010	950,0

## **Polychlorinated biphenyl containing oils and equipment**

### ***Baseline definition:***

As a result of inventory made, the manufacturing of PCB containing oils and equipment was not revealed in Azerbaijan. In addition, PCB containing transformers and capacitors were imported in the country. The presence of PCB containing equipment in the country area and contamination of the environment with PCB poses a risk to the health of people through air, soil and water.

The current inventory detected equipment containing PCB 6015. The amount of PCB oils in the country accounts for 196,7 tons and as wastes for 30 tons. The total weight of equipment containing PCB constitutes approximately 384 tons.

**Identification of problems:**

- A lack of legal regulatory acts;
- Labelling system of PCB containing equipment and their safe storage;
- Definition of environmentally sound destruction manner;
- Timeframe for phase out and destruction of PCBs and PCBs containing equipments
- Decontamination of polluted areas;
- Reducing exposure of the community to PCBs.

**Action plan:**

<b>Measures</b>	<b>Responsible organizations</b>	<b>Implementation period</b>	<b>Budget ths. manat</b>
1. Continuing inventory of PCB wastes and PCB containing equipment in use	MENR, "Azerenergy"OSC, SOCAR	2007-2008	200,0
2. Landfilling and treatment of out of use and obsolete PCB containing equipment and PCB liquid wastes	MENR, "Azerenergy"OSC, SOCAR	2007-2010	950,0
3. Management of PCB containing equipment currently in use meeting safety standards and phasing it out	MENR, "Azerenergy"OSC, SOCAR	2007-2020	5000,0

**Unintentionally produced persistent organic pollutants (Dioxins/ Furans)****Baseline definition:**

In compliance with the Convention guidelines the year 2003 was accepted as a baseline point. According to statistic information of the baseline year the amount of unintentionally produced POPs accounted for 127, 8 gr. 30, 5% of POPs resulted from uncontrolled burning.

**Identification of problems:**

- A lack of relevant legal regulatory acts;
- Selection of contemporary (BAT/BEP) technologies;
- Uncontrolled burning of wastes;
- Treatment of POPs containing wastes;
- Manufacturing and use chlorine and chlorine based organic compounds;
- Recycling of ferrous and non-ferrous metals.

### ***Action plan***

With relevance to the problems identified an action plan of priority source categories has been developed.

#### **Action Plan on Wastes:**

<b>Measures</b>	<b>Responsible organizations</b>	<b>Implementation period</b>	<b>Budget ths. manat</b>
1. Application of best available technologies for reducing Dioxins, Furans, HCBs and PCBs resulting from the incineration of medical wastes	MED, MENR, MH, LEP, Municipalities	2007-2015	3000,0
2. Management of landfills and dumping sites in compliance with the Convention provisions	MED, MENR, MH, LEP, Municipalities	2007-2020	5000,0
3. Reducing emissions of Dioxins and HCBs while disposing of industrial and municipal wastes	MED, MENR, MH, LEP, Municipalities	2007-2020	1000,0
4. Prevention of the occurrence of wastes in an unsealed form	MENR, MH, LEP Municipalities	2007-2020	900,0
5. Organizing the treatment of wastewater releases	MED, MENR, "Azersu" SC, LEP, Municipalities	2007-2020	20 000,0
6. Reducing POPs emissions resulting from the incineration of animal remains	MENR, MH, LEP, Municipalities	2007-2015	800,0

#### **Action Plan on Industrial Branches:**

<b>Measures</b>	<b>Responsible organizations</b>	<b>Implementation period</b>	<b>Budget ths. manat</b>
1. Ensuring safety of industrial operations that are likely to cause emissions of POPs as a result of potential accidents	MENR, MIE, MES	2007-2020	1000,0
2. Enhancement of environmental policy in relation to industrial sector	MENR, MIE,	2007-2020	300,0
3. Promoting the use of treatment facilities in the manufacturing of construction material and ceramics	MENR, MIE,	2007-2020	10 000,0
4. Promoting management technologies and methodologies on reducing pollution from PAH, Dioxins and HXB emissions resulting from processing ferrous and non-ferrous metals, especially recycling of aluminum and steel and production of coke	MENR, MIE,	2007-2020	20 000,0
5. Reducing emission of harmful substances from cement kilns	MENR, MIE,	2007-2020	10 000,0
6. Reducing POPs emissions from oil refineries	MENR, MIE, SOCAR	2007-2020	900,0

### Action Plan on Energy Sector:

Measures	Responsible organizations	Implementation period	Budget ths. manat
1. Enabling energy sector to meet environmental objectives	“Azerenergy” OSC, MENR, MIE	2006-2015	10 000,0
2. Enhancement of the existing energy and environment policy	“Azerenergy” OSC, MENR, MIE	2007-2020	1000,0
3. Promoting the use of environmentally cleaner fuel in HPPs	“Azerenergy” OSC, MENR, MIE	2007-2012	10 000,0
4. Application of BAT/BEP principles to the production, transportation and use of energy at all levels of decision-making	“Azerenergy” OSC, MENR, MIE	2006-2012	100 000,0*
5. Providing incentives for promotion of the use of hydro electric power and other renewable energy sources	“Azerenergy” OSC, MENR, MIE	2007-2020	1 800 000,0*
6. Enhancing efficiency of HPPs	“Azerenergy” OSC, MENR, MIE	2005-2015	2 200 000,0*

Note: budget items marked with \* sign are earmarked under state programmes on the Development of Energy Sector

### Action Plan on Transport Sector:

Measures	Responsible organizations	Implementation period	Budget ths. manat
1. Promoting the use of environmentally friendly fuel in transport sector	MED, MENR, MT, SRP	2007-2010	300,0
2. Promoting the use of environmentally cleaner and economic vehicles	MED, MENR, MT, SRP	2007-2010	950,0

### POPs contaminated areas, stockpiles and wastes

#### *Baseline definition*

Major problems are represented by “agrochemical” associations that were established by “AzerAgroChemical” association in the past in 57 regions of Azerbaijan, regional stock warehouses in 11 regions, illegal sales of pesticides in a number of regions and degradation of a special landfill constructed for the storage of pesticides. One of the areas contaminated with POPs is a yard of Detergents Plant in Sumgayit.

Areas contaminated with PCBs were found at Detergents Plant, Private Transformers Repairs Workshop in Ganja and Deep Water Platforms Plant named for Heydar Aliyev. Other potential areas in which PCB containing oils are used (paint or paper manufacturing sectors) are not common for the economic sector of the country. Old enterprises pertaining to this sector have been reconstructed and no facts of PCBs use were found in instructions relating to products manufactured by them (particularly in the manufacturing of paint).

**Identification of problems:**

- An importance of carrying out environmental surveys in contaminated areas;
- Identification of a strategy on the remediation of contaminated areas;
- Implementation of the strategy identified;
- Establishment of a coordination and management center.

**Action plan:**

Measure	Responsible organizations	Implement action period	Budget ths. manat
1. Preparation of a contaminated areas register	MENR, MH,MA, LEP	2007-2008	200,0
2. Development of a strategy on the remediation of contaminated areas	MENR, MH,MA, LEP	2007-2008	50,0
3. Development of a management and coordination mechanism	MENR, MH,MA, LEP	2007-2008	100,0
4. Implementation of the strategy identified	MENR, MH,MA, LEP	2007-2010	3150,0

**POPs Monitoring**

**Baseline definition:**

Despite the availability of specialized laboratories on analysing certain components of POPs in Azerbaijan the control on this area is nevertheless uncoordinated. The monitoring applied does not encompass all the areas.

**Identification of problems:**

- Focusing monitoring on potential POPs sources;
- Coordination of monitoring of POPs in special programmes and development of special methodological guidelines;
- Coordination of reports on monitoring results;
- Insufficient information on the presence of PCDD/PCDF in all monitored matrices;
- Insufficient information on the concentration of POPs in ambient air.

**Action plan:**

<b>Measure</b>	<b>Responsible organizations</b>	<b>Implementation period</b>	<b>Budget ths. manat</b>
1. Establishing a working group on POPs monitoring	MENR, MA,MH, NAS	2007	10,0
2. Elaborating a methodology for regular POPs monitoring program in Azerbaijan	MENR, MA,MH, NAS	2007	20,0
3. Ensuring implementation and coordination of POPs monitoring in accordance with the elaborated national monitoring program	MENR, MA,MH, NAS	2007	20,0
4. Verifying the analytical methods for subsequent use in selected analytical programmes and ensuring coordination of work in laboratories	MENR, MA,MH, NAS	2008	50,0
5. Ensuring data exchange between institutions responsible for monitoring and institutions responsible for reporting	MENR, MA,MH, NAS	2008	50,0
6. Making monitoring results available for public	MENR, MA,MH, NAS	2008	15,0
7.Promoting wider research	MENR, MA,MH, NAS	Ongoing	5,0

**Reporting and data exchange**

**Baseline definition:**

In all international documents on POPs (protocol on POPs, Stockholm and Basel Conventions) countries are obliged to ensure reporting and data exchange. The Republic of Azerbaijan makes necessary arrangements to ensure the fulfilment of its commitment on reporting and data exchange. Pursuant to Article 9 of Stockholm Convention Ministry of Ecology and Natural Resources of the Republic of Azerbaijan has been appointed as National Coordination Center by Decision of the President of Azerbaijan dated 29 July 2004 to facilitate reporting and data exchange.

Along with that, the following problems have been identified with regard to reporting and data exchange issues:

- Poor mechanism of the flow of information on POPs to be further communicated to the Secretariat of the Convention and other parties concerned;
- Ensuring appropriate format of information gathered from relevant institutions on POPs production, import, export and use for its further submission to the Secretariat;
- Undertaking activities in conformity with legislative acts and relevant regulatory legal documents on POPs.

**Action plan:**

<b>Measure</b>	<b>Responsible organizations</b>	<b>Implementation period</b>	<b>Budget ths. manat</b>
1. Establishment of an effective system of reporting to the National Focal Point by institutions concerned	MENR, NIP implementation group, NFP-POPs	I <sup>st</sup> quarter, 2008	25,0
2. Strengthening collaboration between National Focal Point and State Customs Committee for registering import and export of POPs and POPs containing substances and equipment	MENR, NIP implementation group, NFP-POPs	IV <sup>th</sup> quarter, 2007	10,0
3. Regular communication of information on import and export of POPs and POPs containing substances and equipment to the Secretariat of the Convention	MENR, NIP implementation group, NFP-POPs	Within the term required by the Conference of the Parties	5,0
4. Ensuring flow of information on phasing out PCB containing equipment between institutions concerned, National Focal Point and the Secretariat	MENR, MIE, NIP implementation group, NFP-POPs	I <sup>st</sup> quarter, 2008	10,0
5. Establishment of an effective system of control over the use of obsolete or expired POPs containing preparations	MENR, NIP implementation group, NFP-POPs	IV <sup>th</sup> quarter, 2007	25,0
6. Establishment of an effective system of control over the use and manufacturing of chemicals to prevent the manufacturing of POPs or or materials with properties similar to POPs	MENR, NIP implementation group, NFP-POPs	IV <sup>th</sup> quarter, 2007	25,0

**Raising public awareness about POPs**

**Baseline definition:**

Undertaken survey and questionnaire demonstrates that the level of awareness of public about POPs in the country is low. At present there is neither universal system of public awareness raising on POPs nor plan concerning participation of the public in decision making process in this area. There is a need for systematic training of experts engaged in this area. The public is able to obtain information about POPs or other harmful substances from different published reports or results of surveys undertaken under different programmes.

In order to provide access to information about a state of the environment in Azerbaijan and accomplishments in this area an Aarhus Center has been established within the building of the Ministry of Ecology and Natural Resources with the assistance of the public and relevant bodies of the Aarhus Convention.

Following ratification of the Stockholm Convention by Azerbaijan a system of public participation in decision making process on issues of protection from POPs has been established.

Identification of problems:

The following problems can be outlined with regard to public awareness raising:

- A lack of a system on information dissemination and complex approach to public participation in decision making processes;
- Poor linkage among stakeholders;
- Insufficient information about contaminated areas or level of contamination of special components of the environment (food, etc.);
- Imposition of the requirement to inform customs officers and relevant institutions about possibilities of import of prohibited POPs containing substances;
- A lack of knowledge in the industrial sector about harmful properties of POPs containing equipment, about methodology of their operation and disposal with no impact to the environment;
- Low level of public environmental knowledge about toxicity of some pollutants released from domestic burners;
- Introduction of knowledge about POPs and other harmful substances into educational process.

**Action plan:**

<b>Measure</b>	<b>Responsible organizations</b>	<b>Implementation period</b>	<b>Budget ths. manat</b>
1. Organization of workshops on POPs for public awareness raising	MENR, ME, NGOs	Ongoing	10,0
2. Arranging for periodic addresses and discussions via mass media and publication of articles	MENR, ME, NGOs	Ongoing	10,0
3. Carrying out a questionnaire about POPs among the community and establishing a system of monitoring on awareness raising	MENR, ME, NGOs	Regularly	35,0
4. Development of National Awareness Raising Strategy on POPs	MENR, ME, NGOs	2008	5,0
5. Presenting sufficient information with a view to instilling knowledge into the community as to how to handle POPs	MENR, ME, NGOs	Regularly	40,0
6. Raising awareness about harmfulness of outdoor burning of wastes to the environment and human health among community members in rural areas and employees of farms	MENR, ME, NGOs	Regularly	40,0
7. Gradual introduction of knowledge about POPs issues into curricula of high schools and universities	MENR, ME, NGOs	Up to 2010	160,0

**Institutional and legal actions**

**Baseline definition**

POPs related legislation is implemented based on eliminating discrepancies among governmental bodies (health, environment, agriculture, finance and customs). The major factor along with commitments under international agreements affecting the formation of a new legislation is the harmonization of the legislation of the Republic of Azerbaijan with the legislation of European Union.

**Identification of problems:**

- Establishing control and management of pesticides and PCBs;
- Assessment of new pesticides and agrochemicals;
- Reducing and eliminating of unintentional POPs production;
- Control on the disposal of POPs containing harmful wastes

**Action plan:**

<b>Measure</b>	<b>Responsible organizations</b>	<b>Implementation period</b>	<b>Budget ths. manat</b>
1. Drafting a law on POPs and their safe use	MA, MENR, Milli Mejlis (Parliament)	2007- 2008	20,0
2. Preparation of relevant regulatory legal acts	MA, MENR, Milli Mejlis (Parliament)	2007- 2010	25,0
3. Making relevant amendments to the existing law in conformity with Stockholm Convention	MA, MENR, Milli Mejlis (Parliament)	2007- 2010	30,0

**POPs research and development**

State programmes on research and development can facilitate the implementation of research for resolving the POPs issue. State programmes are the programmes that are intended for the promotion of social economic development in Azerbaijan. Proposals on the development of POPs research provided in the NIP should become the most important issues for research envisioned in the future. Unfortunately, there is currently a shortage of state and private financial sources supporting the development of these surveys in Azerbaijan. Financial problems will be resolved on account of the dynamic development of the country and oil revenues increasing year by year.

Possible means for the implementation of projects on POPs research:

- Including plans on the implementation of POPs survey in the priority list of State Programmes on Research and Development;
- Participation in the 6<sup>th</sup> EU Framework Programme on Science and Engineering and ensuring other international cooperation.

**NIP implementation timeframe and needs in resources**

The first phase of NIP implementation covers a period from 2007 to 2010. This includes the development of initial mechanism, the elimination of POPs, obsolete PCB containing equipment and oils and decontamination of medical wastes. 23,0 million manats are required for the implementation of the first phase. 12,4 million manats of the above amount are envisioned to be earmarked within the framework of state programmes on the reconstruction of the energy system for the fulfilment of commitments under the Convention. 40-50% of the other 11,6 million manats required for the implementation of actions in question will be financed by GEF and other donor institutions while the remaining part will be covered by the Government of Azerbaijan.

The second phase covers a period from 2011 to 2015. This phase envisions the replacement of PCB containing equipment, a gradual reduction of unintentionally produced POPs substances emissions by the application of new technologies in energy, industrial and waste management sectors and production of environmentally clean products in the agricultural sector. The budget required for the implementation of the aforementioned actions accounts for 47,8 million manats. 9,4 million manats of the above amount are envisioned to be earmarked within the framework of state programmes on the reconstruction of the energy system for the fulfilment of commitments under the Convention, 40-50% of the remaining 38,4 million manats will be financed by GEF and other donor institutions and the remainder will be covered by the Government of Azerbaijan. 44% and 12% of the above funds are intended for industrial and agricultural sectors respectively.

The third phase mainly encompasses energy and waste management sectors. No financial problems are expected in terms of sources of financing if long-term period of implementation of the actions that require such a huge amount of money will be taken into account. Implementation period and respective budget for each action has been separately indicated in NIP's Strategy section.

### ***Conclusion***

NIP has been developed by thoroughly analysing the existing situation in wide partnership with all stakeholders taking account of relevant international commitments, documents and general guidelines. Since POPs related issues are multi-faceted general priorities were considered in the first instance followed by actions identified for each sector. The following priorities have been identified based on the above approach:

- Refinement of important regulatory legal documents for the establishment of an organizational system for POPs management;
- Clean-up of areas contaminated by POPs pesticides;
- Inventorying and environmentally sound destruction of wastes and equipments containing PCBs;
- Application of best available technologies for decontamination of the medical wastes;
- Strengthening public awareness raising activities about the adverse impact of uncontrolled outdoor burning of municipal wastes and contaminated biomass;
- Enhancement of POPs monitoring system for ensuring the accuracy of reports intended for international community;
- POPs management and public awareness raising at national level;
- Gradual decontamination of future contaminated areas;
- Research and development on POPs in relevant areas.

The implementation of the NIP will play a significant role in the protection of the environment and health of the population in Azerbaijan.

## 1. INTRODUCTION

Contemporarily, protection of the environment and human health from the adverse effects of Persistent Organic Pollutants has become one of the topical issues globally. This is explained by their poor biodegradability, high bioaccumulation rate, toxicity and potential to long-range transport.

The impossibility to resolve POPs related problems by efforts of a single country caused the necessity to address them based on the united efforts of all the countries. Consequently, following deliberations at international forums concerning joint actions in 2001 UN Stockholm Convention on Persistent Organic Pollutants was adopted.

The Republic of Azerbaijan ratified Stockholm Convention in 2003 (by Law 554-IIQ of 9<sup>th</sup> December 2003) and Pursuant to Resolution 329 of 29 July 2004 by the President of the Republic of Azerbaijan Ministry of Ecology and Natural Resources of the Republic of Azerbaijan was appointed as a coordination unit in compliance with provisions of the Convention.

The Republic of Azerbaijan making use of the support by GEF and technical assistance by UNIDO started the development of National Implementation Plan with a view to the implementation of provisions under the Stockholm Convention to fulfil its commitments in relation to POPs.

The development of National Implementation Plan started from carrying out inventory and monitoring of POPs substances. To this end four working groups on inventory and monitoring of POPs pesticides, PCB substances and dioxins/furans have been established composed of representatives of ministries, committees, organizations and enterprises, as well as NGOs and other stakeholders.

Understanding the difficulty of fulfilling the objectives set, a questionnaire on POPs intended for locating their possible whereabouts has been developed and distributed among communities of the target areas. In order to facilitate the inventory of PCBs and PCB containing substances 500 KIT indicators to instantly detect PCB substances on site were purchased from Finland and used in the inventory activities.

Results of the questionnaire facilitated the inventory and monitoring of POPs hot spots and KIT equipment by enabling instant detection of PCBs on site significantly speeded up the process of inventory.

Personal protective and special sampling equipment were purchased to meet safety requirements during inventory process and monitoring for ensuring protection of staff engaged in inventory and monitoring from harmful effects of POP substances.

As a result of the aforementioned actions major POPs hot spots were identified in the country area. In these hot spot areas 4286,4 t of POPs pesticides, 196,7 t of PCB containing oils, PCB containing equipment weighing 384 t, PCDD/PCDF substances in the amount of 127,8 g have been detected. Subsequently, National Implementation Plan has been developed by identifying priorities and objectives for the management of the detected POPs.

## 2 COUNTRY BASLINE

### 2.1. COUNTRY PROFILE

#### 2.1.1. Geography and population

**Geography:** The Republic of Azerbaijan located at longitudes 44<sup>0</sup>E and 52<sup>0</sup> E and at latitudes 38<sup>0</sup> N and 42<sup>0</sup> N is the largest country among the Southern Caucasus Republics. The area of country is 86.6 km<sup>2</sup>. Azerbaijan borders Russian Federation in the north, Caspian Sea in the east, Islamic Republic of Iran in the south, Armenia in the west, Georgia in the north-west and Turkey in the south-west. A large part of the country that has no land borders with the main land is Nakhchivan Autonomous Republic.

The areas of Azerbaijan adjoining its borders are distinguished for their special natural geographic features. 58% of the total areas are made up of mountains and 42% of lowlands while 18% of it is below the sea level. 11, 5% of the area is covered with forests, 1, 6% with water bodies, 50% belongs within cultivated lands composed of 27% of pastures and the remaining land constitutes 36, 9%.

Different climate types are found in Azerbaijan. Cold weather can be found at a height of over 3000 m in the Great Caucasus Mountains covered with snow, mild climate is observed on the Kura river flood plains, humid subtropical climate is common for the Lankaran-Astara region where the amount of annual precipitation accounts for 1200-1300 mm, dry subtropical climate predominates in the Absheron peninsula and neighboring areas. In lowland areas the winter is milder, the summer is sultry, dry and long and average temperature in July is +27°C getting sometimes above +35°C. Average temperature in January is +10°C. In Baku which is the capital city of the Republic the climate is predominantly mild-hot and subtropical dry, the summer is sultry and the winter is mild. Severe cold weather is observed once in ten years. Strong wind blows all year round in Baku.

According to various estimates the total surface water resources of Azerbaijan constitute 28,1-31,7 km<sup>3</sup>. In dry years the amount of surface water resources decreases up to 23-24 billion cubic meters. Water resources entering the country by watercourses from neighboring countries amount to 19.7-20.3 km<sup>3</sup> that constitutes 67-70% of the total. 7.81-10.6 km<sup>3</sup> of water resources from watercourses are formed in the area of Republic.

**Population:** Azerbaijan is the country with the largest population in the Southern Caucasus. In comparison with 1990 (7 131 000 people) in 2005 its population was 8 436 400, while average population density constituted 97,4 people per km<sup>2</sup>. 51.5% of the population live in urban areas while 48.5% of the population settle in rural areas. In comparison with 1990 the natural growth of population declined from 19, 8 (per 1000 people) to 8 in 2003 and was 10, 9 in 2005.

#### 2.1.2. Political and economic profile

Azerbaijan is a developing unitary country which regained its independence in 1991. The country is going through the social-economic hardships of transition period.

The existing constitution of Azerbaijan was adopted in 1995. The state power of the country is divided among legislative, executive and judicial powers. Azerbaijan is a presidential Republic. President is elected for a maximum two consecutive five-year period and is the head of the state. President appoints Prime Minister and forms the government.

Milli Mejlis, the Parliament is represented by a single house composed of 125 members. Parliament elections are run every five years. Pursuant to the Constitution the President can exercise his right of veto on the decision of Milli Mejlis and the majority of votes are required to repeal the veto by the president.

As part of Azerbaijan Nakhchivan Autonomous Republic enjoys full autonomy and has its own Constitution, Parliament (Supreme Mejlis) and Government. By observing the Constitution of the Republic of Azerbaijan Nakhichevan Autonomous Republic is also governed based on Presidential orders and decrees of the Cabinet of the Ministries.

Similar to other countries of the former Soviet Union Azerbaijan faced economic crisis after the collapse of the Soviet Union. In 1995 when the number of refugees constituted 10 % population the Gross Domestic Product of Azerbaijan accounted for 41, 8% compared to 1990 (Table 1).

**Table 1. Macroeconomic indicators of the Republic of Azerbaijan**

<i>Macroeconomic indicators</i>	<b>1995</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>GDP (bil. manat)</b>	10669,0	23590,5	26578,0	30312,3	35732,5	41872,5	59378,0	88679,0
<b>GDP (bil. US \$)</b>	2415,2	5272,6	5707,8	6236,1	7276,3	8521,8	12553,0	19927,9
<b>GDP (in comparsion with previous year %)</b>	-11,8	11,1	9,9	10,6	11,2	10,2	26,4	234,5
<b>GDP per capita</b>								
<b>ths. manat</b>	1410,3	2975,4	3325,9	3764,6	4403,7	5114,8	7178,5	10600,0
<b>US \$</b>	319,3	665,0	714,3	774,5	896,7	1041,0	1517,6	2382
<b>Inflation %</b>	411,8	1,8	1,5	2,8	2,2	6,7	9,6	8,3
<b>Unemployment</b>	28314	43729	48446	50963	54365	55945	56343	53862
<b>Average monthly salary of employers in economic sector, manat</b>	62467	221606	259991	315407	386974	497081	589500	706500

As from 1995, as a result of effective measures undertaken in the country further decline was stopped and economic and political stability was ensured providing conditions for economic development. The increase in oil and gas export, improvement of industry in other related sectors in 2005 GDP per capita accounted for 1517 USD. According to World Bank the level of poverty declined to 29% in 2005.

As a result of measures undertaken by the government in the area of privatization of state property and development of ownership the share of private sector in the economy of the country significantly increased. The implementation of the privatization programs, as well as development of private business resulted in the growth of non-governmental sector of up to 76% in GDP.

The finalization of the Baku-Tbilisi-Ceyhan export pipeline in 2005 that stretched up to the Mediterranean sea through Georgia and Turkey was the main factor that provided for future development of the country's economy. The high growth in GDP since 2005 was mainly due to a sharp increase in the amount of the oil produced by the international consortiums.

The share of GDP in agriculture declined from 33% in 1990-1995 to 18-22% in 2000-2005

which was due to the growth of industry, particularly, rapidly developing oil extraction.

### **2.1.3 Profiles of Economic Sectors**

Definition of national economy sectors which are potential producers of POPs in Azerbaijan was given in Annex C to the second part of the Stockholm Convention. In this part which is entitled as “Sources categories”, categories of industries with comparatively high potential for generation and release of POPs related chemicals were defined.

Some of these sources are sectors of the national economy while others represent only activities or even side effects of certain industrial and non-industrial processes. For this reason, economic analyses were carried out on those levels which can in a certain way facilitate assessment and description of a likely impact of hot spots and social economic factors. The following is related to the above sectors:

- Metallurgical industry
- Electric power plants and heating plants
- Agriculture
- Outdoor burning of wastes

**Metallurgical industry:** Ferrous and non-ferrous metals manufacturing plants were privatized under State Privatization Programme. Some of them were transformed into Joint-Stock Companies. Most of the old enterprises closed down or maintain production in little quantities. A few new plants have been launched and the manufacturing of steel and cast iron. There are six plants engaged in the manufacturing of cast iron in the country. The “MChT” enterprises and “Bakuelectrocasting” open JSC produced 389,8 and 643,5 tones of cast iron respectively in 2004. Other enterprises produced comparatively less cast-iron. In 2004 Ship Repairing Plant produced 82 tones, “Baku mechanic casting” open JSC – 57,7 tones, “Mechanic Repairing of Amelioration Equipment” plant – 16 tones and Mechanic Repairing Installation Production Unit – 30,2 tones of cast-iron.

There are seven plants engaged in the manufacturing of steel. The most modern of them is Baku Steel Company. The company produced 68840 tones of steel in 2004. “Baku Steel” open JSC produced 19150,9 tones of steel. The output of other enterprises is considerably less.

“Azeroilfuel” oil refinery produces oil coke. It produced 20,8 thousand tons of oil coke in 2003 and 25,9 thousand tons in 2004.

**Power Production and Heat Generation Plants:** There are two types of electric power plants in energy system, i.e. based on condensing and heating modes of operation. The Condensing Cycle Power Plants are: “Azerbaijan” SRPP, “Ali-Bayramli” SRPP, “Shimal” SRPP.

“Azerbaijan” DRES with a production capacity of 3000 MW is located near Mingechevir city on the Yuhari-Garabag Channel’s right bank. It generates electricity and small quantity of heat energy. The plant can be operated based on natural gas and black fuel.

“Ali-Bayramli” SRPP with a total production capacity of 1050 MW is located near Ali-Bayramli city on the left bank of the Kura river. “Ali-Bayramli” SRPP is the first electric power plant the equipment of which has been arranged on an open air site. The thermal and electrical scheme of the plant is block type: Steam Generator - Steam Turbine – Generator- Transformer. The plant is operated in a basic mode. It generates electricity and small quantity of heat energy.

**“Shimal” SRPP** is located in northeastern part of the Absheron Peninsula, at the coast of the Caspian Sea. It generates electricity and small quantity of heat energy. A new 400MW block of the plant has been launched and the construction of the second block is pending.

**“Baku-1” CHPP** was built in 1902 within the area of Baku city at the Caspian Sea coast. During its operation period the plant was entirely reconstructed and the key equipment have been modernized several times. At present five steam engines of a total capacity of 1560 ton per hour and two back-pressure turbine generator units are used at the plant. The plant is operated in a basic mode. It generates electricity and small quantity of heat energy.

**“Baku – 2” CHPP** was brought into operation in 1953. Total power capacity of the plant is 24 MW, and heat generation capacity is 383 MW.

**The “Sumgayit-1” Power Plant** was launched in 1941. It is located at the Caspian Sea coast, within the area of Sumgait city. During its operation period the plant was entirely reconstructed and the key equipment have been modernized several times. At present, five steam engines of a total capacity of 2100 ton per hour and two back-pressure turbine generators are used at the plant. Total power capacity of the plant is 200 MW, and heat generation capacity is 991 MW.

### **Agriculture:**

Among the former Soviet Republics Azerbaijan was one of those ranked first for the production of DDT. DDT was produced at the Detregents Plant in Sumgayit. Throughout its operation the plant produced 480-500 thousands ton of DDT. Despite the fact that the government of Azerbaijan took a decision to ban the use of pesticides and destroy its stockpiles its use in some exceptional and illegal cases by individuals is still continued and currently there are 4286, 37 ton of stockpiled pesticides in the country.

### **Open burning of wastes, including landfills:**

At present there are eight large and about 70 small landfills in Azerbaijan. There are 4 landfills in Baku city. These are Surakhani, Azizbayov, Kharadakh and Balakhani landfills. 70% of wastes are municipal wastes and 30% are industrial and construction wastes.

The largest landfill around Baku city is Balakhani. According to the order of Baku Executive Power Balakhani landfill was given to UP Azerbaijan-German Joint Company for 25-years period.

Calculations show that about 5-7 mln.tons of wastes are generated in Baku city and its suburbs. Waste incinerators are not available in Azerbaijan. According to the statistical information the amount of municipal waste throughout the country’s area constitutes 1, 8 mln.tons.

Results of the monitoring show that in large cities especially in some settlements of Baku city municipal waste is burnt outdoors.

One of the main priorities is the prevention of uncontrolled burning of medical waste with municipal waste unless it is sorted out. According to Ministry of Health about 150-200 million disposable syringes, 70-80 tons of cotton wool, 8-9 tons of blood and other medical waste materials are disposed of. Urgent actions on sorting out, decontamination and elimination of these wastes are envisioned to be undertaken by the government.

#### ***2.1.4. Environmental overview***

As a result of globalisation, rapid development of economy, a drastic rise in needs for natural resources linked to the growth of the world population, uneven access to modern technologies in the developing countries, global climate change and other factors impacts on the environment have contemporarily increased and brought in overexploitation of natural resources.

For that reason more attention is been given to solving the problems of environmental protection and efficient use of natural resources.

With a view to resolving the existing environmental problems a uniform management system has been established.

A number of actions have been undertaken for ensuring the healthy environment which the main goal of the environmental policy, some important laws in conformity with the requirements of the European legislation have been adopted and regulatory legal documents have been approved.

A state of the environment has been assessed, priority issues related to the resolution of environmental problems have been identified, State Programs “On Environmentally Sustainable Social Economic Development”, “On Reforestation and Afforestation”, “On the Rational Use of Summer and Winter Pastures, Grasslands and Combating Desertification in the Republic of Azerbaijan” have been approved and their implementation has been launched.

A number of paragraphs of Presidential Decrees “On Additional Measures on Issues Arising out of International Conventions and Agreements on Environmental Protection to which Azerbaijan is a Party” (March 30, 2006) and “Complex Plan of Measures on the Improvement of Environmental Situation for 2006-2010 years in the Republic of Azerbaijan”(September 28, 2006) concern the management of POPs.

Cooperation in the area of learning and applying international experience in environmental management has been selected as one of the priorities. At present the Republic of Azerbaijan joined to twenty international environmental conventions and is member of a number of international environmental organizations.

Along with the aforementioned accomplishments there are also a number of environmental challenges. These challenges and their causes are as follows:

- Oil extraction by primitive industrial methods for a long time brought about the contamination of more than 10 thousand hectares in the Absheron peninsula. As a result of contamination with oil products and wastewaters the Baku Bay and lakes in the Absheron peninsula have become a zone of environmental tension. It is envisioned to develop an Action Programme for the rehabilitation of the contaminated areas and involving all related organizations to the implementation of the program.
- The formation of about 70 % of water resources outside the Republic and shortage of water resources causes serious problems for the supply of the population with drinking water. The Kura and Araz River that are the main sources of drinking water are contaminated with municipal and industrial wastes released by the neighbouring countries. For that reason this water is only fit for technical use.
- There are very serious problems related to the management of solid municipal wastes in the country, especially in large cities of the Republic. Failure to follow guidelines in sorting out

wastes to accepted standards, in their transportation, landfilling and treatment brought about contamination of the environment and posed a threat to the human health. To resolve the problem there is a need for the establishment of plants for the treatment of solid municipal wastes meeting modern requirements in large cities of our country.

- One of the main problems is a growing pressure on forests due to a lack of heating energy and gas in regions, especially mountainous regions. The issue of refugees as a result of the occupation of 20% of the territory of the Republic has aggravated the situation in this area.

- Unsatisfactory conditions of the existing sewerage and a lack of sewerage in many regions of the country that is one of the main environmental problems nowadays have been the cause for insanitary conditions in cities, emergence of artificial lakes, rise in the level of ground waters, critical contamination of water basins.

- Erosion and degradation of soil is one of the main environmental problems. The problem is conditioned by the natural climate condition of the Republic, long-running poor management practice, the number of cattle in regions exceeding the carrying capacity of the area, failure to observe planting rules, depletion of forests and vegetation, improper collector-drainage system and other anthropogenic factors.

- A more serious environmental problem is chemical contamination of lands. Contamination of lands with pesticides in formerly used cotton and vegetable plantations is more characteristic. In 1990s about 30-40 kg of pesticides were used per hectare of a cotton plantation, 150-180 kg pesticides were applied to vegetable plantations. Expired pesticides that piled up in soil over years are a primary problem. Currently pesticides are stored in conditions that pose a risk for human health and the environment. There are no any special facilities for their storage. About 8 thousand tons of hazardous chemical substances (pesticides) are stored in landfills located in the Gobustan district. They are stored in open uncontrolled conditions.

Economic assessment of natural resources and nature related services is one of the issues that world environmentalists are mostly concerned about. The amount of fines and penalties as part of economic instruments for damage caused to the environment is very low and the effect of this can be seen on impacts made by nature users on the environment. Making more stringent the existing economic instruments could assist in the implementation of measures on ensuring a healthy environment.

One of the problems arising in the improvement of the environment and provision of sustainable use of natural resources is limited financial resources for the implementation of national programs adopted by the government.

Ministry of Ecology and Natural Resources which implements state policy in the environmental area is responsible for environmental management and ensuring environmental safety. The main principles of the Ministry in relation to the elimination of the aforementioned environmental problems are public awareness raising and application of the “pollutant pays” approach.

## **2.2 INSTITUTIONAL, POLICY AND REGULATORY FRAMEWORK**

### ***2.2.1. Environmental policy, sustainable development policy and general legislative framework***

Throughout 15-years period of its independence the Republic of Azerbaijan has constantly been improving its environmental protection system. With a view to a complex management of the environment in 2001 Ministry of Ecology and Natural Resources was established by the Presidential decree and the Ministry was charged with a task of ensuring sound environmental conditions in the Republic and undertaking urgent actions on the regulation of the use of natural resources.

The main objective of the environmental policy of the Republic is the protection of existing ecological systems, economic potential and efficient use of natural resources to meet the needs of present and future generations. In order to provide sustainability in development from the environmental viewpoint it is required to ensure avoiding serious environmental problems in economic activities and take efforts to minimize them.

Taking account of the current environmental conditions and social economic situation three main directions of the environmental policy of the Republic can be formulated:

1. Taking the provision of environmental security as a basic requirement, application of best available practice on sustainable development principles for minimizing human impact on the environment and regulating its protection.
2. Efficient use of natural resources, use of renewable energy sources by alternative, non-conventional methods and achieving energy efficiency to meet the needs of present and future generations.
3. Assessment of national requirements on global environmental issues, finding the ways of their resolution, ensuring their implementation by expansion of relations with international organizations.

In order to achieve the objectives set for main areas of environmental policy the following obligations and principles are taken as a basis:

- Improvement of the environment using best available practice in economic and human resource management;
- Creation and use of stimulating economic models and technologies which will improve the well-being of present and future generations;
- Application of equity principles towards representatives of the same and different generations;
- Protection of ecosystems and biodiversities which could support the everyday human activities.

Principles:

- the implementation of the decision-making process and considering alternatives by taking into account short-term and long-term economic, ecological and social outcomes as well as possible repercussions;
- encouraging the involvement of representatives from public and non-governmental organizations during the preparation of decisions on environmental protection;
- preventing any activities that could affect any component of the environment;

- providing strong and multifaceted economy development that will allow the allocation of relevant resources for ensuring environment protection;
- expansion of relations with international organizations and developed countries in the area of environment protection;
- strengthening environmental awareness raising and educational activities among community members.

As a result of implementation of environmental policy a legislative basis meeting European standards has been established in the Republic, state environmental management system has been improved, priority projects are being gradually implemented through the expansion of relations with international organizations.

Due to the rapid development of social economic processes in the country during the transition period new methods and principles are emerging in the environmental policy. From this viewpoint by addressing the environmental policy at an improved level, National Program “On Environmentally Sustainable Socio-Economic Development” prepared by the Ministry of Ecology and Natural Resources and approved by the President of the Republic in 2003 has created opportunities for its application.

In addition, public environmental awareness raising as well as increasing educational hours on ecology and environment protection in high school are the main problems. A number of laws on the environment adopted by the Parliament (Milli Mejlis) of the Republic of Azerbaijan as well as Law on “Environmental education and enlightening of the population” have provided good opportunities for filling the gaps in this field.

In order to solve existing problems the Ministry of Ecology and Natural Resources gives significant attention to the expansion of relations with international organizations and donor countries. Thus cooperation with UNDP, UNEP, UNIDO, NATO, OSCE, GEF, OECD, World Bank, Asia Bank, WWF and other organizations is being continued. Besides, bilateral cooperation with different countries has been established under various agreements.

A structured procedural system has been established in Azerbaijan for the preparation of legislation which is set forth as prerequisites in the Constitution and regulatory legal acts.

Pursuant to the Law on Regulatory Legal Acts, the National Parliament and relevant bodies of the government prepare a plan for drafting and subsequent adoption of legislative acts. As an established rule, a working group composed of representatives of the responsible organization as well as experts for preparing a draft law. At this stage, experts from stakeholder organizations, NGOs, local government institutions, scientific-research institute and other relevant state institutions can be involved. The preparation of a draft law can be assigned to a state institution, National Academy of Sciences, NGOs and individuals based on a contract.

The Constitution of the Republic of Azerbaijan was adopted on November 12, 1995. The Constitution came into effect on November 27, 1995 and was revised on August 24, 2002.

The Constitution sets forth certain principles for the preparation of national environmental policy. According to Article 39 of the Constitution “Each person has the right to live in sound environment. Each person has the right to get information on a state of the environment and receive compensation for damage to health and property caused by the violation of environmental rights”. According to Article 78 of the Constitution (Environment Protection) “Protection of the environment is a duty of every person”.

According to the Constitution of the Republic of Azerbaijan local authorities in villages and settlements are represented by municipalities. Municipalities are, inter alia, empowered to approve and implement local environmental programs. However, municipalities do not have sufficient financial resources to do this.

Lots of environmental laws and rules covering different areas as well as interrelations between different sectors in Azerbaijan have been adopted. In addition to this, according to Article 8 of the Law about Regulatory Legal Acts all acts that were in force before independence and have not been repealed continue to be effective.

The Law on Environment Protection adopted on June 8, 1999 and amended on March 30, 2001 is an essential component of the national environmental legislation. Its detailed and clear contents sometimes make it possible to apply it without legal acts.

Following issues have been addressed in the Law:

- The rights and responsibilities of government, citizens, public associations and local authorities;
- use of natural resources;
- state registry of natural resources of the environment, monitoring, standardization and certification;
- economical regulation of environmental protection;
- ecological terms required for implementation of economic activities;
- education, research, statistics and information;
- environmental emergency response situations and zones of ecological disasters;
- control on environmental protection, environmental impact assessment;
- environmental inspection, environmental audit;
- responsibility for the violation of environmental legislation;
- international cooperation

The following laws are very close to the subject of Stockholm Convention:

***The Law “On phyto-sanitary control”*** is adopted by Milli Mejlis on May 2006 (No.102-IIIQ) and approved by the President Decree No 441 of 02.08.2006. The Laws ***“Law on pesticides and agrochemical substances”*** and ***“Law on plant conservation”*** were repealed due to the above mentioned Presidential Decree.

***The law on phyto-sanitary control*** defines legal basis for tests, registration, use of pesticides and agrochemical substances and organization of agrochemical service in agriculture. This law defines the framework principles of regulations and rules on production, import and export, packing and labeling, storage and transportation, use, removal of expired and prohibited substances, clean-up and elimination of pesticides and agrochemical substances.

According to the law, production, sale and use of toxic chemical substances that are not relevant to the officially known international, regional and intergovernmental standards of the country and are hazardous for human life, health and property as well as for the environment is not permitted. The way of certification of pesticides and agrochemical substances is determined by the Cabinet of Ministry.

The Law set forth guidelines for the implementation of scientifically grounded complex measures for the protection of plants and harvest, diseases and the spread of weeds. The main objective of the Law is the prevention of plants from the increase and spread of pests, diseases

and weeds, avoiding the loss of harvest, gather environmentally clean harvests, implementation of action system on plant conservation aimed at the protection of the environment and the public health, fauna and flora from harmful impacts of pesticides and implementation of ad-hoc governmental programs intended for the isolation and elimination of quarantined and other special dangerous pests.

**“Law on Environment Safety”** regulates actions of legal entities and individuals, state and local self-management bodies and their officials in the field of environmental safety in the course of implementation of their activities. The Law determines a legal basis for protection from threats caused by natural and human impacts in relation to human life and health, tangible and moral values of the society, the environment including atmosphere, space, water bodies, subsoil, soil, natural landscape, flora and fauna.

**“Law on Environment Protection”** ensures environmental safety in the area of maintaining the ecological balance, prevention of harmful impact of economy and other activities on natural ecosystems, protection of biodiversity and determination of a legal basis for ensuring sustainable use of nature. It sets limits and quotas on the normalization of the use of nature set forth in Article 10 of the law.

**Law on Soil Fertility** sets out legal principles of recovery, increasing and protection of soil fertility in lands belonging to state, private sector and municipality. In accordance with the law, soil fertility means an ability to provide vital elements for nutrition of plants and sufficient humidity in a morphological, physical and chemical, mechanical and biological conditions.

In order to ensure execution of laws in this area the Cabinet of Ministries issued a number of decision and legal acts. The following are the acts that were adopted by decision №120 of the Cabinet of Ministries of 20 October 1997 concerning the approval of regulatory legal acts on the application of the Law of the Republic of Azerbaijan on “Pesticides and Agrochemical Substances”:

- **guidelines** on carrying out state tests of pesticides and agrochemical substances;
- **rules** on registration of pesticides and agrochemicals;
- **rules** on certification of pesticides and agrochemicals;
- sanitary **rules** of storage, transportation, utilization and sale of agricultural toxic chemicals;
- **rules of** disposal, decontamination and destruction of obsolete and prohibited pesticides and agrochemicals;
- **rules of** disposal, decontamination and destruction of agricultural and food products the use of which is impossible;
- **the list** of environmentally high-toxic harmful pesticides and agrochemicals;
- Limits, legal and technological **mode** of operation of special row material regions for the production of diet and baby food stuffs.

### **2.2.2. Roles and responsibilities of institutions involved in the management of POPs**

Provision of the legislation on POPs registration, monitoring and disposal and institutional support of these processes are the common tasks of Ministries of Ecology and Natural Resources, Health, Agriculture, and Industry and Energy. These state organizations have the following responsibilities:

**Ministry of Ecology and Natural Resources** – plays the role of focal point in meeting the requirements of Stockholm Convention on POPs in Azerbaijan. The Ministry carries out

monitoring on POPs contamination of atmospheric air, soil and water and controls the implementation of legislative requirements on their protection.

**Ministry of Health**- carries out POPs monitoring on food stuff with a view to preventing human health from adverse effect of POPs and is responsible for management of medical wastes.

**Ministry of Agriculture** – carries out state tests and registration of pesticides and agrochemical substances and makes decisions on registration and use of pesticides and agrochemical substances that have been proved positive. It is entitled to temporarily or entirely prohibit the application of substances should information about their safety is new and obtained for the first time.

In 2004 State Phytosanitary Control Service was established within the Ministry of Agriculture. Pursuant to the statutes of the Service pesticides cannot be imported, exported, manufactured, repackaged, distributed, sold or proposed for sales unless they have been registered by State Phytosanitary Control Service.

**Ministry of Industry and Energy**- coordinates activities on destruction of PCB containing equipment, prepares strategies on application of BAT/BEP technologies in manufacturing fields and ensures their implementation. MIE prepares a strategy on the implementation of state program on reestablishment of energy system of the country. During the implementation of the NIP Azerenergy OSC will be responsible for the execution of activities on phasing out PCB containing equipment.

**State Customs Committee** - The organization regulates all import-export operations in the country. SCC implements control on import and export of agrochemical substances, POPs pesticides and toxic substances on the basis of the list submitted by the State Phytosanitary Control Service.

**State Committee of Soil and Cartography** – is charged with preparation of maps of stockpiles and storage bases of POPs pesticides and inventory of soil.

**“ECOIL” NGO**- published its [www.environ.aznet.org](http://www.environ.aznet.org) web page on POPs and solid wastes. In 2002 a seminar devoted to the transportation and storage of solid wastes in Baku city was held. A video film on the release of wastewater into the Baku bay and environmental condition of the bay was prepared. Another video-film addressing uncontrolled burning of wastes in Balakhani landfill was also prepared and demonstrated on Space broadcasting channel. It is engaged in public awareness raising about POPs.

**“RUZGAR” Non-Governmental Organization** –held a workshop on POP pesticides, prepared and printed the brochure on POPs. It is engaged in public awareness raising about POPs.

### ***2.2.3. Relevant international commitments and obligations***

The Republic of Azerbaijan apart from Stockholm Convention on Persistent Organic Pollutants assumed other international commitments concerned with this area. Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters which is closely linked to all other international agreements was approved by the Parliament of Azerbaijan on 9 November 1999. Another document dealing with this area is UN Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal which was ratified by the Parliament of Azerbaijan on 16 February 2001.

In compliance with Basel Convention it is envisioned to make appropriate amendments and additions to the existing national legislation on waste management. To this end Ministry of Ecology and Natural Resources drafted a law and submitted it to the Cabinet of Ministers.

Another international document relating to POPs is Rome Convention on “Plant protection” ratified by the Parliament of Azerbaijan on March 14, 2000. Yet another international agreement concerned with this area is Helsinki Convention on the Transboundary Effects of Industrial Accidents which was ratified by Azerbaijan on May 4, 2004.

Rotterdam Convention on Agreed Procedures of International Trade in Preliminarily Approved Pesticides and Various Hazardous Chemicals is an international agreement that is referred to in Stockholm Convention on POPs. Azerbaijan is now undergoing internal procedures to join this international agreement.

Prerequisite documents and development of proposals are now being finalized to enable Azerbaijan to join Protocol on Pollutant Release and Transfer Registers which is the annex to Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.

Acceding of Azerbaijan to the above conventions and protocols will expedite the harmonization of the legislation of Azerbaijan on POPs management with environment related Directives of the European Union and impose additional commitment on the country.

#### ***2.2.4. Description of existing legislation and regulations addressing POPs***

The first internationally accepted document on the protection of the environment and human health from adverse effects of POPs was a Protocol on POPs to Convention On Long-Range Transboundary Air Pollution. This Convention entered into force on October 03, 2003.

UN Stockholm Convention on POPs had been declared open for signatures since 2001 and came into effect on May 17, 2004. The Republic of Azerbaijan ratified Stockholm Convention on POPs on December 9, 2003.

In the course of recent 10 years Azerbaijan has adopted a number of national laws regulating legal relationships under Stockholm Convention’s provisions and addressing problems of this area as well as regulatory legal acts as a working mechanism of these laws. Laws that are most closely linked to the subject of the Convention are as follows: Phytosanitary Control (2006), Environmental Safety (1999), Environment Protection (2001), Soil Fertility (1999), Industrial and Municipal Wastes (1998), Protection of Atmospheric Air (2001), Water Supply and Wastewater (1998), Access to Environmental Information (2002), Land Code (1999). Compliance of the above laws with provisions of the Convention have been analyzed by experts:

**Table 2. Compliance of the laws with provisions of the Convention, gaps and weaknesses**

№	Articles of the Convention	Legal acts	Gaps which should be addressed in the action plan	Weaknesses
1.	Article 3	Regulation on State Phytosanitary Service	Relevant	A lack of concreteness with regard to the Articles of Annex A, Part II of the Convention
2.	Article 5	<p>A) Law on Environment Protection which was revised on March 30, 2001</p> <p>B) Law on Protection of Atmospheric Air (2001)</p> <p>C) Law on Sanitary-Epidemiological Services (November 10,1992)</p>	<p>Article 5 is not covered</p> <p>Article 5 is not covered</p> <p>A lack of measures on the impact of POPs on the environment and human health</p>	<p>Activities and sources in Annex C of the Convention are not covered</p> <p>Articles of Annex C of the Convention are not covered</p> <p>Annex C substances are not indicated directly in the regulatory acts</p>
3.	Article 6	<p>A) Law on Industrial and Municipal Wastes (1998)</p> <p>B) Law on water supply and wastewater (1998)</p>	<p>The relations with the Basel Convention are not indicated</p> <p>There are not information on POPs</p>	<p>The mechanism of POPs management is not indicated</p> <p>The regulatory acts are not developed</p>
4.	Article 7	Decrees of President and Milli Mejlis(Parliament ) on this Law	Relevant	Relevant
5.	Article 8	There are not any law		
6.	Article 9	Law on Environmental Information (2002)	POPs are not covered	Regulatory documents do not cover this article
7.	Article 10	<p>A) Aarhus Convention</p> <p>B) Law on Public Awareness Raising and Education</p>	<p>Relevant</p> <p>Relevant</p>	<p>Relevant</p> <p>POPs are indicated in general</p>
8.	Article 11	Scientific –research plans of NAS	POPs are not covered	Technical capacity is weak
9.	Article 12-16	Decisions and Decrees of President on these Articles	Relevant	Relevant

Above mentioned laws and regulatory legal acts have been adopted before the Republic of Azerbaijan ratified the Convention, so the Article and principles of the Convention have not been reflected in those documents.

### ***2.2.5. Key approaches and procedures for POPs chemical and pesticide management***

Disposal and phasing out of POPs is the main goal of the Stockholm Convention. The Cabinet of Ministries in former USSR adopted Decision № 173 in 1970 on the Prohibition of the Use of DDT on Account of its Harmfulness for Human Health and the Environment. Since there were not alternatives to DDT, it was exceptionally used in Azerbaijan until 1982.

The storage of obsolete POP pesticides stockpile in a dispersed form at bases of the former “Azerkandkimya” located in different regions of the country, their illegal sale and open, uncontrolled landfills are the key issues for the Republic. At present POPs pesticides are not produced and consumed in Azerbaijan.

In former times the landfills were under the control of “Azerkandkimya” union, but after the collapse of the union in 1996 the landfills remained unattended.

All reports on import of pesticides had been implemented by the “Azerkandtekhnik” Union until 1980 and by the “Azerkandkimya” Union in 1980-1986. Since 1996 report on import of pesticides and fertilizers has been implemented by different firms, companies and individuals.

In 2004 the State Phytosanitary Control Service was established under the Ministry of Agriculture. Pursuant to the statutes of the Service pesticides cannot be imported, exported, manufactured, repackaged, distributed, sold or proposed for sales unless they have been registered by State Phytosanitary Control Service.

The Parliament (Milli Mejlis) of the Republic of Azerbaijan adopted the Law on “Phytosanitary Control” (№102-IIIQ) in May, 2006. This law has been approved by the Presidential Decree № 441 dated August 2, 2006. According to this law State Customs Committee is responsible for resolution of problems related to import-export of chemicals on the basis of the list submitted by the Ministry of Agriculture.

The Environmental Protection Department and Local Environmental Divisions of the MENR carries out control on the protection of the environment. Local inspectors undertake surveys to determine the pollution level of air, water and soil. Depending on pollution level of areas and enterprises the surveys are undertaken once a month, quarter or year. If the pollution level is not in accordance with the accepted regulatory norms then appropriate penalties can be applied.

Various measures on environmental protection are carried out jointly by the inspectors of MENR, MA and MH. At the end of every year Local Environmental Divisions of MENR receive reports on pollution of atmosphere, soil and water and submits these reports to the State Statistical Committee.

### ***2.2.6. Legal problems linked to NIP***

The analyses of current laws on POPs in Azerbaijan, articles of Stockholm Convention and Europe Union legislation revealed the following:

Some issues arising from the Convention are not appropriately covered in the national legislation. Consequently, there is a need for the adoption of new legislative acts and make amendments to the current legislation pursuant to the requirements of the Convention.

First of all there is a need for the adoption of those legislative acts that will restrict production and utilization of 9 chemicals listed in Annex A as well as limits on the production and utilization of the chemicals listed in Annex B to the Convention.

There is a need for the adoption of a regulatory legal act which will limit (ban) import and export of the Annex B and C chemicals of the Convention.

In accordance with the requirements of Annex D to the Convention there is a need for the preparation of procedures on the assessment of peculiarities of the new or existing pesticide containing chemicals.

It is important to prepare a strategy on reducing or phasing out of POPs which were generated from unintentional production of chemicals listed in Annex C by anthropogenic sources.

There is a need for the preparation of a strategy on identification and recovery of areas polluted with Annex A, B and C chemicals.

One of the important issues is the establishment of awareness-raising, training and educational systems pursuant to Article 10 of the Convention.

## **2.3 POPs ISSUES ASSESSMENT IN THE COUNTRY**

### ***2.3.1. Stockholm Convention Annex A, Part I chemicals (POPs pesticides)***

#### **2.3.1.1 Introduction**

POPs pesticides represent a large group of POPs substances, whose elimination is strictly stipulated in the Stockholm Convention.

POPs pesticides belong to a group of the most bioactive substances. Being an active substance in various components of the environment they adversely affect croplands, ecosystems and human health. It was discovered that they can directly impact human health even in low concentrations and are practically able to spread over a large area in the environment and be present in areas that are far away from places of their production, storage and application.

POP pesticides slowly degrade chemically and biologically, has high bioaccumulation rate and are organic chlorine based compounds that are very hazardous for living creatures. These substances remain in the environment, in human and animal tissue for decades.

### **2.3.1.2 Requirements of the Stockholm Convention**

Following are the basic provisions:

- 1.a) i Each party shall prohibit and/or take the legal and administrative measures necessary to eliminate its production and use of the chemicals listed in Annex A
- 1.a)ii Each party shall prohibit and/or take the legal and administrative measures necessary to eliminate its import and export of the chemicals listed in Annex A
- 1.b) Each party shall restrict its production and use of the chemicals listed in Annex B (DDT)
- 2.a)i Each party shall take measures to ensure that a chemical listed in Annex A or Annex B is imported only for the purpose of environmentally sound disposal.
- 2.a)ii Each party shall take measures to ensure that a chemical listed in Annex A or Annex B is imported only for the purpose which is permitted for that party.
3. Each party that has one or more regulation and assessment schemes for new pesticides or new industrial chemicals shall take measures to regulate with the aim of preventing the production and use of new pesticides or new industrial chemicals which, taking into consideration the criteria in paragraph 1 of Annex D, exhibit the characteristics of persistent organic pollutants.
4. Each party that has one or more regulation and assessment schemes for pesticides or industrial chemicals shall, where appropriate, take into consideration within this schemes the criteria in paragraph 1 Annex D when conducting assessments of pesticides or industrial chemicals currently in use.

### **2.3.1.3 POPs pesticides situation in the Azerbaijan Republic**

The Inventory group made assessment concerning the presence of POPs pesticides, their export and import, production and use in the country.

One hundred and thirty seven questionnaire forms were distributed among community members in priority regions for defining POPs pesticides. Eighty five completed forms were returned which constitutes 62.05% of respondents. The majority of questionnaire forms in regions were distributed with the assistance of staff of regional environmental departments of the Ministry of Ecology and Natural Resources.

The group undertook inventory in 83 spots to discover presence of POPs in the country in accordance with special guidelines. Findings of the conducted inventory showed that of the nine POP pesticides included in the Stockholm Convention only one (DDT) was largely produced and used in the country. No case of production, export-import and use of the other eight pesticides (Aldrin, Endrin, Dieldrin, Chlordane, Mirex, Toxaphene, Heptachlor and Hexachlorobenzene) was detected during the inventory. State registration of these pesticides was not carried out. During the inventory no facts of POPs pesticides manufacturing, import and export were observed.

In addition, the Republic of Azerbaijan is not entitled to any special exceptions applied to POPs in Stockholm Convention against malaria.

Within a period from October 2005 to 30 June 2006 the pesticides inventory group revealed hot spot areas composed of stockpiles and remnants of expired and prohibited pesticides in the majority of regions of Azerbaijan. These hot spot areas are as follows:

- The base of Daykend settlement of Salyan region. It has an area of 4 ha and is located 100 m away from Baku-Bilasuvar highway. Dwelling houses of the settlement are 100-120 m away from the base. An irrigation channel runs at a distance of 100 m from the area and there is a small lake 35-40 m away from the area of the base. The amount of DDT found in this area is 1,2 ton. Substances are dumped on an open area.
- The base in Pokrovka village of Sabirabad region. Its area is 4 ha which is 200 m away from the village. The amount of DDT found in this area is 1,5 ton.
- The base in the center of Kurdamir region is 200-300 m away from Baku-Kurdamir highway. The base has deteriorated. 0,75 t of DDT was found in the area.
- The base in Mususli village of the Ujar region. The area of the base is 4 ha which is 400-500 m away from the village. The condition of the base is unsatisfactory and needs to be repaired. 0,72 t of DDT is stockpiled in the base.
- The base in Dalimammadli settlement of Goranboy region. The area of the base is 6 ha and it is located at the outskirts of the settlement. The base needs to be repaired. As a result of inventory 0,6 t of DDT were found there.
- The base of Siyazan region is located in the center of the region. Dwelling houses are 150-200 m away from the base. The area of the base is 4 ha. Except one building all the remaining buildings of the base are semi-destroyed. During the inventory 3,0 t of mixed fertilizer was detected there.
- The base in Horadis settlement of Fusuli region was absolutely destroyed during the war between Armenia and Azerbaijan. It was not possible to conduct inventory and monitoring in the base which has an area of 4 ha.
- Ganja city. The base is situated near the railway station. The area of the base is 4 ha. A regional Agroleasing OJSC has been established in the base. The base is in normal conditions. There are 4 large stockpiles in the area. The base is 10-15 m away from the dwelling houses. 3,0 t of DDT were found in the area of the base which is dangerous for the people.

Soil samplings were taken from the area of all bases. The results of the analyses are given in detail in the Monitoring section.

No inventory was conducted in areas that are invaded by Armenia constituting 20% of the total area of Azerbaijan.

In general, of 4286, 37 t of pesticides found as a result of the inventory that have expired in terms of usage.

- 80,87 tons are DDT dust with 5,0-5,5% content;
- 3876,1 tons are DDT dust mixture (pesticides and agrochemicals);
- 329,4 tons are non-POP pesticides

The information on POPs and non-POP pesticide remnants amounts and information on DDT production is presented in Annex 4 and 5.

## ***Production of POP pesticides in Azerbaijan***

POPs pesticides inventory group conducted inventory at Detergents plant in Sumgait city where DDT dust was produced from 1958 to 1980. According to the information obtained from the plant, during the Soviet Union DDT was imported from Russia and was converted into a 5% technical dust at this plant. The annual production capacity of the plant was 60 thousand tons. During 22 years period 480,549 tons of DDT were produced at the plant. The plant was closed down because of its obsolescence and failing to meet the environmental requirements as well as because prohibition of DDT manufacturing.

The hot spot areas where DDT was found are shown in the map in Annex 6.

### ***2.3.1.4 Identification of problems***

The following problems have been identified in POPs pesticides management:

1. Safe management and gradual phasing out of prohibited and expired POP pesticides remnants dumped in the area of former “Azerkendkimya” stockpiles and on the site of DDT manufacturing plant;
2. Implementation of supplementary measures to prevent illegal sale in some regions;
3. Restoration of a special pesticide landfill that was intended for the storage of expired pesticides in USSR or establishment of a new one.

## ***2.3.2 Assessment with respect to Annex A, part II chemicals (PCBs)***

### ***2.3.2.1 Introduction***

Polychlorinated biphenyls (PCBs) and PCB containing equipment represent a serious problem for Azerbaijan from the view point of the Stockholm Convention requirements. These substances threaten human health because long presence in the environment resulting from poor biodegradation properties.

PCB containing oils and equipment were never produced in Azerbaijan. However PCB containing oils and equipment (power transformers, capacitors) were delivered to Azerbaijan from Russia and other countries (Germany, Poland) and are now widely used in the energy consumption sector. The availability of PCB containing equipment in Azerbaijan poses a high risk for human health through air, soil and water.

The main problems are focused on enterprises having PCB containing equipment from the viewpoint of their effects on the environment.

The disposal of PCB containing equipments is of a general problem.

As a result of inventory conducted under the GEF-UNIDO project following PCB containing equipment have presently been registered: 6004 capacitors, 11 power transformers.

### 2.3.2.2 Requirements of the Stockholm Convention

According to commitments concerning PCBs under the Stockholm Convention each party:

- (a) With regard to the elimination of the use of polychlorinated biphenyls in equipment (e.g. transformers, capacitors, or other receptacles containing liquid stocks) by 2025, subject to review by the Conference of the Parties, take action in accordance with the following priorities:
- (i) Make determined efforts to identify, label and remove from use equipment containing greater than 10 per cent polychlorinated biphenyls and volumes greater than 5 liters;
  - (ii) Make determined efforts to identify, label, and remove from use equipment containing greater than 0.05 per cent polychlorinated biphenyls and volumes greater than 5 liters;
  - (iii) Endeavor to identify and remove from use equipment containing greater than 0.005 per cent polychlorinated biphenyls and volumes greater than 0.05 liters;
- (b) Consistent with the priorities in subparagraph (a) promote the following measures to reduce exposures and risk to control the use of polychlorinated biphenyls:
- (i) Use only in intact and non-leaking equipment and only in areas where the risk from environmental release can be minimized or quickly remedied;
  - (ii) Not use in equipment in areas associated with the production or processing of food or feed;
  - (iii) When used in populated areas, including schools and hospitals, all reasonable measures to protect from electrical failure which could result in a fire, and regular inspection of equipment for leaks;
- (c) Notwithstanding paragraph 2 of Article 3, ensure that equipment containing polychlorinated biphenyls, as described in subparagraph (a), shall not be exported or imported except for the purpose of environmentally sound waste management;
- (d) Except for maintenance and servicing operations, not allow recovery for the purpose of reuse in other equipment of liquids with polychlorinated biphenyls content above 0.005 per cent;
- (e) Make determined efforts designed to lead to environmentally sound waste management of liquids containing polychlorinated biphenyls and equipment contaminated with polychlorinated biphenyls having a polychlorinated biphenyls content above 0.005 per cent in accordance with paragraph 1 of Article 6 as soon as possible but not later than 2028, subject to review by the Conference of the Parties;
- (f) In lieu of note (ii) in Part I of this Annex, endeavor to identify other articles containing more than 0.005 per cent polychlorinated biphenyls (e.g. cable-sheets, cured caulk and painted objects) and manage them in accordance with paragraph 1 of Article 6;
- (g) Provide report every five years on progress in eliminating polychlorinated biphenyls and submit it to the Conference of the Parties pursuant to Article 15;
- (h) The reports described in subparagraph (g) shall, as appropriate, be considered by the Conference of the Parties in its reviews relating to polychlorinated biphenyls. The Conference of the Parties shall review progress towards elimination of polychlorinated biphenyls at five years

intervals or other period, as appropriate, taking into account such reports.

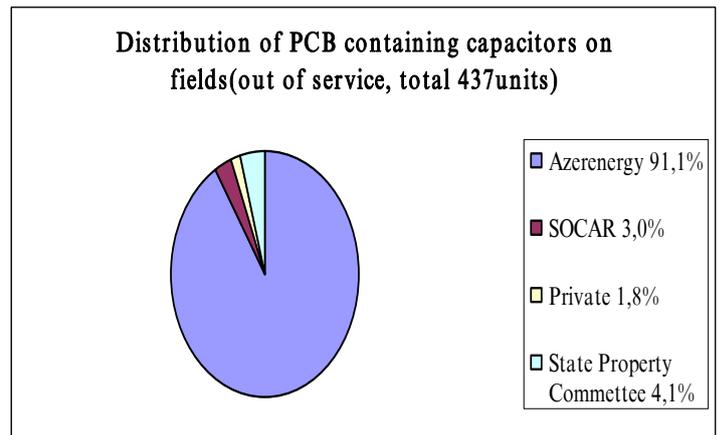
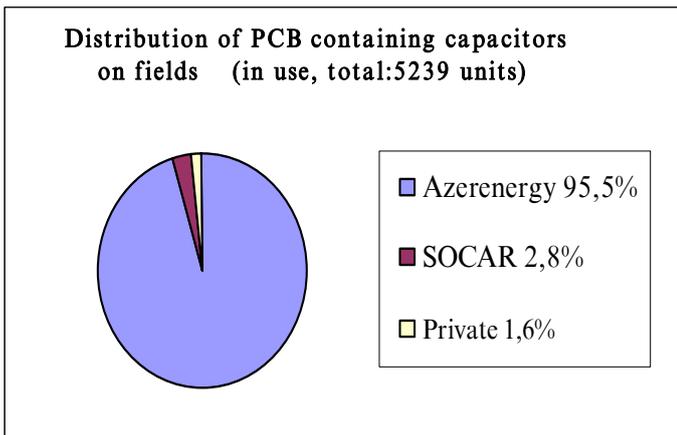
### **2.3.2.3 PCBs in the Azerbaijan Republic**

As a first step, an inquiry has been communicated to relevant ministries, committees, organizations, and private sectors about transformers and capacitors at their sites to identify sources of PCBs and PCB containing substances. In order to facilitate the inventory of PCBs and PCB containing substances 500 KIT indicators to instantly detect PCB substances on site were purchased from Finland and used in the inventory activities.

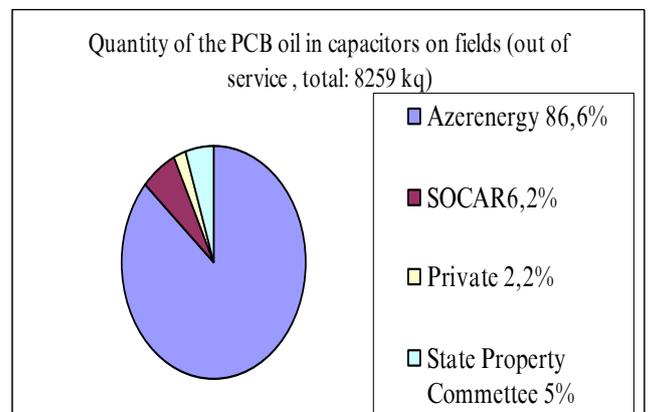
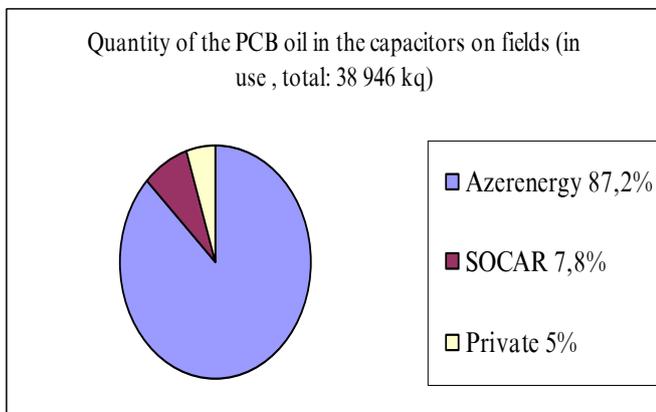
As a result of the inventory detected 196,7 tons of PCB containing oil including 102,1 tons in capacitor, 64,6 tons in transformers and 30 tons in waste oil. The total weight of PCB containing equipment is about 384 tons.

PCB containing equipment is mainly in use in the facilities (sub-stations) of Azerenergy JSC. PCB containing equipment was found in more than 20 % of substations surveyed. 95,5% of all the functional capacitors found in the country with 87,2% PCB oil and 91,1% of non-functional capacitors with 86,6% PCB containing oil are based in the above enterprise.

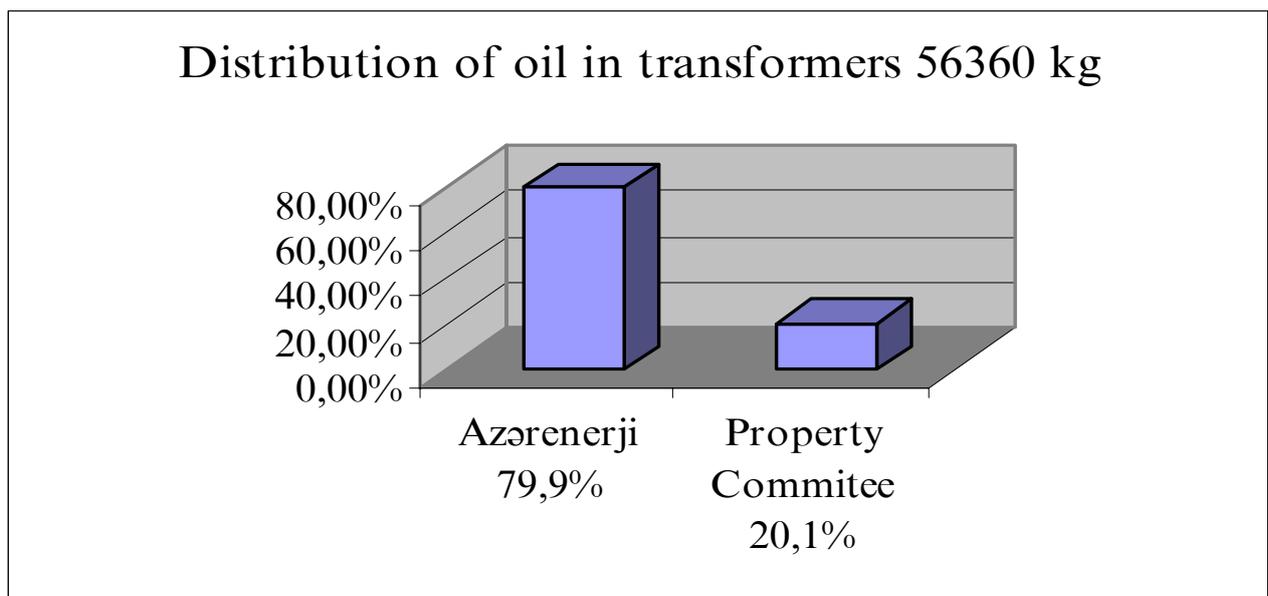
In addition to facilities of Azerenergy SC, as a result of inventory, PCB containing equipment was found in facilities of SOCAR, State Committee for State Property Management and other organizations. Findings show that owners of the equipment are mainly state enterprises. Only little number of equipment is in private use in energy supply system. Distribution of PCB equipment over different areas is shown in Figures 1-3.



**Figure 1. PCB containing capacitors field distribution**



**Figure 2. Quantity of PCB oil in capacitors on fields**



**Figure 3. Distribution of PCB oil in transformers**

In the area of Detergents Plant in Sumgait city 30 t waste oil is kept in underground barrels.

Distribution of PCB based equipment over the area is shown in Annex 6.

PCB containing equipment is used in densely populated regions – Absheron peninsula, particularly in Baku city, Sumgayit, Ganja cities.

According to the Graphic this equipment is based along the Kura river, as a main watercourse, in the vicinity of human settlements, forestry institutions and nature reserves. This increases the risk of exposure of water bodies, lands and humans to PCB compounds.

There are many PCB oil containing equipments not regulated by the Stockholm Convention, especially capacitors all over the Republic.

The difficulties revealed during the inventory:

- Poor awareness of stakeholders, decision-makers and public about PCBs (equipment, fields of their use, their impact on human health and environment);
- Lack of statistical and import-export data on PCB containing equipment;
- Lack of legislative acts on PCB containing equipment (consumption, elimination, register and etc.)

#### ***2.3.2.4 Identification of PCB related problems***

The following obstacles were identified with respect to PCBs and PCB containing equipments:

1. Maintaining regular inventory of PCB containing wastes and PCB containing equipment in use;
2. Disposal of obsolete PCB containing equipment and liquid wastes in special landfills;
3. Safe management of PCB containing equipment in use and their phasing out.

#### **2.3.3 Assessment with respect to Annex B chemicals (DDT)**

##### ***Use of POPs pesticides in Azerbaijan***

The use of DDT against agricultural pests was taking place for about 30 years in Azerbaijan. But statistical information is available only for the period after 1965 (Table 3). According to information received from the Ministry of Agriculture of 65 regions of the Republic DDT was used only in 24 lowland regions during the Soviet times.

**Table 3. Use of DDT in Azerbaijan\***

Years	Cotton-growing		Vine-growing	
	Area of cotton plantations (ths.ha)	Amount of DDT used (tons)	Vineyard area (ths.ha)	Amount of DDT used (tons)
1965	214,7	22974	89,5	0,9
1966	211,3	23579	96,1	0,8
1967	207,5	25341	102,9	1,0
1968	202,2	25923	110,1	1,1
1969	198,3	26221	119,5	0,9
1970	192,9	25748	121,6	0,8
1971	205,8	26228	133,2	0,8
1972	196,4	25167	152,5	0,6
1973	198,2	26342	150,2	0,6
1974	209,6	26691	158,5	0,5
1975	211,5	15362	178,1	0,3
1976	216,2	8794	195,5	0,2
1977	218,0	4028	212,8	-
1978	223,7	1278	225,8	-
1979	241,1	437	247,6	-
1980	249,6	404	263,0	-
1981	282,8	245	274,2	-
1982	305,9	215	274,9	-

\* Source – Ministry of Agriculture

### *Use of DDT to combat malaria*

Natural climatic and socio-economic conditions of Azerbaijan are very favorable for spreading of malaria. Historical sources show that malaria was a disaster for people of the country at the beginning of XX<sup>th</sup> century. Besides the impact on health of the population it also significantly damaged the economy of the country due to pandemic effects of the disease.

However systematic and consistent preventive measures resulted in the mitigation of this disaster in late 50s of the last century and beginning of 60s. However, due to a few 3-days malaria hotspots epidemic was periodically observed at the beginning of 70-90s. Notably, in 1994 667 malaria cases in 3 towns and 15 regions of the Republic were observed. The number of patients was 28 times more than it was in 1992-1993. Rapidly developing disaster reached its highest level (13135 incidents) in 1996. In view of this Ministry of Health gave it a status of an issue of state importance and applied to a number of international, governmental and non-governmental organizations. The State Program on Malaria Control for 1996-98 was developed and the implementation of the Program was supervised by the Government.

The main objective of the Program was the prevention of the spread of malaria in refugee camps. Thus the number of the sick fell up to 24, 6% in 1997 in comparison with 1996 and up to 48, 8% in 1998 in comparison with 1997. Specific measures in the subsequent years resulted in annual decline of malaria to its minimum in recent years (from 506 cases in 2002 up to 198 cases in 2005) and epidemiologic stability has been achieved.

The DDT was used in Azerbaijan in 1948-80 against malaria epidemic. DDT has not been used since 1980 in Azerbaijan.

From 1980 until 1996 Chlorophos and Hexachlorane were used against malaria epidemic. As from 1996 “Aykon”, “Solfak”, “Deltametrin” and “Didiphos” were used.

## **2.3.4 Annex C Chemicals of Stockholm Convention**

### **2.3.4.1 Introduction**

For the implementation of the requirements of the Stockholm Convention the group on unintentionally generated POPs inventory was established within the framework of the GEF-UNIDO project in compliance with the guidance on the preparation of National Implementation Plan. The group includes experts from Ministries of Industry and Energetic, Economic Development, Ecology and Natural Resources, Health, Azerchemistry State Company, Statistics Committee, State Customs Committee, National Academy of Science, Executive Power and specialists from the non-governmental organizations.

During the inventory of unintentionally generated POPs advanced experiences of some countries was used, works carried out in our country in this field was studied and questionnaires were compiled. Questionnaire forms were distributed to institutions of the priority category. Inventory group took into consideration source categories in its work, which causes the creation of Dioxin and Furans shown in International Instruction. According to the methodology electronic timetables were drawn up for calculating Dioxins and Furans and emission coefficients were taken from UNEP Methodology (February, 2005, second edition).

### **2.3.4.2 General information on unintentional Persistent Organic Pollutants (POPs)**

Polychlorinated dibenzoparadioxins and polychlorinated dibenzofurans (PCDD/PCDF) are part of 12 Persistent Organic Pollutants (POPs) listed in the Stockholm Convention. These substances together with polychlorinated biphenyls (PCBs) and hexachlorobenzene were included into Annex C of the Stockholm Convention. They are generated unintentionally and are called “by products”. According to the provisions of the Convention these by-products shall be phased out and eliminated after a certain period. Success in its phasing out is closely linked to the quality of inventory.

Dioxins and dioxin-like substances represent high toxic, dangerous group of chemical compounds. They are by- products generated as a result of chemical technologies and some other processes. Dioxins represent the most dangerous toxic group of chlorine organic compounds. They have special impact omens relating to damage of hepatic, nerve, endocrine and immune systems. Dioxins have ability to generate cancer and have negative impact on development of next generations. Dioxins never present in the environment separately, so it is very difficult to remove their impact. Technogenic pollution of environment by dioxins type chemicals occurs every where. The danger of incisive, chronicle impact of dioxin appears in the development of intoxication after one week, sometimes after years.

The clinical detection of dioxin intoxication is very various and is not particular, and this makes difficult the identification of danger. They don't have antipodes, photogenic and symphonic therapy has little impact. The inventory of all dioxin generating sources is very complex, significant issues and they are important part of National programs which are important in reduction the impact of persistent organic pollutant to the environment.

#### 2.3.4.2.2 *Environmental and health effects of dioxin and furans*

Dioxins and dioxin-like biphenyls, xanthenes, xanthenes, asoxibenzyls and their C and O tricyclic linear hetero-like substances are all harmful for human (xenobiotics). They are highly toxic for humans and animals and therefore are categorized as super toxicants with the following properties:

- 2, 3, 7, 8- TCDD – critically toxic for animals in very low concentrations (2-5 mg/kg);
- A wide permeation into the environment and natural food;
- Resistance to external natural factors (oxygenation, hydrolyze, exposure to acids and alkali);
- Soluble in oil, able to permeate into a human body through bioaccumulation and migration in food chain and concentrations of which in biota in comparison with water is  $10^4$ - $10^8$  times higher.

Clinical picture of poisoning of warm-blooded animals with dioxin is characterized by thirst, slowness, loss of appetite. It may be accompanied by diarrhea, discharges of blood from eyes and nose. Starting from the third week signs of inflammation appear accompanied by bleeding ulcers on the skin. One of specific and regular signs of poisoning with dioxin in the clinic picture is a change of body weight, i.e. at that time losing of weight, damage of lever, involution of thymus are taking place. The damage of lever is frequently followed by necrosis and bruises. Dioxins seriously affect endocrinology system. They bring about structural changes in adrenal glands, spleen and thyroid gland. Dioxins destroy estrogenic processes.

It has been proved that one of the targets of dioxins in organism is the immune system. By causing the atrophy of thymus gland dioxins affect cellular immunity. Similar effects can take place in relation to human, especially, to the development of embryo in the womb. Carcinogenic effects of dioxins is worth being given particular attention. Thus, tumors are frequently found in body parts of animals affected by dioxins. Having promoting functions it can strengthen the impact of other causative carcinogens. This provided grounds for the inclusion of 2, 3, 7, 8-TCDD in the first category of carcinogen substances by the International Agency on Cancer Diseases.

Dioxins are mainly accumulated in the human body in adipose tissue, pancreas, lever, thyroid gland, brains, lungs and kidney.

In the past in Sumgayit city the level of poisoning of the production area by dioxins during production of chlorine was very high. It was revealed that most of those poisoned by dioxins suffered from skin diseases. These are operators, metal craftsmen, laboratory staff and people that are exposed to products manufactured.

There is little research undertaken concerning the distribution and accumulation of dioxins in Azerbaijan. Therefore, taking account of the existence of dioxin hot spots it is important to undertake appropriate actions towards preventing the spread of dioxins in the environment. Hygienic standards on dioxins which are in force in Azerbaijan are given in Table 4.

**Table 4. Dioxins hygienic standards\*(2,3,7,8-TCDD)**

№	Environment and products analyzed	Dioxins	PCB	Regulation
1	Atmosphere air	0,5 pq/m <sup>3</sup>	1 mkq/m <sup>3</sup>	QN2.16.014-94
2	Emissions into the atmosphere (incineration in high temperature)	0,1 nq/m <sup>3</sup>		Norm EU
3	Drinking water, soil, surface water	20 pq/l	1mkq/l	Order MH USSR 05.05.1991 q.142-9/105
4	Soil	0,33 nq/kg	0,1 mq/kq	OrderMH USSR 08.09.68 q. 697
5	Sediments	9 nq/l	-	Order MH USSR 08.09.68 q. 697
6	Milk and milk products	5,2 nq/κq TE	1,5 mqkq TE	Order MH USSR 05.05.1991 q.142-9/105
7	Fish and fish products	11,0 nq/κq 88,0nq/κq TE	- 5 mq/kq TE	Order MH USSR 05.05.1991 q.142-9/105
8	Meat and meat products	0,9 nq/κq 3,3 nq/κq TE	-	Order MH USSR 05.05.1991 q.142-9/105

\* Source: - Ministry of Health care

#### **2.3.4.3 Dioxins and furans inventory**

In accordance with the guidelines of UNEP the inventory of dioxins and furans was conducted in five phases. Information on accomplishments to date in the country was analyzed. In addition, source categories were identified, methodology was selected, questionnaires were sent to enterprises and companies, and calculations on were made based on answers to questionnaires and statistical data.

Partially completed questionnaires covering Ministry of Transport, “Azerenergy” Stock Company, areas of processing ferrous and non-ferrous metals, raw materials, chemical industry, Baku city Executive Power and Nakhchivan Autonomous Republic were provided to the Inventory group.

In accordance with the methodology electronic tables on the calculation of emissions of dioxins and furans were drawn up. Emission coefficients were derived from the second edition of “UNEP, s Methodology on calculation of dioxin/furans” published on February, 2005.

Due to lack of emission coefficients and methodology for HCBs and PCBs their inventory was not carried out.

##### **2.3.4.3.1 Research on unintentionally generated POPs**

It is particularly important to study works done in Azerbaijan on dioxin and furans. In spite of the fact that the first anti-dioxin program was developed and applied by the Ministry of Health of former USSR in 1988 there is still insufficient awareness among the public on danger of dioxins and dioxin-like substances.

After that the works on the determination of the pollution degree in Azerbaijan were undertaken in the framework of the program on “Protection of population and the environment from dioxin and dioxin-like toxicants for 1996-1997”.

Based on the proposal of the workshop which was held in April, 1999 in Pushkin city of Russian Federation, Institute of Ecology and Use of Natural Resources of the Academy of National Sciences of Belarus made assessment of emissions of PCBs and dioxins under MSU-V contract in 2000.

Some works have been done and are being continued under the leadership of M.S.Salahov, a professor at the Institute of Polymer Metals of Academy of Azerbaijan National Sciences. Thus:

- Structures (sis- and trans-) of acid like polychlorinated POPs were identified based on titrometric method, a number of articles were published and reports were made in international symposia.
- Quantum-chemical calculation based correlation between structure of electrons and properties of toxicity of chlorinated phenol and dibenzo-p-dioxin POPs is being studied with the assistance of Chemistry and Physics Department of Baku State University;
- Scientific speeches were made in international symposia held in Istanbul, Ankara (Turkey), Guenqyu (Korea), Monterey (USA), Iskenderun, Ufa (Russia) and etc.
- Special courses on dioxin issues were delivered at universities of Azerbaijan (Sumgait State University, Baku State University, Caucasus University), masters and post-graduates were coached in;
- The First National Workshop on Dioxin Issues was held on July, 1996 under the initiative by Ecological Committee of Sumgayit city and Institute of Polymer Metals of Academy of Azerbaijan National Sciences and a decision was taken to establish a National Anti-dioxin Association;

Official requests were received by Ministry of Ecology and Natural Resources of the Republic of Azerbaijan, UN Office in Azerbaijan and “VUDVORD-KLAYD” company and by a consent of BP company it was decided to conduct dioxin monitoring in “Azeri” and “Cirag” oil fields;

In accordance with the intergovernmental contract till 2010 years between Azerbaijan Republic and Russian Federation, a joint agreement was signed on joining anti-dioxin combat between the Institute of Polymer metals of Academy of Azerbaijan National Sciences and Ecological Scientific-Research Center of the Republic of Bashqirdistan.

#### ***2.3.4.3.2 Calculation methodology of dioxins and furans***

The following equation sourced from the second edition of the Methodological Manual on the Calculation of Dioxins and Furans by UNEP (2005) was used:

**Source strength = emission factor X activity rate**

Where,

Source strength is dioxin emission per year;

Emission factor is an emission unit of PCDD/PCDF resulting from materials manufactured, processed or used;

Activity rate is an amount of product manufactured, processed or used.

#### ***2.3.4.3.3 Classification of the source categories***

2003 was accepted as a baseline year to conduct calculations. In accordance with methodological resources of UNEP the following main sources are recommended for further study:

- Waste incineration
- Ferrous and non-ferrous metal production
- Power generation and heating
- Mineral products manufacturing
- Use of transport
- Uncontrolled combustion processes
- Production and use of chemicals and consumer goods
- Other processes
- Disposal/landfilling
- POPs hotspots

A list of processes and activities for each source category has been drawn up and waste category of each major type was identified. Assessment of activities for each source has been made based on waste factors indicated in the guidelines. Information obtained from experts of State Statistical Committee and industrial sectors was used for systematization of industrial manufacturing and activities.

One of the major hazardous sources of dioxins is unattended management of medical wastes. According to recent findings 200-230 million disposable syringes or 70-80 tons of cotton wool is used each year in the country at medical institutions or domestically. In addition, in surgical operations 120-130 thousand catheters, 90-100 thousand disposable probes, 400-500 thousand plastic injection tubes, 110-120 thousand drains and other medical stuff is used. In spite of prohibition to burn medical wastes 10 to 20 % of them is subjected to uncontrolled burning. According to estimates 300-600 tons of medical wastes are burnt without control.

Source and sub-categories are shown below in Table 5:

**Table 5. Source categories and subcategories**

Source categories	Subcategories
Waste incineration	Municipal solid waste incineration, hazardous waste incineration, medical waste incineration, light-fraction shredder waste incineration, sewage sludge incineration, waste wood and waste biomass incineration, combustion of animal carcasses
Ferrous and non-ferrous Metal Production	Iron ore sintering, coke production, iron and steel production plants, copper, aluminum, lead, zinc, magnesium and other non-ferrous metal production, shredders, thermal wire reclamation
Power Generation and Heating	Fossil fuel power plants, biomass power plants, landfill/biogas combustion, household heating and cooking(biomass), domestic heating (fossil fuel)
Mineral products	Cement production, lime production, brick production, ceramics production, asphalt mixing
Transport	4-stroke engines, 2-stroke engines, diesel engines, heavy oil engines,
Uncontrolled combustion processes	Biomass burning, waste burning and accidental fires
Production and Use of Chemicals and Consumer Goods	Pulp and paper mills, chemical industry, petroleum industry, textile plants, leather plants
Miscellaneous	Drying of biomass, crematoria, smoke houses, dry cleaning, tobacco smoking
Disposal/landfill	Landfill and waste dumps, sewage and sewage treatment, composting, open water dumping, waste oil disposal (non-thermal)
Hot spots	Production sites of chlorinated organics, production sites of chlorine, formulation sites of chlorinated phenols, timber manufacture and treatment sites, PCB filled transformers and capacitors, dumps of wastes/residues, sites of relevant accidents, dredging of sediments, kaolin tic or ball clay sites

Source: UNEP Toolkit

#### **2.3.4.3.4 PCDD/PCDF initial inventory results**

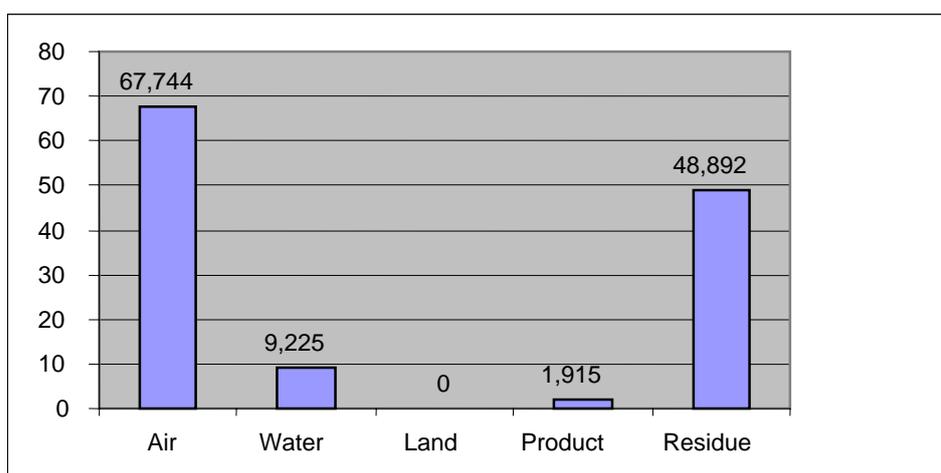
Based on the results of the initial inventory the total amount of PCDD/PCDF wastes for 2003 is 127.776 g TEQ/a. Uncontrolled combustion processes emitted the highest level of PCDD/PCDF with 37.998 q TEQ or 30,5 % of the total annual releases. Table 6 summarizes the results of the calculation.

**Table 6. Azerbaijan National PCDD/PCDF inventory, 2003**

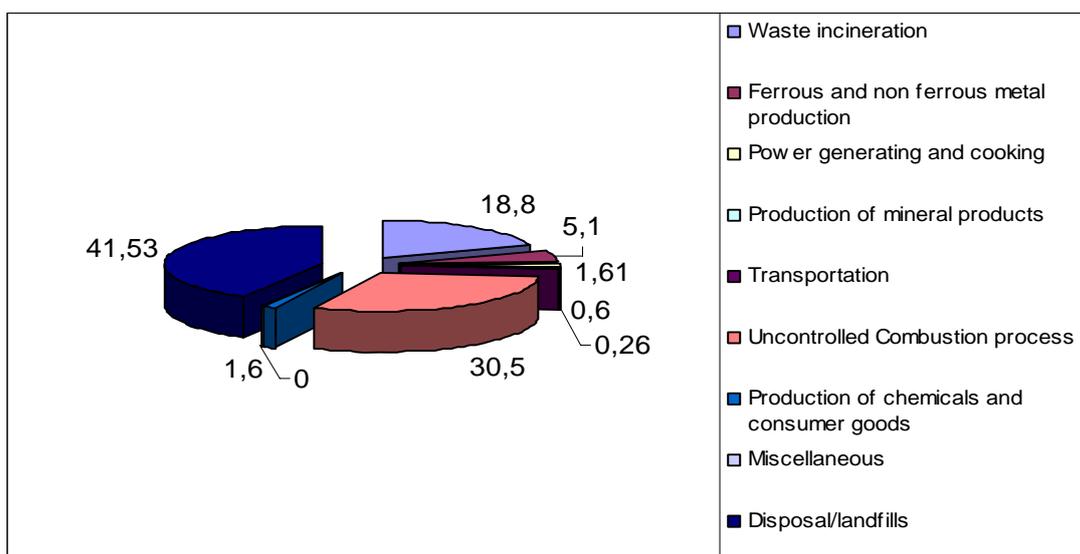
Sector	Source category	2003 Annual releases (gTEQ/a)					Total/ Sector
		Air	Water	Land	Product	Residue	
1	Waste incineration	24	0	0	0	0,12	24,12
2	Ferrous and non ferrous metal production	2,645	0	0	0	3,878	6,523
3	Power generating and cooking	2,061	0	0	0	0	2,061
4	Production of mineral products	0,662	0	0	0	0,101	0,764
5	Transportation	0,332	0	0	0	0	0,332
6	Uncontrolled Combustion process	37,998	0	0	0	0,998	38,996
7	Production of chemicals and consumer goods	0,045	0,001	0	1,915	0,094	2,055
8	Miscellaneous	0	0	0	0	0	0
9	Disposal/landfills	0,001	9,224	0	0	43,7	52,925
10	Identification of potential hot spots						
<b>TOTAL</b>		<b>67,744</b>	<b>9,225</b>	<b>0</b>	<b>1,915</b>	<b>48,892</b>	<b>127,777</b>

Source: Dioxin/furan inventory report

Annual releases to air constitute the greatest threat of PCDD/PCDF with 53,0% of total annual releases. Releases into water are related to contamination levels of wastewater released into open water bodies as a result of human activities. The release in residue was mostly due to PCDD/PCDF releases from waste waters. Sources of PCDD/PCDF releases in land and product were from leather plants and uncontrolled combustion of agricultural residues.



**Figure 4. Annual releases by environmental media, 2003 TEQ/a**



**Figure 5. Releases of PCDD/PCDF by activities area (%)**

### ***2.3.5 Stockpiles, contaminated areas and wastes***

#### **2.3.5.1. Introduction**

Occurrence of POPs in the natural environment and in polluted areas or in different areas depend on the technological development of the country and its production infrastructure. In the past, POPs and their effects on human health and environment were not sufficiently known and therefore, no effective regulation was in place for their production, spread, use and liquidation.

#### **2.3.5.2 Stockholm Convention requirements with regard to stockpiles, polluted areas and wastes**

Obligations relevant to contaminated areas are listed in part 1.2 of the Convention. Stockholm Convention requires that all parties develop their own strategy for identification of areas contaminated by POPs compounds listed in Annexes A, B or C. Moreover, if remediation of these areas is planned, this should be carried out in an environmentally appropriate manner.

The proposed Action Plan within the framework of Stockholm Convention was prepared in compliance with “Guidance on Planning and Developing NIPs – Guidance Set 6 POPs Contaminated Sites Survey and Action Plan.

#### **2.3.5.3 Situation in the Republic of Azerbaijan with regard to stockpiles, polluted areas, wastes.**

The most significant group of pollutants contaminating areas in Azerbaijan and classified as chemical compounds called POPs are DDT and polychlorinated biphenyls (PCBs). It does not look surprising with regard to the history of production and distribution in Azerbaijan and is supported by large amount of data in published researches and by current monitoring in DDT and PCB-polluted areas.

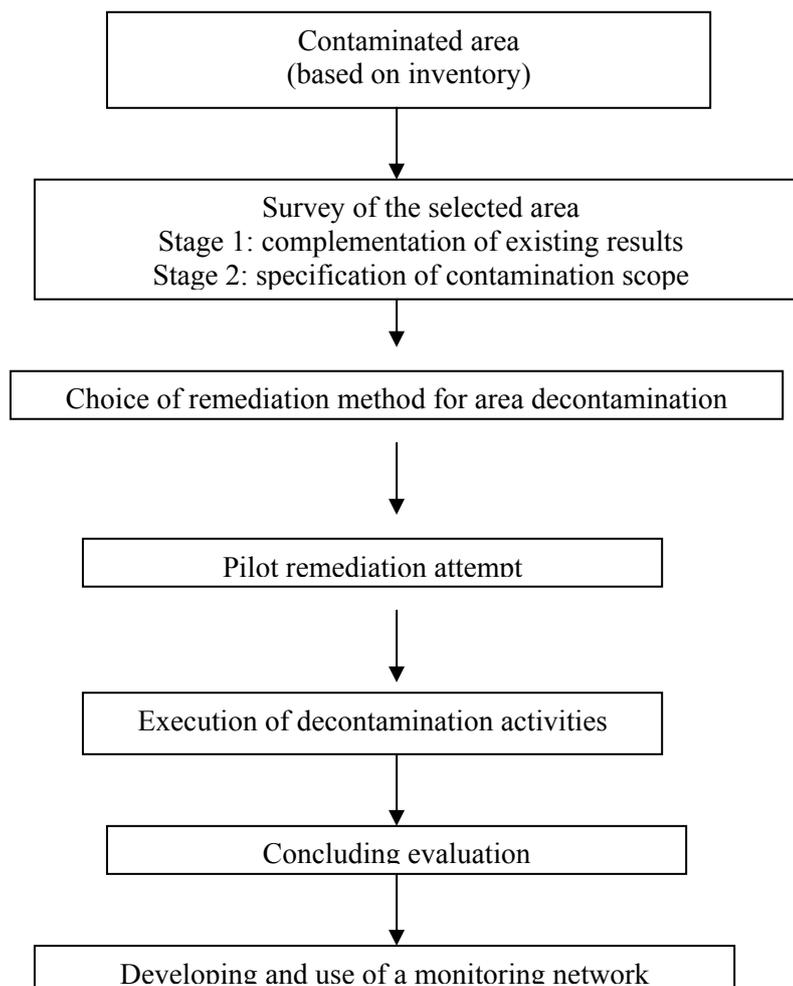
#### 2.3.5.4 Strategy of approach to a contaminated area

The phase of finalization of the inventory of POPs-polluted areas was affected by a previous unsystematic collection of relevant data. These data was applied to the above contaminated areas or those threatened with contamination. The data obtained from projects implemented to date have provided useful conclusions with regard to the assessment of the rate of contamination of these areas. Nevertheless, we recommend these priority areas be included into a target research in order to make a quantitative assessment of the scope of contamination.

Research activities in the proposed areas should reflect the following knowledge about the sites:

- scope of contamination (degree of contamination and its spatial dimensions),
- natural conditions in this area in terms of a threat of spreading of the contamination and thus endangering individual elements of the natural environment and eventually the human organism. The purpose of this information is to describe the contamination specification, description of distribution channels of the contaminant from the pollution source to final recipient (human organism and environment), that can result in proposal of ways in which the area can be decontaminated and remedied.

Strategy and manner of area decontamination depends on a thorough knowledge of the contaminated area and degree of its contamination. General approach to contaminated area, which is in accordance with the aforementioned, can be characterized as follows (Figure6)



**Figure 6. General approach to contaminated area**

Based on the aforementioned remediation methods are proposed, taking into account scope of decontamination activities, amount of material to be decontaminated and its properties (degree of contamination, contaminated matrix – soil, water, equipment, other contaminated wastes, etc.) and economic and time requirements of these activities.

Proposal of remediation methods, especially, a technology of decontamination should reflect specific characteristics of the contaminated material and also distance between contaminated areas, current legal limitations for processing and treatment of such kind of contaminated material (waste), etc.

#### **2.3.5.5 Principles and sequence of proposed survey and remediation activities**

Proposed survey activities should proceed in several phases from general characterization of the area to its detailed examination. Each phase should be finished by an interim report and proposal of further survey activities should be based on the knowledge obtained.

The final phase of the survey should include the evaluation of all data obtained and provide a preliminary proposal for decontamination technology.

The survey should characterize natural conditions of the contaminated area also in broader context, in relation to possible movement of contaminant and quantify its spatial distribution.

#### **2.3.5.6 Problem identification**

The monitoring group on DDT took soil samplings in the area of former and existing bases of toxic chemicals and submitted them to different laboratories:

- The base in Daykand settlement of Salyan region. The amount of remnants of DDT sampled from soil at a depth of 0,3-0,4 m exceeded permissible limits by 3 to 5 times identified in the soil samplings taken in 0,3-0,4 m depth exceeds the permissible limit 3-5 times (permissible concentration is 0,1 mg/kg);
- DDT was not detected in soil samples taken from the base in Uzuntapa village of Jalilabad region.
- DDT remnants in the base of Pakrovka village of Sabirabad region exceed the limit by 3 to 4 times;
- In soil samples taken from the base in Kurdamir region remnants of DDT exceed the permissible level by 2 to 4 times;
- Remnants of DDT in soil samplings taken in the base in Musisli settlement of Ujar region exceed the limit by 3 to 4 times;
- Remnants of DDT in soil samplings taken from the base in Yevlakh region exceed the limit by 2 to 4 times;
- Remnants of DDT in soil samplings taken at a depth of 0,3 to 0,4 m in Dalimammadli settlement of Goranboy region exceed the limit by 3 to 5 times;
- No DDT was found in soil samplings taken at a depth of 0,3-0,4 m from the base in Siyazan region;
- It was not possible to conduct monitoring in Horadiz settlement of Fuzuli region
- No DDT was found in soil samplings taken from the base in the Port-Ilich settlement of Lankaran region

- Remnants of DDT in soil samplings taken at a depth of 0,35 to 0,40 m from the base in Ganja city exceed the limit by 2 to 4 times.

As a result of monitoring and inventory in polluted areas the following problems have been identified:

### ***1. Environmental survey of the areas identified as a result of inventory***

Insufficient information about the level of contamination of various areas causes uncertainty in quantitative assessment concerning the remediation of the area in question and in subsequent phases. In this connection, the following problems have been identified regarding activities in contaminated areas that were subjected to quantitative analysis and whose survey costs were estimated:

- a strategy of implementation of actions under the survey;
- survey methodology;
- uniform analytical methodology on detecting PCB and DDT in a matrix
- ensuring capacity for the survey;
- collaboration with local authorities and self-governing institutions;
- implementation of actions under the survey;
- monitoring of areas where PCB and DDT is expected to be found.

### ***2.Strategy of remediation of contaminated areas***

With regard to results of environmental survey the following problems have been identified:

- prioritization of the areas for decontamination;
- developing technical and economic aspects of remediation in different areas;

### ***3. Execution of remediation activities***

Following the resolution of the above issues subsequent problems have been identified:

- financial support to remediation activities;
- technical and technological procedures for individual areas;
- cooperation with local authorities;
- cooperation with non-government organizations;
- cooperation with the media.

### ***4. Establishment of a management and coordination body***

It is considered appropriate to establish relevant bodies for efficient solving of the above mentioned problems.

### ***5. Assignment of responsibilities and liabilities***

MENR and MA are jointly preparing the Contaminated Sites Remediation Strategy. Owners of the contaminated sites and relevant organizations will carry out remediation activities with the contribution of local executive powers. Monitoring and control activities will be carried out by local environmental divisions of MENR. Public awareness raising among local communities and discussion of remediation activities with them will be undertaken by representatives of MENR, MA and NGOs.

### ***2.3.6 Requirements for the reduction of POPs in production sites to be established in the future***

The former Cabinet of Ministries of USSR issued Decree № 173 on “Prohibition of DDT use due to its hazard to human health and the environment” in September 1970. In accordance with this decree the DDT production in “Detergents Plant” in Sumgait city was ceased and production of POPs substances was not envisioned.

Azerbaijan is the country which undergoes dynamic economic development and is in transition to the market economy. Azerbaijan pursues an environmentally clean sustainable development. Particular attention is given to the development of a regional non-oil sector. By improving the legal base, it is envisioned to develop mechanisms of prohibiting the establishment of enterprises that fail to meet best available technologies. Reconstruction of the energy system and application of alternative energy technologies are the priorities of the country. In development programmes of the country the production of POPs substances is not envisioned. With regard to POPs substances only the use of PCB containing equipment is the case. It is envisioned to phase these equipment out by 2020.

### ***2.3.7 Carrying out monitoring for the assessment of the impact of POPs on the environment and human health***

In 50s of the last century the expansion of croplands (cotton, cereals, vegetable, tobacco plantations vineries, forestry and fruit growing) brought about the growth in the amount of pesticides intended for their protection against pests and diseases. In those years DDT 5% was applied against pests in cotton plantations. DDT is toxic, poorly degradable in natural conditions, highly insoluble in water and they can accumulate in human organism. This compound is very hazardous for human organism due to its chlorine content. DDT was used in Azerbaijan from 1950s. The use of DDT was prohibited in 1970 in the former USSR. In spite of this its use, as an exception, continued in Azerbaijan until 1985. DDT was sprayed by ground sprayer in the amount of 20-25 kg per hectare and by airplane in the amount of 15-20 kg per hectare to combat cotton pests. In most cases the procedure was repeated 4-5 times and sometimes even 8-10 times.

Initial analyses show that more than 500 thousand tons of DDT was used in Azerbaijan throughout 1950-1982. In view of the importance of locating remnants of DDT a monitoring group has been established under the project with the aim of checking chemical indicators in former chemical stock bases, chemical retail outlets, human body and detecting the substance in the soil of cotton plantations and other croplands, mother milk, fish and fruits, and water sediments.

As a result of activities of the monitoring group samples of fish, eggs and various fruits were tested and only in eggs samples from Salyan and pomegranate samples from Goychay traces of DDT were detected.

The results of the monitoring activities were disseminated to community members through workshops organized in Kurdamir, Aghjabedi, Beylagan, Goranboy, Salyan and other regions during which a detailed information about Stockholm Convention was given. It was made known to community members that POPs have a serious adverse effect on the environment and human health because of their poor biodegradability. DDT residues increase in amount in soil, water, food, mother milk which brings about cancer, serious diseases among people.

The second representative of POPs group substance existing in Azerbaijan is polychlorinated biphenyls (PCBs). As usual PCBs is used purely as antioxidant and cooling substance or as

mixture in transformer oils. The quantity of PCBs used in transformers ranges between 160 to 2980 kg depending on size of the transformers and the average quantity of PCB in capacitors is about 17.2 kg.

Annex A Section 2 of the Stockholm Convention sets forth a requirement to phase out the use of PCB containing equipment and wastes by 2025 year. The Republic of Azerbaijan plans to phase out the use of PCB containing equipment by 2020.

### ***2.3.8. Public awareness raising***

Article 10 of the Convention sets forth a recommendation for promoting public awareness and providing the public with adequate information so that they are aware of the effects of POPs on health and the environment.

#### **2.3.8.1 Mechanism of information exchange with other Parties**

Azerbaijan has recently ratified the Stockholm Convention and in compliance with the article 9, the focal point will exchange information directly with other Parties or through the Secretariat.

In order to ensure completeness of information provided by the Secretariat of the Convention, the Ministry of Ecology and Natural Resources, as a focal point for the Convention, pass on to the public through press and Internet information about the implementation of National Implementation Plan to fulfill commitments under the Convention. In addition, preparations for launching a central portal where information about POPs will be gathered and made available to the public are being undertaken.

#### ***2.3.8.2 Institutional background concerning the environmental information***

The Ministry of Ecology and Natural Resources which was established by the Presidential Decree dated May 23, 2001 is an executive state body responsible for the implementation of the governmental policy on environment protection, elaboration and enforcement of environmental legislation, including also aspects related to POPs in Azerbaijan.

The activities of the Ministry of Ecology and Natural Resources incorporate the activities of the following divisions and agencies:

- Environment Protection Department
- Regional divisions of the Ministry of Ecology and Natural Resources
- National Department of Monitoring
- National Department of Hydro-meteorology
- Caspian Complex Environmental Monitoring Institution
- Examination Institution
- Awareness raising Division
- National Geological Service
- Forestry Development Department
- The Department of Specially Protected Areas

MENR applies different methods for providing the public with environmental information. While launching any project meetings with representatives of the media are held. On a regular basis, representatives of the Ministry make statements through the media and participate in different discussions.

Under the initiative of the Ministry photos and posters contests for pupils and students are organized.

Different workshops with the participation of local and international experts are held on a regular basis. Environmental Awareness Raising Division of the Ministry is in charge of organizing these regular events.

#### **2.3.8.3. State bodies and public institutions as holders of environmental information**

Involvement of different state bodies and public institutions in the fulfilling of National Implementation Plan on POPs in the Republic of Azerbaijan is one of the important issues. The presence of POPs substances all over the country's area makes it necessary to combine efforts of all institutions in this area. Below is a list of state bodies and public institutions that are holders of environment related information:

- Ministry of Ecology and Natural Resources
- National Parliament (Milli Mejlis)
- Ministry of Health
- Ministry of Agriculture
- Ministry of Industry and Energy
- Ministry of Transport
- Ministry of Taxes
- State Committee on Soil and Cartography
- State Customs Committee
- State Statistics Committee
- State Agency of Standardization, Metrology and Patents
- Regional Executive Powers
- Municipalities
- "Sustainable Development" Center
- "Ekoyl" NGO
- "Ruzgar" Environmental Society
- "Sanaye" Scientific-Ecological Society
- Academy of "Ecoenergy"

#### **2.3.8.4. Overview of environment related public information policy/practice**

By ratifying the Aarhus Convention in 1999, Azerbaijan has assumed certain obligation. By fulfilling these obligations Azerbaijan undertakes to provide the public with access environment related information, ensure public participation in decision making process, and facilitate access to justice in environment protection matters. These obligations are set forth in the Law on Access to Environmental Information (2002) and Law on Public Environmental Awareness Raising (2002).

For better communication with the public and the stakeholders, the Ministry of Ecology and Natural Resources has established an Environmental Information Center and Public Relations Office. In addition, POPs Center that was established at the Ministry (the working group of the

office includes the specialists from above mentioned institutions) is in charge of public awareness raising in the area of POPs chemicals.

Under the support of the European Union a regional project on Environmental Information, Education and Public Awareness Raising was implemented in Azerbaijan in 2002-2004. The main objective of the project was to establish instruments for the implementation of Aarhus Convention principles in Azerbaijan. During the project implementation a manual was developed and distributed among officials and representatives of public institutions at local and national levels. The manual contains issues relating to practical recommendations, instruments to enable public participation in decision-making processes and collaboration with state authorities.

#### **2.3.8.5. Assessment of existing public information and awareness**

Under the support of UN Industrial Development Organization (UNIDO) a project on the Development of National Implementation Plan for the Implementation of the Stockholm Convention has been implemented in Azerbaijan since July 2005.

Since September 2005 the POPs Center has implemented the following actions:

- the full text of the Stockholm Convention has been translated into the Azeri language, published and distributed;
- events, including initial workshops, six training workshops with the participation of international experts have been held;
- a brochure on Stockholm Convention about POPs, the Environment and Human has been prepared in the national language and presented to ministries and other stakeholders;
- scientific and popular articles about POPs have been published in periodicals and other publications, particularly in “EcoInter” environmental magazine;
- regular reports on project implementation progress have been made available through the media;
- reports on project implementation progress were distributed through electronic mailing lists such as “eco-forum” discussion e-list of national environmental NGOs as well as “eco-accord\_pops” discussion e-list of European and NIS NGOs;
- involvement of NGOs into the project implementation process, providing conditions for active participation of NGOs in inventory, monitoring, publication of brochures and independent reports;
- promoting the participation of experts from POPs Coordination Unit in Internet based eco-forums and e-mail discussions on POPs organized by NGOs involved in the project.

Despite the above mentioned efforts the level of public awareness raising about POPs issues is currently very low. The factor that supports this statement is the attitude of community members and farmers in rural areas to POPs. Cases of retailing POPs pesticides at some regional stock bases, destruction of a dumping site for the disposal of hazardous chemicals and pesticides, privatization of former agrochemical stockpiles has been witnessed. Most of containers with DDT are kept unsealed. Open burning of domestic wastes is frequently seen in rural or urban areas.

### ***2.3.9. Non-governmental organizations related activities***

NGOs took an active part in the development of NIP. A representative of “Ruzgar” NGO was involved as advisor on inventory, a representative of “Ekoil” NGO participated as a leader for PCBs inventory group, and a representative of “Ecoskop” was engaged as expert on awareness raising group.

In addition, community members in cotton growing rural areas took active participation in carrying out surveys and completing questionnaires. As a result of this, initial information on illegal use of DDT by community members in rural areas has been obtained.

Involvement of NGOs during the project and subsequent phases in actions of public awareness raising, locating new hot spot areas and implementation of small projects envisioned in NIP will facilitate the fulfillment of obligations under the Convention.

### ***2.3.10. Overview of technical infrastructure for POPs management– linkage to international programmes and projects***

#### ***Introduction***

The international programmes on POPs were fulfilled in post Soviet Union in Azerbaijan. Thus the first anti-dioxin programmes was developed and applied by former USSR Ministry of Health in 1988.

After the restoration of its independency (1991) the expedient activities on determination of pollution level as well as on inventory of emission sources of dioxins in Azerbaijan Republic has been conducted within the framework of Republic Program on “Prevention of the Population and Environment from Dioxins and Dioxin-like toxicants for 1996-1997 years”.

According to the proposal by seminar held on April, 1999 in Pushkin city of Russian Federation the Institute of Ecology and Use of Natural Resources of the Academy of National Sciences of Belarus under the (MSU-V) contract conducted the evaluation of emissions of PCBs and Dioxins in Azerbaijan Republic in 2000.

To study the content of communal wastes in Baku city a joint project with the participation of “Sustainable Development Unity” and the “Environmental Problems Research Centre” has been implemented.

“AzEcoLab” laboratory that was established under the Academy of National Sciences of Azerbaijan Republic is the professional laboratory on implementation of ecological projects with scientific-research components and identification of heavy metals, pesticides, PCBs and their residue amounts. “AzEcoLab” was registered in the list of Global POPs Laboratory and represents Azerbaijan in the global scale on conducting of monitoring.

#### ***Waste Management Facilities***

Management and processing of communal wastes consistent with the modern requirements is the priority for the Republic. Learning and application of experience of developed countries with

regard to this field plays significant role in solving the above- mentioned problem in Azerbaijan Republic.

Besides the governmental enterprises, there are several private companies such as “UP-Azerbaijan” Germany-Azerbaijan, “Kasko-RCP”, “Kasko-Waste-Services” Finland-Czech – Azerbaijan Joint Enterprises that are also engaged in waste management for 10 years. In spite of that there are some progresses in the field of waste management, the researches conducted show that the activities of the above-mentioned companies don't meet the requirements of the waste management system.

The plant that was built during the former Soviet times located near the Balakhani communal wastes landfill was intended for the production of compost from the communal wastes. But the wastes were not completely assorted, so the compost produced did not meet the standards and the plant ceased to work since 1994. At present the equipments of the plant outdated and their restoration is not planned.

Improvement of communal wastes management and treatment is necessary to solve this problem. But due to the lack of plants for assortment, reuse, decontamination and incineration of wastes the installation of such plants has great significance for the Republic.

We consider that the measures toward the decontamination of annually increasing communal wastes should be urgent. Establishment of the perfect system for waste management that meet the modern requirements and provision of the infrastructure are assessed as the first step. Improvement of this system and installation of waste treatment plants consistent with the BAT/BEP are the priorities.

There were submitted several projects to the Ministry by the companies that represent several developed countries and discussions with the representatives of the companies on learning and application of such experience is ongoing.

### ***Contaminated Areas Remediation Capability***

Our country has regulatory, institutional and human resource potential for remediation of contaminated area.. Thus the Article 7 of the Presidential Degree № 1396 dated March 30, 2006 on “Supplementary Measures derived from International Conventions and Agreements in the field of Environmental Protection that the Republic of Azerbaijan joined” stipulates the preparation of NIP and implementation of the concrete measures for 2006-2007. The first of these measures includes the remediation, protection of the special pesticide landfills, and inventarization of pesticide residue amounts that was intended to fulfill by MENR, MA, MH and LEP and the second is the implementation of the NIP project.

MENR jointly with the MA designed the project on collection and decontamination of POPs pesticides residue amounts from stockpiles and submitted this project to the Cabinet of Ministries.

### ***Environmental Monitoring Capability***

There are several laboratories in Azerbaijan that perform researches on environmental monitoring. These are the Republic Control-Toxicological Laboratory of MA, the Soil Pollution Monitoring Laboratory of the Environmental Pollution Monitoring Center under

MENR, the “AzEcoLab” LTD Laboratory of NAS. These Laboratories performs monitoring on DDT dust, mixed pesticides, PCBs, soil, water bottom sediment, fruit, fish, egg samples.

The Republic Control-Toxicological Laboratory identifies the quality of pesticides and its residue amounts in foodstuffs, agricultural products, soil and water.

The Laboratory of the Environmental Pollution Monitoring Center identifies the degree of contamination of soils, water, water bottom sediments and the residue amount of pesticides, heavy metals.

“AzEcoLab” performs the ecological projects with scientific-research components and identifies the PCBs residue amounts in soil, water, water bottom sediments and etc.

“AzEcoLab” was registered in the list of Global POPs Laboratory and represent Azerbaijan in the global scale on conduction of monitoring.

### ***Health Monitoring Capability***

The organizations that perform the monitoring of human health and environment are MH and MENR. The sanitary-epidemiology center in the Ministry of Health is engaged in protection of human health. The Center performs the control on quality of foodstuff and feedstuff and defines are they in conformity with the standards.

### ***Technical Support and Release Mitigation Services***

Azerbaijan is the worldwide country and integrates into the Europe, so all new enterprises are built with the technical support of the developed countries. BAT/BEP technologies are used in new built enterprises.

Article 7.2 of the “Plan of Complex Actions for 2006-2010 on Improvement of Ecological State in the Republic of Azerbaijan” approved by the Presidential Order dated September 28, 2006 stipulates the measures such as improvement of the environmental standards, environmental impact assessment, monitoring, environmental protection fond establishment and strengthening of environmental control.

### ***Research and Development Assets***

All State Programs adopted in Azerbaijan stipulates the researches that contribute to the social-economic development. The progress proposals of POPs researches should be the main issues that will be researched in the future. The dynamic development of our country as a result of ,year after year oil revenues increase, our financial problems will be removed.

Research and development were stipulated in the above mentioned Plan of Measures. According to the Article 7.11 of the above mentioned Order the MENR, NAS, MIA, MJ were commissioned to prepare the ecological code of the Republic of Azerbaijan for 2009-2010. The Articles on POPs research and development will find its reflection in the code.

### ***Information Management Capacity***

The Center on Information Management and Dissemination has been established under the MENR. There is a commission that conducts works with NGOs. The activities on establishment

of the electron-government are conducted in the Ministry of Communication and Information Technologies.

### ***Capacity Strengthening Requirements***

Considering the industrial capacity strengthening and dynamic development of the country there is a need for dioxin/furans monitoring laboratory in the country. Establishment of the laboratory can contribute in fulfillment of the Stockholm Convention requirements in the future.

#### ***2.3.11 Experts and local communities involvement to POPs human health and environment impact elimination.***

During 1970-1980 years when the chlorine was manufactured in Sumgayit city the poisoning of the production surrounds with dioxin in Sumgayit city was in high level. It was defined that the major part poisoned with dioxin constitutes the man who catches the leather illness. Medically examined workers complained with headaches, sleeplessness, nervousness, tiredness, general weakness and heavy heart. There were detected neuropathological changes in about half of the examined people. There were detected gastroenterostomy and disturbance of antitoxic function of hepatic in more than half of people examined. There was detected gastritis and diodenitis in 64% of the workers, stomach ulcer in 57 % of workers, cholecystitis in 45 % of workers.

One hundred and thirty seven (137) questionnaire forms were distributed in priority regions. Eighty five (85) replies were received which is 62.05% of the researches performed. The main questionnaire forms were distributed with aid of regional ecological units of the Ministry of Ecology and Natural Resources.

In accordance with the Guidance on POPs pesticides inventory prepared in the Republic the inventory group organized trips to 83 facilities to perform examination.

The number of studies on dissemination and accumulation of dioxins on environmental objects are very low. Taking into account the existence of dioxin hazard objects and growth of catastrophic events in these objects in future there is the necessity for extraordinary measures to prevent the spread of dioxin to the environment.

#### ***2.3.12 Details of any relevant system for the assessment and listing of new chemicals***

Currently different firms, companies and individuals carry out import of fertilizes and pesticides to the Republic.

According to the Decree of President of Azerbaijan Republic № 467 of October 23, 2004 the State Phitosanitary Control Service under the Ministry of Agriculture has been established. This service conducts state control on protection and quarantine of plants, on use of pesticides, biological preparations and other plant protecting substances as well as gives permission for import, export, production, repackaging, distribution and selling of pesticides.

Before the import of pesticides the initial examples are tested on special plants. The list of pesticides import of which permitted is submitted to the State Customs Committee and State Phitosanitary Control Service.

If the new industrial chemicals are banned by the international requirements in that case MENR prepares list of such chemicals and submits it to the State Customs Committee for control.

***2.3.13 Details of any relevant system for the assessment and regulation of chemicals already in the market***

As the prices of import pesticides are expensive, the sale and use of landfills pesticides was conducted. So, majority of market pesticides are very likely the products of those landfills.

For preventing this Ministry of Ecology and Natural Resources along with the Ministry of Agriculture is going to prepare measures plan for submitting to the government.

### **3. STRATEGY AND ACTION PLAN ELEMENTS OF THE NATIONAL IMPLEMENTATION PLAN**

#### **3.1. POLICY STATEMENT**

The Republic of Azerbaijan is the country that follows the democratic, worldwide, sustainable development and market economy way. At present the economy of the country is in the transition period. Environmental protections, improvement of social condition of population, dynamic and sustainable development are the main priorities of the country.

The Republic of Azerbaijan ratified the Stockholm Convention on Persistent Organic Pollutants in 2003.

According to Presidential Order № 329 of July 29, 2004 the Ministry of Ecology and Natural Resources designated a National Focal Point responsible for information exchange and reporting, pursuant to articles 9 and 15 of the Stockholm Convention.

The “Agreement on Provision of Services on Enabling Activities to Facilitate Early Actions on Implementation of Stockholm Convention on POPs” was signed between MENR and UNIDO based on Resolution of May 19, 2005 by the President of Azerbaijan.

According to the Agreement NIP Preparation envisioned to be implemented in 5 steps. Reports on each step of the inventarizations was prepared and submitted to UNIDO Secretariat.

Azerbaijan received through UNIDO and GEF grant to support implementation of the Stockholm Convention commitments and to elaborate its *National Implementation Plan*. In compliance with the Stockholm Convention and GEF Guidelines NIP considers all POPs related international commitments relevant to the Azerbaijan Republic.

The main objective of the NIP is to identify the priority problems in the AR and their gradual solving within the requested period based on the present situation analyses, considering the provisions of relevant international commitments.

Ministry of Ecology and Natural Resources of the Republic of Azerbaijan being the coordination centre has prepared National Implementation Plan in close cooperation with all relevant organizations of this field.

During the preparation of the NIP emphasis has been put also on overall raising of public awareness on POPs; a broad information campaign via television, radio, newspapers, information brochures and Internet has been an integrated part of the project.

*The National Implementation Plan* contains a brief national profile of Azerbaijan, description of the present legal and institutional POPs framework, as well as evaluation of particular POPs issues considering also the provisions of relevant international commitments. Based on the above detailed strategies and action plans, including timetables and costing of their implementation, were elaborated.

POPs listed in Stockholm Convention have been covered in the NIP in detail.

In addition to the Stockholm Convention on POPs Azerbaijan have other several international commitments with regard to this field. The National Parliament of the Republic ratified the Aarhus Convention in 1999.

The Republic of Azerbaijan ratified other essential international treaties regarding to the field. The policy approach of the country in this field is to continue the activities on joining to other international acts that are close to the essence of Stockholm Convention.

The Orders of the President of the Republic of March 30 and September 28, 2006 created legal basis for implementation of the NIP.

## **3.2 IMPLEMENTATION STRATEGY**

### **3.2.1 Overview**

Azerbaijan Republic is undergoing transition period and its economy characterized by rapid development in recent years. For that reason state organizations related to the environmental protection has the difficult task such as the minimization of adverse effects on environment.

XX century” s Global problems such as climate change, ozone layer depletion, desertification, deforestation, depletion of bio-variety and etc. show that protection of the human health and environment from these impacts is one of the main priorities at present. Sustainable Development integrates two main concepts such as Demand and Limitation. The main goal of the Sustainable Development is to meet the requirements of the present generations and not limit the requirements of the future generations. The Government of the Republic of Azerbaijan is based on sustainability principles in its development. In essence, sustainable development is the new approach to existing problems.

Persistent Organic Pollutants are one of these problems. Out of these highly persistent compounds pesticides are used in the agriculture and PCBs are used in the industry. Some of the POPs are by- products generated as a result of combustion and industrial production processes. Most of the POPs are the source of hazard for human health and environment.

It is not easy to reduce POPs related risks, but this problem has to be solved. It is important to use the POPs alternatives to solve the problems. The transition to the POPs alternatives can be encouraged by the voluntary programs, awareness raising companies, and use of economic driving factors.

The first step toward the management of the Persistent Organic Pollutants is the preparation of the NIP. The specialists of the MENR, experts from relevant ministries and organizations, representatives of NGOs and stakeholders were involved in NIP preparation. As a result of their joint efforts the possible sources of POPs in the Republic have been identified, the public were informed on safe behavior patterns and action plan for gradual phase-out of these substances has been prepared. The Execution of the NIP covers the period up to 2020 year.

The preparation of the NIP is one of the main and early requirements toward the fulfillment of the commitments of the Convention in Azerbaijan.

### **3.2.2 NIP Policy Basis and Implementation Objectives**

UN Stockholm Convention on Persistent Organic Pollutants was ratified by Azerbaijan government in 2003.

According to Presidential Order № 329 of July 29, 2004 the Ministry of Ecology and Natural Resources has been designated a National Focal Point responsible for information exchange and reporting, pursuant to articles 9 and 15 of the Stockholm Convention.

The “Agreement on Provision of Services on Enabling Activities to Facilitate Early Actions on the Implementation of the Stockholm Convention on POPs” has been signed between MENR and UNIDO by the Presidential Order of May 19, 2005.

The Orders of the President of the Republic of March 30 and September 28, 2006 created legal basis for implementation of the NIP.

In the Project document a number of steps are prescribed at the governmental level that can assist with NIP development. These include:

- 1) Determination of the coordinating mechanisms and organization of process of NIP development;
- 2) Establishment of a POPs inventory and assessment of national infrastructure and capacity;
- 3) Priority-setting and determination of objectives;
- 4) Formulation of a prioritized and monetary estimated NIP and specific Action Plan on POPs;
- 5) Endorsement of the NIP by stakeholders.

### **3.2.3. Implementation Principles**

Implementation of the NIP is based on following principles:

- Inclusion of public and stakeholder participation;
- Transparency in information sharing and exchange, particularly related to monitoring and reporting on implementation activities;
- Adherence to "the polluter-pays" principle;
- Integration with overall environmental management and sustainable development policies;
- Adherence to and use of technologies and applications of international standards; and
- Commitments regarding public awareness and education.
- Adherence to EU directives

### **3.2.4. Priorities and Conditionality**

Priority setting of key objectives, measures and instruments is based on the guidance achieved by the project team. The results of the initial inventarization show that there are POPs pesticides and PCBs substances in Azerbaijan. According to the opinion of the national experts' the phase-out of PCBs and pesticides are the main problems included into the NIP.

The criteria to be used in the priority setting are as follows:

1. To what extent particular Key objectives should be addressed in the national environmental protection strategy.

2.To what extent does a particular key objective address directly the most severe environmental problems caused by POPs releases.

3.To what extent it is considered the responsibility the involved ministries to initiate, plan and implement the actions needed to achieve a particular key objective.

These criteria are to be rated on a scale between 0 and 4 by the representatives. The scale is defined as follows: 0: nothing; 1: a little; 2: pretty much; 3: much; 4: very much.

The overall priority of the key objectives as given by the ministries has to be access by calculating a weighted average of the individual criteria. Numbers for the first criterion which is a common approach of the ministries is to be weighed by a factor of 2 , numbers for the second criterion related to the mandate of the agriculture energy and industrial sectors criterion by a factor of 1, and numbers for the addressing the most severe environmental problems criterion by a factor of 4.

The measures are to be scored using the same criteria as for the key objectives.

It's expected that the results will indicate the prioritized measures will be linked to the highly prioritized key objectives.

The actions are packages of instruments which implementation is strongly related. Practically all instruments mentioned above are useful in the long term.

Actions should focus on the instruments that are the most urgent and cost-effective, in the short term. Less urgent instruments are combined into general actions, focusing on the general preconditions for more concrete action in the future.

The process of defining actions consists of:

1. The urgency of instruments according to the priorities of the instruments as revealed by the questionnaires and assessment on the cost-effectiveness and side- effects of the instruments.
2. Actions are combined as packages of instruments which implementation is strongly related.

Priority instruments are defined for each Key objective and related measure.

The instruments are to be scored on the extent that they:

- A) Have environmental benefit, that is to reduce the environmental pressure of Pops release to the environment locally and globally;
- B) Have political support and real willingness to implement, that is ranked high in the national political agenda;
- C) Fit into accession priorities , that is they will promote both the accession and the environmental objectives are likely to have wide political support;
- D) Are given priority in the international context, that is measures and instruments that are given international priority, usually present BAT, or methodologies;
- E) Fit into the priorities of national; the main objectives and priorities are economic efficiency, regional development;

- F) Accepted by the public;
- G) Are possible to implement realistic time frame, it is important that the measure/instrument can be made operational within a time frame of 1-5 years;
- H) Are possible to implement with domestic financing;
- I) Are feasible using domestic expertise in addition to foreign technical assistance;  
Are enforceable, that is legislative measures will have little impact unless there are good possibilities to enforce them.
- J) Are enforceable, that is legislative measures will have little impact unless there are good possibilities to enforce them.

The main priorities of the NIP are indicated in Section 3.3. The modern technologies and the technologies that meet the European standards will be preferred.

### **3.2.5. Major Milestones**

The first phase of NIP implementation covers a period from 2007 to 2010. This includes the development of initial mechanism, the elimination of POPs, obsolete PCB containing equipment and oils and decontamination of medical wastes. 23,0 million manats are required for the implementation of the first phase. 12,4 million manats of the above amount are envisioned to be earmarked within the framework of state programmes on the reconstruction of the energy system for the fulfilment of commitments under the Convention. 40-50% of the other 11,6 million manats required for the implementation of actions in question will be financed by GEF and other donor institutions while the remaining part will be covered by the Government of Azerbaijan.

The second phase covers a period from 2011 to 2015. This phase envisions the replacement of PCB containing equipment, a gradual reduction of unintentionally produced POPs substances emissions by the application of new technologies in energy, industrial and waste management sectors and production of environmentally clean products in the agricultural sector. The budget required for the implementation of the aforementioned actions accounts for 47,8 million manats. 9,4 million manats of the above amount are envisioned to be earmarked within the framework of state programmes on the reconstruction of the energy system for the fulfilment of commitments under the Convention, 40-50% of the remaining 38,4 million manats will be financed by GEF and other donor institutions and the remainder will be covered by the Government of Azerbaijan. 44% and 12% of the above funds are intended for industrial and agricultural sectors respectively.

The third phase mainly encompasses energy and waste management sectors. No financial problems are expected in terms of sources of financing if long-term period of implementation of the actions that require such a huge amount of money will be taken into account. Implementation period and respective budget for each action has been separately indicated in NIP's Strategy section.

50% of financial resources required for implementation of above mentioned activities envisioned to be earmarked by GEF and other donor organizations and the remaining part by the Government of Azerbaijan.

### ***3.2.6. Institutional/Organizational Arrangements and Assignment of Responsibility***

MENR controls the implementation of the NIP. For implementation of the NIP it is intended to establish the special center and to prepare the regulation, structure and activity plan of the center.

Ministry of Agriculture will perform activities on collection, transportation and storage of the POPs pesticide residue amounts. “Azerenergy” SC will be responsible organization for collection and storage of PCB containing equipments. The researches performed show that the amount of POPs pesticides and PCB containing oils is little, so transfer of the technology to the country for their destruction is not effective. Destruction of these substances outside the country will be more cost-effective and negotiations on this are ongoing.

The active participation of NGOs is intended in the implementation of the NIP. NGOs will more active in the public awareness raising and education activities. Conduction of discussions for agreement with the representatives of local communities and NGOs is planned in the implementation of the all projects.

The MENR is responsible for monitoring of the activities on NIP.

### ***3.2.7. Implementation Approach***

The ***Implementation*** Approach is based on the objectives, activities and the time-table prepared. Five main kinds of objectives are distinguished:

- A. objectives to reduce, or eliminate releases from the existing stockpiles and wastes;
- B. objectives to eliminate production of POPs (Annex A from the Stockholm Convention)
- C. objectives to restrict the use of DDT ( Annex B from the Stockholm Convention) and other POPs;
- D. objectives to reduce unintentionally releases of dioxins, HCB and PCBs from the social and economic activities.
- E. enforcement of legislation and the aim of the social enlightenment.

No single objective or measure is sufficient to achieve the final POPs-related to human health and environment protection goals. Therefore a package of objectives, measures and action are directed:

1. Discouraging the production, use or unintentionally emissions of POPs;
2. Encouraging the production and use of environmental friendly economic activities.

**Measures** specify steps necessary the achievement of the (less concrete) key objectives. There are technical, economical, institutional, procedural and informative measures.

**Instruments** are specific tools to be used of the implementation of measures, such as:

«command and control» environmental legislation, fiscal, instruments, monitoring arrangements, and enforcement regulation.

**Actions** in the implementation of an individual measure or of a package of measures in order to achieve the objectives. An action is undertaken within a certain frame by an appointed and responsible party.

The relevant activities, time table and financing are indicated in the Section 3.3.

### ***3.2.8. Implementation Strategy Review Mechanisms***

The Implementation Strategy is based on the implementation of the NIP in 3 stages- short term, medium term and long term. At the end of each step outputs of the stage will be analyzed and reported to the relevant executive structures. Results of the each analysis and the obstacles revealed will be considered in the next stages and relevant measures will be applied to remove these obstacles.

Coordination and execution mechanisms of the implementation will be established at the first stage. The indicator of the monitoring should be the Decree of the Ministry of Ecology and Natural Resources. The indicator of the monitoring of the legal basis of the Implementation should be the laws and Decrees of the Parliament. At the first stage the Decrees of the relevant ministries on elimination of POPs pesticides and PCBs containing equipments will be the indicator of the monitoring. The indicator of the monitoring at the final of the activity will be the results of the analyses of the soil samplings taken from the areas. The indicator of the monitoring of the decontamination of the POPs pesticide residue amounts in stockpiles will be the results of the analyses of soil samplings taken from the areas. In the public awareness raising the analyses in comparison with the baseline will be performed and the results of the monitoring will be defined on the basis of questionnaires.

## **3.3 ACTIVITIES, STRATEGIES AND ACTION PLANS**

### ***Priority setting***

Priority setting of key objectives, measures and instruments is based on the guidance achieved by the project team.

### ***Priority setting of key objectives***

According to the results of initial inventarization POPs pesticides and PCB substances was detected in Azerbaijan. According to the comments of national experts phasing out of PCB emissions and pesticide stockpiles can be the priority among the problems included into the NIP. The representative expert of the following Ministries defines priorities of Key objectives and measures mentioned above:

- Ministry of Ecology and Natural Resources
- Ministry of Industry and Energy
- Ministry of Health
- Ministry of Economic Development
- Ministry of Transport
- Ministry of Agriculture

The criteria to be used in the priority setting are as follows:

1.To what extent particular Key objectives should be addressed in the national environmental protection strategy.

2.To what extent does a particular key objective address directly the most severe environmental problems caused by POPs releases.

3. To what extent it is considered the responsibility the involved ministries to initiate, plan and implement the actions needed to achieve a particular key objective.

These criteria are to be rated on a scale between 0 and 4 by the representatives. The scale is defined as follows: 0: nothing; 1: a little; 2: pretty much; 3: much; 4: very much.

The overall priority of the key objectives as given by the ministries has to be access by calculating a weighted average of the individual criteria. Numbers for the first criterion which is a common approach of the ministries is to be weighed by a factor of 2 , numbers for the second criterion related to the mandate of the agriculture energy and industrial sectors criterion by a factor of 1, and numbers for the addressing the most severe environmental problems criterion by a factor of 4.

### ***Priority setting of measures***

The measures are to be scored using the same criteria as for the key objectives.

It's expected that the results will indicate the prioritized measures will be linked to the highly prioritized key objectives.

### ***Priority setting of the instruments and defining actions***

The actions are packages of instruments which implementation is strongly related. Practically all instruments mentioned above are useful in the long term.

Actions should focus on the instruments that are the most urgent and cost-effective, in the short term. Less urgent instruments are combined into general actions, focusing on the general preconditions for more concrete action in the future.

The process of defining actions consists of:

1. The urgency of instruments according to the priorities of the instruments as revealed by the questionnaires and assessment on the cost-effectiveness and side- effects of the instruments.
2. Actions are combined as packages of instruments which implementation is strongly related.

### ***3.3.1 Activity: institutional and regulatory strenghtening measures***

With the aim of to strenghten the institutional and regulatory measures there were established POPs management center under the Ministry of Ecology and Natural Resources. The center was formulated during 2007 year.

The next significant step toward this is the improvement of legislative basis on POPs substances. The timeframe for this measure is intended 2007-2010 years. The legislative acts should be prepared by the working group which consists of experts from Ministry of Ecology and Natural Resources, Ministry of Agriculture, Milli Mejlis (Parlament).

Thus the experts decided that "Improvement of the Legislation on POPs substances " is the most priority activity. The time-table and the financial request for priority objectives and measures are submitted in the tables provided in Annex 5 and Annex 6.

#### **3.3.1.1. Objectives**

##### **Key objective 1: Improvement of legislation on POPs substances**

The information on measures of the objectives, responsible organizations, time for performance, financial request is submitted in Annex 8-9.

### 3.3.1.2. Present National Institutional, Policy and Regulatory Framework

The POPs legislations are implemented to remove weaknesses in relations between different governmental organizations (healthcare, environment, agriculture, finance and customs). Besides the requirements of the international agreements the main factor that impacts on development of the new legislation is the adaptation of the Regulation of the Republic of Azerbaijan with the Regulations of European Union. The inventarization identified the following gaps with regard to the legal basis:

- Management of pesticides and PCBs and organization of the control;
- Assessment of the new pesticides and agro-chemical substances;
- Reduction and elimination of the unintentional POPs generated in the industry;
- Lack of the legal regulatory system on control of the disposal of POPs containing hazardous wastes.

### 3.3.1.3. Action Plan Implementation Strategy and Process

**Table 7. Action Plan on Improvement of legislation on POPs substances**

Measure	Responsible organizations	Time for performance	Financial request ths. manat
1. To prepare "POPs and their safe utilization" low project	MA, MENR, Parliament	2007-2008	20,0
2. To prepare legal normative for POPs	MA, MENR, Parliament	2007-2010	25,0
3. To make changes appropriate to Stockholm Convention in exciting legislation	MA, MENR, Parliament	2007-2010	30,0

### 3.3.1.4. Institutional Capacity Strengthening Measures

Reports on removal of gaps in Institutional Capacity Strengthening are regularly submitted to the Parliament by MENR

### 3.3.1.5 Regulatory Development Initiatives

For improvement of the POPs legislation it is planned preparation of law project on "POPs and their safe utilization". The international experience and the Articles of the Convention will be considered. The relevant normative legal acts will be prepared to provide the elimination and gradual reduction of POPs. Activities on making relevant changes to current legislation pursuant to the Stockholm Convention are carrying out.

### ***3.3.1.6. Action Plan Implementation Performance Monitoring and Periodic Review Mechanisms***

The main indicator for monitoring will be laws and legal normative acts adopted by the Parliament. Comments and proposal of the local and international independent experts will be the factor for the review mechanisms.

### ***3.3.2 Activity: measures to reduce or eliminate releases from intentional production and use***

The researches performed show that POPs substances are not produced in Azerbaijan at present. Azerbaijan has obligations under the Stockholm Convention, so production of POPs substances is not planned in the future.

With regard to use, population illegally use little amount of DDT residues. There are transformers and capacitors in service, which will be removed from use in the result of other activities.

These activities and measures are integrated under Section 3.3.3, 3.3.4 and 3.3.5.

### ***3.3.3 Activity: production, import and export, use stockpiles and wastes of Annex A POPs pesticides***

#### **Key objective 2: Destruction of the existing POPs pesticides**

##### **Measure 1. To continue inventory of POPs containing pesticides**

Applied methods:

- a) Training seminars on inventory of POPs pesticides; Selection of relevant methodology for inventory;
- b) Institutional arrangements for verification of sites with POPs pesticide residues;
- c) Methodologies for identifying products and articles in use and wastes consisting of or containing chemicals listed in Annexes A, B or C.
- d) Use of existing laboratories provided with proper equipment for POPs analysis to identify the unknown presumable POPs stockpiles.
- e) Awareness – raising programs.

##### **Measure 2 To establish system for safe disposal of POPs containing pesticides**

Applied methods:

- a) Elimination of bases and stockpiles of chemical toxic substances; Cleaning of such areas should be carried out without harm;
- b) Training of people close to the stockpiles of toxic substances;
- c) Labeling the identified POPs in the existing stockpiles and special attention notes on not-identified substances;

- d) Administrative instruments to secure the existing deposits;
- e) Technical instruments to assure the security of POPs and other substances which are supposed to be POPs or containing POPs (e.g. watching systems, insulation);
- f) Legislative instruments for interdiction of no longer use of chemicals listed in Annex A, or Annex B of Stockholm Convention and for considering these chemicals to be wastes, being manage accordingly;
  - monitoring of existing stockpiles;
  - phase – out improper stockpile placements;
  - establishment the responsibilities;
  - inspection of deposits
- g) Financial and taxation instruments.

### Measure 3 To finally eliminate POPs containing pesticides

Applying instruments:

- a) Guidelines on handling, collection, transportation and storage in on environment sound manner;
- b) Norms on POPs wastes disposal in such a way the POPs content is destroyed pr irreversibly transformed so they do no exhibit the characteristics of POPs or otherwise disposed of in an environmentally sound manner when destruction or irreversible transformation does not represent the environmentally preferable option, or the POPs content is low, taking into account international rules, standards, and guidance, including those that may be developed pursuant to paragraph 2 of article 6 of Stockholm Convention, and relevant global and regional regimes governing the management of hazardous wastes;
- c) Legal acts related to:
  - interdiction of disposal operations that may lead to recovery, recycling, reclamation, direct reuse or alternative uses of POPs;
  - interdiction of transportation across international boundaries without taking into account relevant international rules, standards and guidelines.
- d) Determine the methods that constitute environmentally sound disposal
- e) Work to establish, as appropriate the concentration levels of the chemical listed in Annexes A,B, C.

**Table 8. Action Plan on finally elimination of POPs containing pesticides**

Measure	Responsible organizations	Time for performance	Financial request ths. manat
2.1 To continue identifying POPs containing pesticides in the existing deposit	MENR, MA	2007-2008	100,0
2.2 To establish safe efficient of POPs containing pesticides	MA, MENR	2007-2010	100,0
2.3 To finally eliminate POPs containing pesticides	MENR, MA	2007-2010	950,0

**3.3.4. Activity: production, import and export, use, identification, labeling, removal, storage and disposal of PCBs and equipment containing PCBs(Annex A, part II chemicals)**

Production, import and export of PCBs containing equipments are not performed in Azerbaijan. For that reason the main priority for Azerbaijan is remove from use and gradual elimination of existing PCB containing equipments.

**Key objective 3: To eliminate PCB equipments**

**Measure 1 To continue inventory of PCB containing emissions and equipments**

Applying instruments:

- a) Training seminars for preparing PCBs inventories. Institutional arrangements of PCBs stockpile inspection
- b) Identifying, labeling and removing from use equipment containing greater than 10 percent PCBs and volumes greater than 5 litres;
- c) Identifying, labeling and removing from use equipment containing greater than 0.05 percent PCBs and volumes greater than 5 liters;
- d) Endeavor to identify and remove from use equipment containing greater than 0.005 percent PCBs and volumes greater than 0.05 liters;
- e) Awareness – raising.

**Measure 2 Disposal in special landfills and utilization of useless PCB equipments and PCB liquid emissions in “Azerenergy” SC, oil-gas industry, “Azerkimya” SC, State Property Management Company and private sector**

Applying instruments:

- a) Monitoring system and reporting every five years on progress in eliminating PCBs;
- b) Guidelines for using appropriate equipments or placements, or other provisions to reduce risk to control; the use of PCBs;
- c) Training of workers involved in PCBs handling;
- d) Awareness – raising.

**Measure 3 Safe management and gradually removal from use the PCB containing equipments in service in “Azerenergy” SC, oil-gas industry, “Azerkimya” SC, State Property Management Company and in private sector**

Applying instruments:

- a) Researches to establish methods for release reduction or elimination;
- b) Public information, awareness and education;
- c) Information exchange;
- d) Ensuring that equipment containing PCBs shall not be exported or imported except for the purpose of environmentally sound waste management .
  - not transported across international boundaries without taking into account relevant international rules, standards and guidelines.
  - Not allowing recovery for the purpose of reuse in other equipment of liquids with PCBs content above 0.005 percent;

- Environmentally sound waste management of liquid with PCBs above 0.005 percent.
- e) Methods that constitute environmentally sound disposal, when destruction or irreversible transformation does not represent the environmentally preferable option, or PCBs content is low, taking into account international rules, standards, and guidelines, including those that are relevant global and regional regimes governing the management of hazardous wastes.

**Table 9. Action Plan on safe management and gradually removal from use the PCB containing equipments**

Measure	Responsible organizations	Time for performance	Financial request ths. manat
1. To continue inventory of PCB emissions and PCB equipments in use	MENR , MED, “Azerenergy”OSC, SOCAR	2007-2008	200,0
2. Utilization of useless PCB equipments and PCB liquid emissions	MENR, MED “Azerenergy”OSC, SOCAR	2007-2010	950,0
3. Safe management and gradual elimination of PCB equipments in use	MENR, MED “Azerenergy”OSC, SOCAR	2007-2020	5000,0

**3.3.5. Activity: production, import and export, use, stockpiles and wastes of DDT (Annex B chemicals) if used in the country**

Information on production, import and export, use, stockpiles and wastes of DDT is given in Activity 3.3.3 in detail. Thus the measures will be implemented on Measure 3 and will be finished up to 2010.

**3.3.6. Activity: register for specific exemptions and the continuing need for exemptions (Article 4)**

From the chemicals elimination of which required in Article 4 of the Stockholm Convention only DDT exists in Azerbaijan and DDT is not used in malaria vector control. Destruction of DDT will be implemented in accordance with Measure 3 of Activity 3.3.3.

**3.3.7. Activity: measures to reduce releases from unintentional production (article 5)**

**Key objective 4 To reduce POPs emission from Industry/Municipality Wastes and sewerages**

**Measure 1 To reduce POPs emission arising from Industry/Municipality Wastes and sewerages**

According to Order of Ministry of Health № 60 of 2000 on “Improvement of the Measures on Disinfection in the Republic” medical wastes are disinfected and given to the landfill of communal wastes. In spite of that the combustion is not permitted 10-20% of the wastes are combusted unintentionally. According to the calculations approximately 300-600 tons of medical wastes are combusted unintentionally annually. To prevent these following methods will be applied:

- a) collection of medical wastes;
- b) development of the mechanism for decontamination of wastes;
- c) enhancement of control mechanisms;
- d) choice of BAT/BEP technology;
- e) education of medical employers;
- f) information exchange

### **Measure 2 To manage stockpiles pursuant to the Convention**

According to the Presidential Order dated September 28, 2006 measures on management of landfill will be implemented during 2007-2008 years. This should be the basis for management of other landfills.

### **Measure 3 To reduce Dioxin, HCB and PCB from Hospital wastes incineration**

Applying instruments:

- a) collection of medical wastes;
- b) development of the mechanism for decontamination of wastes;
- c) enhancement of control mechanisms;
- d) choice of BAT/BEP technology;
- e) education of employers and public;
- f) information exchange

### **Measure 4 To prevent open incineration of wastes (with including landfills)**

Applying instruments:

- a) legal regulation;
- b) development of the administrative penalty mechanisms;
- c) enhancement of control mechanisms;
- d) education of employers and public;
- e) information exchange

### **Measure 5 To organize sewerage cleaning**

Applying instruments:

- a) discussions with relevant international organizations;
- b) reestablishment of the sewerage system;
- c) choice of BAT/BEP technology;
- d) education of public;
- e) information exchange

### **Measure 6 To reduce POPs emissions arising from animal remains**

Applying instruments:

- a) enhancement of the control;
- b) establishment of the disposal system;
- c) choice of BAT/BEP technology;

- d) education of public;
- e) information exchange

Information on measures are submitted in Table 10 in detail

**Table 10. Action Plan on POPs reduction**

Measure	Responsible organizations	Time for performance	Financial request ths. manat
1. To reduce Dioxin, HCB and PCB from Hospital wastes incineration	MENR, MH, LEP, Municipalities	2007-2015	3000,0
2 To manage stockpiles appropriate to Convention	MENR, MH, LEP, MED Municipalities	2007-2020	5000,0
3 To reduce Dioxin and HCB emission arising from elimination of Industry/Municipality Emissions	MENR, MH, LEP, MED, Municipalities	2007-2020	1000,0
4 To prevent open incineration of wastes (with including landfills)	MENR, MH, LEP, MED, Municipalities	2007-2020	900,0
5 To organize sewerage cleaning	MENR, "Azersu"SC, LEP, Municipalities	2007-2020	20000,0
6 To reduce POPs emissions arising from animal remains	MENR, MH, LEP	2007-2015	800,0

**Key objective 5: To improve the environmental performance in energy sector**

**Measure 1 Improving of environmental impacts of energy sector**

Applying instruments:

- a) Standards and regulation regarding emissions in the combustion plants;
- b) Environmental indicators;
- c) Research and studies initiated to find out the way of reaching the environmental targets for energy sector;
- d) Public awareness programs.

**Measure 2 Strengthening energy-environment policy**

Applying instruments:

- a) Enforcement regulation;
- b) Educational and training programs;
- c) Public awareness programs

**Measure 3 Promote the use of ecological cleaner fuels especially in TPS area**

Applying instruments:

- a) Methodologies to estimate emission inventories;
- b) Guidance on BAT and BEP;
- c) Fiscal instruments to discourage emission of POPs in boilers and encourage fuels with low POPs emission factors ;
- d) Education and training instruments;
- e) Monitoring of POPs releases;
- f) General guidance on prevention and release reduction measures on sustainable development

#### **Measure 4 Application of EIA/SEA principles to all levels of decision – making with respect to the energy production, transport and use**

Applying instruments:

- a) Methodology for EIA/SEA in the energy sector;
- b) National Manual on EIA/SEA;
- c) Environmental indicators;
- d) Administrative and legislation instruments;
- e) Educational and training programs and full assistance;
- f) Agreement with neighboring states about a common approach to trans-boundary production, transport and use of energy infrastructure.

#### **Measure 5 Promoting the use of hydro and other renewing energy sources**

Applying instruments:

- a) Research and studies for promoting the application of available, feasible and practical measures that can expeditiously achieve a realistic and meaningful level of release reduction or source elimination;
- b) Fiscal instruments for encouraging production of non-emitted pollutant energy production and for discouraging production of important pollutant emission sources;
- c) Guidelines on BAT and BEP for using not conventional sources of energy;
- d) Educational and training programs at the national and international levels.

#### **Measure 6 Improving the energy efficiency of Heat Power Plants**

Applying instruments:

- a) Release limits values or performance standards;
- b) General guidance on prevention and release reduction in combustion plants producing thermal and electrical energy;
- c) Environmental indicators;
- d) Fiscal instruments;
- e) Administrative instruments (privatization and etc.)
- f) Research and studies

**Table 11. Action Plan on improvement of environmental performance in energy sector**

Measure	Responsible organizations	Time for performance	Financial request ths. manat
1. Improving of environmental impacts of energy sector	MIE, , MENR, "Azerenergy" OSC	2006-2015	10 000,0
2. Strengthening energy-environment policy	MIE, MENR	2007-2020	1 000,0
3. Promote the use of ecological cleaner fuels	MIE, MENR, "Azerenergy" OSC,	2007-2012	10000,0
4. Application of EIA/SEA principles to all levels of decision – making with respect to the energy production, transport and use	MIE, MENR, "Azerenergy" OSC,	2006-2012	100000,0*
5. Promoting the use of hydro and other renewing energy sources	MIE, MENR, MED, "Azerenergy" OSC	2007-2020	1800000,0*
6. Improving efficiency of HPPs	MIE, MENR, "Azerenergy" OSC,	2007-2015	2200000,0*

\* this financial resources will be covered by other programs

### **Key objective 6: To improve the environmental performance in industry sector**

#### **Measure 1 Enhancing the safety of the industrial processes with potential accidents where POPs might be emitted**

Applying instruments:

- a) Identification of sensitive areas where industrial accidents may occur;
- b) Risk assessment;
- c) Regular inspection of the existing industrial units where pollution accidents may occur;
- d) Guidelines for local action plans for prevention and to cope with pollution accidents;
- e) Training programs and full assistance;
- f) Agreement with neighboring states about a common approach to trans- boundary pollution accidents;
- g) Research and studies to approach the risk of accidents and possible effects on humans and environment;
- h) Methodology for economic evaluation of damages on humans and environment;
- i) Public awareness;
- j) Proposals for new chemicals to be listed in Annexes A, B or C.

#### **Measure 2 Strengthening environmental policy in industry sector**

Applying instruments:

- a) National policy paper and industrial POPs emitting sources;
- b) National system for monitoring and regular reporting;

- c) National strategy for reduction and elimination of POPs emission;
- d) Identification of sensitive areas together with responsible authorities;
- e) Initiatives to be taken straighten the link between sustainable industrial development in the POPs emitting plants and spatial policy.

### **Measure 3 Promoting cleaning installations in ceramic and building materials**

Applying instruments:

- a) National task force for the strengthening of BAT/BEP practice;
- b) National manuals on BAT/BEP ;
- c) Training programs and full assistance;
- d) Voluntary application of BAT/BEP principles to the industrial sector, namely to activities producing POPs.

### **Measure 4 Promoting air pollution control technologies and means in the non-ferrous industry, especially with the secondary aluminum and steel production (for dioxin PAHs and HCB) and with coke production and pig iron tapping (for PAHs)**

Applying instruments:

- a) Methodology for emission estimate and projected releases from the industrial processes;
- b) Consistent monitoring on evaluation of the efficacy of the laws and policies;
- c) Financial incentives to decrease the POPs emissions from secondary aluminum and copper production and industrial processes;
- d) Using guidance on prevention and release reduction from the industrial activities with POPs emissions;
- e) Using guidance on BAT /BEP for POPs emission reduction in industrial processes;
- f) Release limit values or performance standards for BAT/BEP;
- g) Education and Training Programs;
- h) Information by industry and professional users regarding public information, awareness and education;
- i) Researches and studies regarding the effects on humans and environmental.

### **Measure 5 Reducing hazardous emissions from cement kilns**

Applying instruments:

- a) Appropriating analyses of cement plant technologies of republic to BAT/BEP;
- b) Preparing of mechanisms which provide appropriation of BAT/BEP to new created enterprises;
- c) Public awareness.

### **Measure 6 Reducing Dioxin and HCB emissions from oil refinery**

Applying instruments:

- a) Appropriating analyses of oil refinery of republic to BAT/BEP;
- b) Preparing of mechanisms which provide appropriation of BAT/BEP to new created enterprises;
- c) Public awareness.

**Table 12 Action Plan on improvement of the environmental performance in industry sector**

Measure	Responsible organizations	Time for performance	Financial request ths. manat
1. Enhancing the safety of the industrial processes with potential accidents where POPs might be emitted	MENR, MED, MIE, MES	2007-2020	1000,0
2. Strengthening environmental policy in industry sector	MENR, MIE, MED	2007-2020	300,0
3. Promoting cleaning installations in ceramic and building materials	MENR, MIE	2007-2020	10000,0
4. Promoting air pollution control technologies and means in the non-ferrous industry, especially with the secondary aluminum and steal production (for dioxin PAHs and HSB) and with coke production and pig iron tapping (for PAHs)	MED ,MENR, MIE,	2007-2020	20000,0
5. Reducing emissions from cement kilns firing hazardous wastes	MED ,MENR, MIE,	2007-2020	10000,0
6. Reducing Dioxin and HCB emissions from oil refinery	MENR, MIE, SOCAR	2007-2020	900,0

**Key objective 7 To enlarge measures on environmental impacts mitigation on transport sector**

**Measure 1 Promote cleaner/more economical vehicle**

Applying instruments

- a) Vehicle emissions standards and fuel efficiency improvements;
- b) Vehicle in section and maintenance programs;
- c) Financial and taxation instruments;
- d) Institutional arrangements for vehicle inspection;
- e) Training programs;
- f) Old vehicle scrappage schemes;
- g) Green lorry schemes;
- h) Awareness – raising programs.

**Measure 2 Promote the use of cleaner fuels**

Applying instruments

- a) Fuel quality standards;
- b) Inspection programs;
- c) Financial and taxation instruments;
- d) Awareness – raising programs.

**Table 13 Action Plan on enlargement of measures on environmental impacts mitigation on transport sector**

Measure	Responsible organizations	Time for performance	Financial request ths.manat
1. Promote cleaner/more economic l vehicle	MENR, MT, SRP	2007-2010	300,0
2.Promote the use of cleaner fuels	MENR, MT, SRP	2007-2010	950,0

**3.3.8 Activity: measures to reduce releases from stockpiles and wastes (Article 6)**

As mentioned above there were one landfill for pesticide storage, regional supply stockpiles in 11 regions and local stockpiles in 57 regions.

Decontamination of these areas is intended up to 2010 and was included into NIP as a priority.Measures are described in Key objective 2 of Activity 3.3.3.

**3.3.9.Strategy: identification of stockpiles, articles in use and wastes**

The strategy of identification of stockpiles, substances and wastes in use is given in 2.3.5.4, 2.3.5.5, 2.3.5.6 paragraphs.

**3.3.10 Activity: manage stockpiles and appropriate measures for handling and disposal of articles in use**

Exept Jangy landfill there are not any offically registered POPs pesticide landfill in the Republic. There are only stockpiles shown in paragraph 3.3.8, measures of their decontamination indicated in Key objective 2 of Activity 3.3.3 .

**3.3.11 Strategy: identification of contaminated sites (Annex A, B and C chemicals) and remediation in an environmentally sound manner**

The characteris polluted area for Azerbaijan are the areas of bases of “Azerkendkimya” union pollutteed with pesticides, DDT residues in the area of Detergents Plant in Sumgayit city and lanfills for communal wastes in big cities of the Republic.

According to the NIP the preparation of strategy on contaminated sites management is intended for 2007.

**Key objective 8: Identification of presumable POPs pesticides and PCBs stockpiles and their safe management**

**Measure 1 Identifying of presumable POPs pesticides and PCBs stockpiles**

Applying instruments:

- a) researches comprising analysis to find out POPs in the existing stockpiles and wastes, and to find out products and article in use and wastes consisting of, containing or contaminated with a chemical listed in Annexes A, B or C from Stockholm Convention;
- b) Administrative instruments for identifying the presumable POPs in the existing stockpiles consisting of or containing chemicals listed ether in Annex A or Annex B and producats and

- articles in use wastes consisting of containing or contaminated with chemical listed in Annex A, B or C of Stockholm Convention;
- c) Legal instruments for inspection, labeling interdiction of use of new substances that are supposed to be POPs;
  - d) Awareness – raising programs.

***Measure 2 Managing stockpiles of presumable POPs, as appropriate, in a save, efficient and environmentally sound manner***

Applying instruments:

- a) Legal acts for special care on presumable POPs;
- b) Methodologies of handling, collection, transportation and storage of unknown substances presumed to be POPs;
- c) Guidelines on prevention and release reduction and guidelines on the best available techniques and best environmental practices;
- d) Monitoring of existing stockpiles for updating the substances stored.

***Measure 3 Elimination and final disposal of POPs***

Applying instruments:

- a) Training workers, scientists, educators and technical and managerial personnel;
- b) Fiscal instruments to enforce the legislation;
- Provision to the republic of all available information;
- d) Legislative instruments regarding POPs presumable wastes including products and articles upon becoming wastes for not permitting them to be subjected to disposal operations that may lead to recovery, recycling, reclamation, direct reuse or alternative uses of POPs, or for not permitted to be transported across international boundaries without taking into account relevant international rules, standards and guidelines;

**Table 14. Action Plan on identification of POPs and their safe management**

Measure	Responsible organizations	Time for performance	Financial request ths.manat
1. Identifying of presumable POPs pesticides and PCBs stockpiles	MENR, NAS, MA,	2007-2010	300,0
2. Elimination and final disposal of POPs	MENR ,NAS, MA	2007-2012	250,0
3. Managing stockpiles of presumable POPs, as appropriate, in a save, efficient and environmentally sound manner	MENR, NAS, MA,	2007-2012	500,0

**Key objective 9 Promote the use of harmless and alternative substances**

***Measure 1 Promote the use of harmless and alternative substances***

Applying instruments:

- a) Legal and administrative instruments;
  - To eliminate:

- Production and use of the chemicals listed in Annex A of Stockholm Convention (international production and use);
- Import and export of the chemicals listed in Annex A;
  - To restrict production and use of chemicals listed in Annex B;
- b) Regulatory and assessment schemes for new pesticides or new industrial chemicals. These schemes will be set up taking into consideration the criteria of paragraph 1 of Annex D of Stockholm Convention when conducting assessment of pesticides or industrial chemicals currently in use;
- c) Researches for using harmless solutions;
- d) Fiscal instruments for discouraging potential hazardous POPs use and production and for encouraging cleaner activities that protect human health and the environment by taking the necessary measures to minimize or prevent releases;
- e) Monitoring arrangements for POPs inventory in each country.

**Table 15. Action Plan on promotion the use of harmless and alternative substances**

Measure	Responsible organizations	Time for performance	Financial request ths.manat
1. Promote the use of “cleaner” and alternative substances	MENR , MA, MH,MED	2007-2015	800,0

**Key objective 10 To strive for sustainable development of ecological agriculture**

***Measure 1 To encourage for use of environmentally-friendly agriculture products***

Applying instruments:

- a) Awareness on policy and decisions on POPs;
- b) Public awareness programs on POPs, as well as on their health and environmental effects and on their alternatives;
- c) Research, development, monitoring and cooperation pertaining to POPs and, where relevant, to their alternatives and to candidate POPs, including on their sources and releases into environment, presence, levels and trends in humans and the environment;
- d) Fiscal instruments to encourage ecological products.

**Table 16. Action plan on encouragement the use of environmentally-friendly agriculture products**

Measure	Responsible organizations	Time for performance	Financial request ths.manat
1 To encourage for use of environmentally-friendly agriculture products	MED, MENR, MA	2007-2020	300,0

### 3.3.12 Activity: *facilitating or undertaking information exchange and stakeholder involvement*

In all steps of preparation of National Implementation Plan working groups consisting of experts from different ministries, governmental and non-governmental organizations were take active participation. It is expedient to create agency(centre) on POPs management in the Republic to keep the existing potential. Modern computer and information technologies were used to simplify the information exchange . Posting and uptade of information on POPs on MENR web-site is intended for the future.

**Table 17. Action Plan on Reporting and information exchange**

Measure	Responsible organizations	Time for performance	Financial request ths. manat
1. To introduce an effective system of reporting by responsible institutions towards the National Focal Point	MENR, NIP Executive group, NFP-POPs	I quarter, 2008	25,0
2. To assure institutional background for effective recording of exports and imports of POPs or POPs containing materials between MENR and the Customs Directorate	MENR, NIP Executive group, NFP -POPs	IV quarter, 2007	10,0
3. To assure systematic reporting the actual data on POPs exports/import to the Stockholm Convention Secretariat	MENR, NIP Executive group, NFP -POPs	Within the term required by the Conference of the Parties	5,0
4. To assure information flow regarding gradual phasing out of the PCBs contaminated equipments, among the involved institutions, Focal Point and Convention Secretariat.	MENR, NIP Executive group, NFP -POPs	I quarter, 2008	10,0
5. To introduce an effective surveillance system of handling with outdated obsolete POPs containing plant protection preparations	MENR, NIP Executive group, NFP -POPs	IV quarter, 2007	25,0
6. To introduce an effective surveillance system of chemicals production, aiming at preventing production of POPs or materials with properties similar to POPs	MENR, NIP Executive group, NFP -POPs	IV quarter, 2007	25,0

### 3.3.13 Activity: *public awareness, information and education (article 10)*

The activities on public-awareness and education is implemented separately for each key objective and measure. The execution of following measures is intended at the first stage of the NIP implementation:

**Table 18. Action Plan on Public awareness raising and education**

Measure	Responsible organizations	Time for performance	Financial request ths. manat
1. Organization of seminars on POPs with the aim of public awareness rising	MENR, ME, NGOs	Ongoing	10,0
2. Organization of systematic speeches and discussions on POPs by mass media, printing of articles	MENR, ME, NGOs	Ongoing	10,0
3. Conduction of inquiring among people on POPs and organization of monitoring system on awareness raising	MENR, ME, NGOs	Regularly	35,0
4. Preparation of National Awareness Raising Strategy on POPs	MENR, ME, NGOs	2008	5,0
5. To raise awareness and know-how of employees possibly handling with POPs	MENR, ME, NGOs	Regularly	40,0
6. Raising public awareness (among village people and in gardening and cottage areas) of unsuitability of uncontrolled open waste combustion	MENR, ME, NGOs	Regularly	40,0
7. Gradually supplement information on POPs issues into the educational curricula for basic and high school students as well as students of pedagogic universities, entering the education process themselves	MENR, ME, NGOs	Up to 2010	160,0

The future activities on public awareness and education will be implemented by means of measures indicated in Annex 7.

### **3.3.14 Activity: effectiveness evaluation (article 16)**

Pursuant to the requirements of the Convention the effectiveness evaluation will be implemented on the base of existing scientific, ecological, technical and economic information. MENR will perform regular monitoring and the results of the monitoring will be submitted to the Convention Secretariat as like as indicated in Activity 3.3.15. Pursuant to the Article 15 National reports should be submitted to the Secretariat.

To assess the effectiveness of the Convention conduction of consequent examination of soil, water, residues and food-stuff by the monitoring group should be regulated by the legal acts. The chemical analyses will be performed in the regional laboratories.

As a Party to the Stockholm Convention Azerbaijan is based on open policy principle on POPs and will cooperate with the countries of the region. This cooperation will be performed on bilateral and multilateral basis.

### ***3.3.15. Activity: Reporting***

#### ***3.3.15.1 Priority setting***

Based upon the Stockholm Convention requirements, overview of current POPs reporting mechanism in Azerbaijan, as well as agreed criteria for priority setting, following Action Plan measures have been defined:

1. To establish a National Focal Point (NFP-POPs) responsible for reporting and information exchange pursuant to Article 9 and 15 of the Stockholm Convention.
2. To introduce an effective system for provision of information by responsible institutions to the National Focal Points
3. To secure effective recording of the POPs compounds imports and exports on institutional level between Ministry of Agriculture of AR and Customs directorate, as well as reporting mechanism on real amounts of POPs imports and exports for the NFP-POPs.
4. To secure flow of information between stakeholder institution and NFP-POPs on gradual elimination of the use of PCB containing equipments in Azerbaijan.
5. To introduce an effective system for monitoring of handling with POPs containing plant –protection preparations after their expiry period.
6. To introduce an effective system for monitoring of origin and handling of the POPs containing hazardous wastes as well as their imports and exports.
7. To introduce an effective system of future chemical production monitoring , with the aim to eliminate production of POPs or chemicals with POPs properties in Azerbaijan.
8. To introduce effective measures for controlling the use of chemicals with prohibited HCB content

Further text describes these priorities in more detail.

#### ***3.3.15.2 Proposed measures***

- 1. To establish a National Focal Point (NFP-POPs) responsible for reporting and information exchange pursuant to Articles 9 and 15 of the Stockholm Convention**

Analysis of current situation in the institutions that record or hold information on some POPs, shows that there is no system sufficient for comprehensive POPs data collection.

As a part of its international commitments such as “Basel Convention on regulation of transboundary transfer of hazardous wastes and their disposal”, “Convention on Long-Range Transboundary Air Pollution” and “Protocol on POPs “, Azerbaijan Republic regularly reports to international organizations via existing contact focal points. These are National Focal Point to

the MENR for the Basel Convention and relevant institutions of the MENR for the POPs Protocol.

In terms of Stockholm Convention requirements, we recommend to establish a National Focal Point on POPs within an existing focal point (either Basel Convention or POPs protocol). It will secure exchange of information and reporting to Secretariat of Stockholm Convention and Conference of Parties and other institutions processing the data on POPs, pursuant to the Stockholm Convention requirements.

It will be necessary to organize a meeting of involved ministries (ME NR, MA, MH, MIE, MED) in order to agree on establishment of the NFP-POPs. This meeting will be called by the Ministry of Environment AR, as the body responsible for the implementation of Stockholm Convention in Azerbaijan. The purpose of this meeting will be discussion on current institutional, personnel, and technical situation, their tasks and consecutive mandate for enlargement of the existing national focal point for NFP-POPs and its statute. We recommend that this enlarged institution will be supported by new personnel and technical equipment in order to meet the demands of its enlarged agenda. The NFP-POPs employees will have to undergo basic training where they will gain information on already completed activities as well as on further obligations in terms of the Convention. This training will be organized by the ME NR AR. The establishment of NFP-POPs will be considered as successfully completed when it will be fully operating and will have a web page with basic information on its tasks, which will be updated and enlarged with the focal point's growing experience. Also good operation of NFP-POPs is important for reporting to the Stockholm Convention Secretariat.

	Activity	Required output/ Indicator of success	Time horizon	Responsible institution /ministry/ body	Financial request ths. manat
0	1	2	3	4	5
1.	<b><i>To establish a National Focal Point (NFP-POPs) responsible for reporting and information exchange pursuant to Articles 9 and 15 of the Stockholm Convention</i></b>		February 2007	ME NR	130,0
1.1	Talks between the ministries with the purpose of NFP-POPs establishment	NFP-POPs with its statute	June – September 2007	ME NR	20,0
1.2	Establishment of NFP-POPs – personnel and technical equipment, training, and its operation	Start of NFP-POPs' operation	November 2007 January 2008	ME NR	50,0
1.3	Establishment and operation of NFP-POPs web page	WWW portal NFP-POPs – information on NFP-POPs tasks, reports, actual information on POPs in AR.	February 2008	NFP-POPs	60,0

## 2. To introduce an effective system for provision of information by responsible institutions to the National Focal Point

For the purposes of preparation of reports on POPs production, use, imports, exports, storage and emissions will NFP-POPs receive partial information from the institutions having information on POPs. It is therefore imperative to legally establish the duty of responsible institutions to NFP-POPs. This is to be done by directions from individual ministries. Pursuant to the Article 15 of the Stockholm Convention, reporting format and periodicity will be agreed on the first meeting of the Conference of Parties. Following the definition of format on the first meeting of the Conference of Parties, requirements and reporting mechanism for individual POPs areas according to the Stockholm Convention requirements will need to be defined in the form of methodologies. Reporting methodology should be prepared also for the areas (POPs production, use, exports, imports), where no POPs occurrence is expected in Azerbaijan Republic because of currently valid norms. Affected institutions must make themselves familiar with these methodologies, so that they are prepared for carrying out the new tasks in the area of POPs and so that the time schedule can be set and their database systems can be adjusted.

	Activity	Required output/ Indicator of success	Time horizon	Responsible institution/m inistry/ body	Financial request ths. manat
0	1	2	3	4	5
2.	To introduce an effective system for provision of information by responsible institutions to the National Focal Point		June 08	MENR	100,0
2.1	Discussions between ministries	Ministry directions to the responsible institutions for cooperation with NFP-POPs	January 08	MENR	20,0
2.2	Mechanism for provision of information on real amounts of imported, exported and produced POPs, POPs use, storage of POPs plant-protecting preparations after expiry date, origin, imports and exports of POPs waste, unintentional POPs production and POPs contaminated equipments	Methodologies on provision of information on POPs /NFP-POPs	November 07 – January 08	MENR	50,0
2.3	Meeting of the stakeholder institutions and NFP-POPs with the aim to get familiar with the methodologies and information provision duties regarding POPs	Minutes from the meeting and proposal of further cooperation and following tasks	May 08 – June 08	NFP-POPs	30,0

## 3. To secure effective recording of the POPs compounds imports and exports on institutional level between MA and Customs directorate, as well as reporting mechanism on real amounts of POPs imports and exports for the NFP- POPs.

Reporting mechanism on real amounts of POPs exports and imports does currently not exist. Exports/imports of POPs listed in the Annexes A and B of the Stockholm Convention are subject to permission procedure. Preliminary permission is given out by the MA.

Import of POPs to Azerbaijan is prohibited. It will be further necessary that MA together with Customs Directorate establish institution responsible for provision of information on exports and imports of chemicals to NFP-POPs and also define standard format for provision of this information to NFP-POPs.

	Activity	Required output/ Indicator of success	Time horizon	Responsible institution/ ministry/ body	Financial request ths. manat
0	1	2	3	4	5
3.	To Secure effective recording of the POPs compounds imports and exports on institutional level between MA AR and Customs directorate, as well as reporting mechanism on real amounts of POPs imports and exports for the NFP- POPs		August 08	MA AR, SCC	50,0
3.1	Inter-ministry negotiations with the aim to define appropriate measures for effective registration of the real exported and imported quantities of POPs	Adjusted existing mechanism	June 07- September 07	MA AR, SCC	10,0
3.2	Modification of existing registration system for facilitating the provision of information on POPs exports and imports.	Adjusted system of POPs imports and exports registration	June 08- July 08	MA AR, SCC	15,0
3.3	Definition of format for provision of information on actual quantities of imported and exported POPs to the NFP-POPs	Standard format (methodology) for provision of information on POPs exports and imports to the NFP-POPs	August 08	NFP-POPs	25,0

#### **4. To secure flow of information between stakeholder institution and NFP-POPs on gradual elimination of the use of PCB-containing equipments in Azerbaijan.**

Reporting mechanism on POPs use in Azerbaijan does currently not exist. There is a law establishing the control of the use of PCB-contaminated equipments until their disposal. Relevant data will be processed for the registration and updating of the records on contaminated equipments with PCB content. In order to achieve an effective transmission of information from the inventarization of PCB-contaminated equipments to the NFP-POPs, we recommend that the existing registration system is modified and the output form for provision of the required information is defined.

	Activity	Required output/ Indicator of success	Time horizon	Responsible institution /Ministry/ body	Financial request ths. manat
0	1	2	3	4	5
4.	To secure flow of information between stakeholder institution and NFP-POPs on gradual elimination of the use of PCB-containing equipments in Azerbaijan		September 08	MENR	50,0
4.1	Modification of the existing mechanism for registration of PCB-contaminated equipments and facilitation of provision of information to the NFP-POPs	Modified registration system	July 08- August 08	MENR	30,0
4.2	Definition of format for provision of information on the PCB-contaminated equipments in Azerbaijan	Standard format for provision of information on PCB-contaminated equipments to the NFP-POPs	September 08	MENR	20,0

#### **5. To introduce an effective system for monitoring of handling with POPs-containing plant-protecting preparations after their expiry period.**

AR Phytosanitar Service under the Ministry of Agriculture has data on the quantities of plant-protecting preparations after their expiry periods that were disposed of, provided by plant-inspectors. These data also include information on POPs containing preparations. We recommend that disposed POPs plant-protecting preparations after expiry date are identified during a control and compared with existing list of inventoried POPs plant-protecting preparations after the expiry date. Thus, POPs plant-protecting preparations after the expiry period are classified as wastes and the institution responsible for registration and processing of data on origin and disposal of wastes is the MA AR.

It is also necessary to finish and modify existing registration of data on stocks of plant-protecting preparations after the expiry period and their disposal and to develop a standard format for provision of information to NFP-POPs according to the Stockholm Convention requirements.

	<b>Activity</b>	<b>Required output/ Indicator of success</b>	<b>Time horizon</b>	<b>Responsible institution /ministry/ body</b>	<b>Financial request ths. manat</b>
0	1	2	3	4	5
5.	To introduce an effective system for monitoring of handling with POPs-containing plant-protecting preparations after their expiry period.		September 08	Fitosanitar Service	80,0
5.1	Modification of the existing mechanism of registration of the stocks of POPs plant-protecting preparations after their expiry period in order to improve provision of information to the NFP-POPs.	Modified registration system	July 08- August 08	Fitosanitar Service	45,0
5.2	Definition of format for provision of information on POPs plant-protecting preparations after their expiry period stocks in Azerbaijan.	Standard format for provision of information on POPs plant-protecting preparations after their expiry period to the NFP-POPs.	September 08	Fitosanitar Service	35,0

**6. To introduce an effective system for monitoring of origin and handling of the POPs - containing hazardous wastes as well as their imports and exports.**

There exists a reporting mechanism on wastes exports and imports (from POPs it covers only PCB) for the purposes of meeting the requirements of Basel Protocol.

The primary problem in registration origin and handling of wastes is the absence of codes of individual POPs (it is specific only for PCB) as well as different coding of wastes for imports and exports. Correction measures deal with modification of legal requirements that recommends specification of separate codes for different types of waste containing POPs (in Catalogue of waste) as well as including of these codes to the Red List of Wastes (for registration of the imports and exports).

We recommend that the existing registration system of the responsible institution is modified and standard format for provision of information to NFP-POPs is established.

	Activity	Required output/ Indicator of success	Time horizon	Responsible institution /ministry/ body	Financial request ths. manat
0	1	2	3	4	5
6.	<i>To introduce an effective system for monitoring of origin and handling of the POPs-containing hazardous wastes as well as their imports and exports.</i>		2008	MENR	140,0
6.1	Modification of current legal requirements in order to achieve effective registration of POPs containing waste	Amended decree on imports, exports	2008	MENR	40,0
6.2	Modification of the existing system of waste registration in Azerbaijan, in order to facilitate provision of information on POPs-containing hazardous waste handling, imports and exports to the NFP-POPs	Modified system of POPs imports and exports registration	2008	MA NAS	60,0
6.3	Definition of format for provision of information on POPs-containing waste	Standard format for provision of information on POPs-containing waste to the NFP-POPs	September 08	MAAR NAS	40,0

**7. To introduce an effective system of chemical production monitoring, with the aim to eliminate production of POPs or chemicals with POPs properties in Azerbaijan.**

As there are no POPs currently produced in Azerbaijan, there is also no system for reporting their production.

However, it should be noted that POPs production is not prohibited by law. This means that during the environmental impact assessment process by prepared constructions, equipments and other activities, public bodies responsible for giving out the permission have no legal authority to prohibit production of POPs or POPs-like chemicals. Also because of this fact we may state that no production of banned POPs or POPs-like compounds was recently permitted in Azerbaijan.

Although we state that no POPs are produced in Azerbaijan, we propose a control of chemical factories for elimination of POPs compounds. The competent organization for single chemical production control would be Azerbaijan Environmental Inspection. AEI would write a report on POPs production (or rather non-production) to the NFP-POPs. It will be necessary to authorize AEI to carry out this control and to create the control procedure and time schedule.

Pursuant to the Stockholm Convention requirements, it will be further necessary to create a standard format for provision of information on POPs production to NFP-POPs, despite the fact that they are not produced in Azerbaijan at all.

	<b>Activity</b>	<b>Required output/ Indicator of success</b>	<b>Time horizon</b>	<b>Responsible institution /ministry/ body</b>	<b>Financial request ths. manat</b>
0	1	2	3	4	5
7.	To introduce an effective system of chemical production monitoring, with the aim to eliminate future production of POPs or chemicals with POPs properties in Azerbaijan.		September 08	ME NR	100,0
7.1	Authorization of relevant organization to carry out a targeted control for elimination of future POPs production in Azerbaijan	Authorization and defined control time schedule and procedure	February 08	ME NR	20,0
7.2	Implementation of the control of chemical factories	Evaluation report on production of POPs in Slovakia	March 08-September 08	MED , MIE responsible organization	50,0
7.3	Definition of a format for provision of information on POPs in Azerbaijan	Standard format for provision of information on POPs to NFP-POPs in Azerbaijan	September 08	MED, MIE responsible organization	30,0

## **8. To introduce effective measures for controlling the use of chemicals with prohibited HCB content**

Reporting mechanism on POPs use in Azerbaijan does currently not exist. Mechanism for monitoring of HCB use in Azerbaijan does not exist. HCB may not be contained in: human and veterinary medicaments, cosmetic appliances, motor fuels, oil products that serve as fuel for mobile or stationary combustion equipment, fuels sold in closed packing (for example bottles with liquid gas) and in colors used by artists.

We propose to introduce effective measures for monitoring of HCB in chemical preparations listed above and to commit the responsible control bodies to carry out control of their use in Azerbaijan. Information regarding the use of HCB in chemical preparations will be passed to NFP-POPs.

As the first step, we propose to authorize the responsible control institutions, i.e. Public Health Offices (PHO) and Azerbaijan Consumers Unit (ACU), which will carry out the control of chemical preparations that should not contain HCB.

As the second step, these authorized institutions, after they carry out the control, will submit reports on HCB-containing chemical preparations use to NFP-POPs.

	Activity	Required output/ Indicator of success	Time horizon	Responsible institution /ministry /body	Financial request ths. manat
0	1	2	3	4	5
8.	To introduce effective measures for controlling the use of chemicals with prohibited HCB content (excluding plant-protecting preparations)		September 08	ME NR	150,0
8.1	Authorization of relevant organizations to carry out control of the prohibited use of HCB-containing preparations in Azerbaijan	Authorization and defined time schedule and control procedure	February 08	NAS, MH	30,0
8.2	Control results	Evaluation report on the use of HCB-containing preparations in Azerbaijan.	March 08-September 08	MH, ME NR	60,0
8.3	Definition of format for provision of information on the HCB-containing preparations use. .	Standard format for provision of information on the HCB-containing preparations use to the NFP-POPs.	September 08	MH, ME NR	60,0

### **3.3.15.3 Time and Financial plan**

The same principles were used for estimates of costs of this action plan as in the action plan: Monitoring. Total costs of creating the reporting and information exchange system will be 800 000 manat.

### **3.3.16 Activity: research, development and monitoring (article 11)**

The Stockholm Convention defines for its parties responsibilities in the area of research and development, binding them to the following:

The parties shall, within their capabilities, at the national and international levels, encourage and/or undertake appropriate research, development, monitoring and cooperation pertaining to persistent organic pollutants and, where relevant, to their alternatives and to candidate persistent organic pollutants, including on their:

- (a) Sources and releases to the environment;
- (b) Presence, levels and trends in humans and the environment;
- (c) Environmental transport, fate and transformation;
- (d) Effects on human health and the environment;
- (e) Socio-economic and cultural impacts;
- (f) Release reduction and/or elimination; and
- (g) Harmonized methodologies for making inventories of generating sources and analytical techniques for the measurement of releases.

In undertaking these activities, the Parties shall, within their capabilities:

- (a) support and further develop, as appropriate, international programs, networks and

- organizations aimed at defining, conducting, assessing and financing research, data collection and monitoring, taking into account the need to minimize duplication of effort;
- (b) support national and international efforts to strengthen national scientific and technical research, capabilities, particularly in developing countries and countries with economies in transition, and to promote access to, and the exchange of, data and analyses;
  - (c) take into account the concerns and needs, particularly in the field of financial and technical resources, of developing countries and countries with economies in transition and cooperate in improving their capability to participate in the efforts referred to in subparagraphs (a) and (b);
  - (d) undertake research work geared towards alleviating the effects of persistent organic pollutants on reproductive health
  - (e) make results of their research and development and monitoring activities referred to in this paragraph accessible to the public on a timely and regular basis;
  - (f) encourage and/or undertake cooperation with regard to storage and maintenance of information generated from research, development and monitoring.

Scientific-research group studying the impacts of POPs on human health and living organisms are operated in the National Academy of Sciences and the Baku State University. But those groups need for modern equipments and methodologies. The first step for expansion of researches is the establishment of Dioxin laboratory in the Republic and training of specialists that would be helpful for the development of both research and monitoring activities.

### ***3.3.17 Activity: technical and financial assistance (article 12 and 13)***

For implementation of the NIP Azerbaijan needs for financial resources to develop the projects and technical resources for establishment of modern laboratories. For implementation of projects on destruction of obsolete POPs pesticides and PCB containing equipments there could be the necessity of technical assistance to purchase equipments. The financial requirement to purchase these equipments is 700 thousands manat. UNIDO was appealed for preparation of the project on elimination of POPs pesticides and PCB containing equipments removed from use and the activities on preparation of project proposal in amount of 10 mln. manat are ongoing. It is intended that 40% of this amount will be covered by GEF, 40 % by the Azerbaijan government and 20% by other developed country as the technical contribution. For applying the BAT/BEP technology in the country it could be the need to receive technical assistance for purchase of the equipment. It is intended to appeal to the international financial organizations and developed countries to receive the technical and financial contribution.

### **3.4 DEVELOPMENT AND CAPACITY-BUILDING PROPOSALS AND PRIORITIES**

This chapter includes the measures and projects for implementation of the requirements of the Convention. Priority setting of key objectives, measures and instruments is based on the guidance achieved by the project team.

#### ***3.4.1. Approach***

The basis for identification of the priorities is that one of the measures prepared in accordance with the paragraph 1 of the Presidential Order № 1396 of March 30,2006 on “Supplementary measures with respect to the international Conventions and Agreements that Azerbaijan Republic joined up” is related to the Stockholm Convention.

In accordance with the paragraph 7.2 of “Complex Plan of Measures for 2006-2010 on Improvement of the Environmental State in the Republic of Azerbaijan” stipulates the measures such as improvement of the environmental standards, environmental impact assessment, conduction of the monitoring, establishment of the environmental protection funds and strengthening of the environmental control.

These orders create the legal basis for the implementation of the requirements of the Convention.

3.3.2,3.3.3 and 3.3.5 Activities are intended for the implementation of the requirements mentioned in Article 3 of the Convention.

The Activity 3.3.7 is intended for implementation of the requirements mentioned in Article 5 of the Convention.

The requirements mentioned in Article 6 of the Convention will be fulfilled by the means of Activity 3.3.8, 3.3.9, 3.3.10.

The Activity 3.3.12 is intended for the implementation of requirements in Article 9 to the Convention.

The requirements of the Article 10 of the Convention will be meeting by Activity 3.3.13.

The requirements of the Article 15 of the Convention will be meeting by Activity 3.3.15.

#### ***3.4.2 Key Investment Requirements and Priorities***

The first phase of NIP implementation will cover 2007-2010 years. This includes the establishment of initial execution mechanisms, destruction of DDTs and out of service PCBs containing equipments and oils as well as decontamination of medical wastes. 23,0 mln . manat financial resource is required for implementation of first period of the NIP. 12,4 million manat of this total cost will be covered under the state programs on *Reestablishment of Energetic System*. It is assumed that 40-50% of remaining cost (11,6 million manat) will be covered by GEF and other donor organizations as well as by the state budget.

The second phase of NIP implementation will cover 2011-2015 years. This phase includes activities such as the replacement of PCB containing equipments, the gradual reduction of unintentionally produced POPs emissions by means of application of new technologies in energetic, industrial sectors and the production of environmentally sound products in the agricultural sector. 47,8 mln.manat is required for implementation the mentioned measures. It is assumed that 9,4 mln. manat of this total cost will be covered under the state programs on

*Reestablishment of State Energetic System*, 40-50% of remaining cost (38.4 mln.manat) will be covered through GEF and other donor organizations and remaining part of this costs will be covered by the state budget. Out of this total cost 44% is for the measures in the industrial sector and 12% is for the measures in agricultural sector.

The third phase of the NIP implementation covers the energetic and waste sectors.

Taking into account that the measures that need heavy financial resources are long-term it is not expected problems with respect to financial resources. The timetable and financial requirements are indicated in Annex 8 and 9 of the NIP.

#### **3.4.2.1 Immediate Measures**

The immediate measures cover 2007-2010 years. The immediate measures include the establishment of the National Coordinating Center and as well as the establishing of the legal regulatory basis on POPs for implementation of the NIP.

UNIDO was appealed for preparation of the project on elimination of POPs pesticides and PCB containing equipments removed from use and the activities on preparation of project proposal in amount of 10 mln. manat are ongoing. It is intended that 40% of this amount will be covered by GEF, 40 % by the Azerbaijan government and 20% by other developed country as the technical contribution.

One of the immediate measures is the preparation and implementation of the project on decontamination and elimination of the medical wastes.

#### **3.4.2.2 Medium-term Measures**

Medium-term measures cover 2011-2015 years time period. This phase includes activities such as the replacement of PCB containing equipments, the gradual reduction of unintentionally produced POPs emissions by means of application of new technologies in energetic, industrial sectors and the production of environmentally sound products in the agricultural sector.

#### **3.4.2.3 Long-term Measures**

The long-term measures cover the period up to 2020.

The third phase of the NIP implementation covers the energetic and waste sectors.

Taking into account that the measures that need heavy financial resources are long-term it is not expected problems with respect to financial resources. Due to oil incomes to the Republic at the planned time the problems with respect to the financial resources is not expected.

#### **3.4.3. Conceptual Financing Plan**

At first it is intended the establishment of the National Focal Points for information exchange and reporting pursuant to the Articles 9 and 15 to the Convention. This measures requires 800 thousand manat financial resources. Allocation of this resource is expected for 2007-2008 years.

23,0 mln . manat financial resource is required for implementation of first period of NIP. 12,4 million manat of this total cost will be covered under the state programs on *Reestablishment of Energetic System*. It is assumed that 40-50% of remaining cost (11,6 million manat) will be covered by GEF and other donor organizations as well as by state budget.

The second phase of NIP implementation will cover 2011-2015 years. This phase includes activities such as the replacement of PCB containing equipments, the gradual reduction of

unintentionally produced POPs emissions by means of application of new technologies in energetic, industrial sectors and the production of environmentally sound products in the agricultural sector. 47,8 mln.manat is required for implementation the mentioned measures. It is assumed that 9,4 mln. manat of this total cost will be covered under the state programs on *Reestablishment of State Energetic System*, 40-50%of remaining cost (38.4 mln.manat) will be covered through GEF and other donor organizations and remaining part of this costs will be covered by the state budget. Out of this total cost 44% is for the measures in the industrial sector and 12% is for the measures in agricultural sector.

34,7 mln. manat is required for implementation of the third phase. It is intended review of the financial resources at the second and third stages and to make changes if necessary.

### **3.5. TIMETABLE FOR PLAN IMPLEMENTATION AND MEASURES OF SUCCESS**

#### ***Principles of time and financial plan development***

In order for the time and financial plan for the implementation of Stockholm Convention in terms of EP&C Regulation to be developed, it is necessary to evaluate impact its implementation into legal system will have on State budget, businesses and socio-economic area, especially impact on employment.

In order to evaluate socio-economic impacts of the Convention, it is necessary to identify costs and benefits of the proposed measures that are new or different from costs and benefits following from the existing laws.

## ANNEXES

**711** “Davamlı üzvi çirkləndiricilər haqqında” Stokholm  
Konvensiyasına qoşulmaq barəsində

**AZƏRBAYCAN RESPUBLİKASININ QANUNU**

Azərbaycan Respublikasının Milli Məclisi qərara alır:

I. Azərbaycan Respublikası “Davamlı üzvi çirkləndiricilər haqqında” 2001-ci il 22 may tarixli Stokholm Konvensiyasına qoşulsun.

II. Bu Qanun dərc edildiyi gündən qüvvəyə minir.

**İlham ƏLİYEV,**  
Azərbaycan Respublikasının Prezidenti

Bakı şəhəri, 9 dekabr 2003-cü il  
№ 554 - IIQ

The Law of the Republic of Azerbaijan

on joining to Stockholm Convention on “Persistent Organic Pollutants”

The Milli Mejlis of the Republic of Azerbaijan decides:

**I.** The Republic of Azerbaijan joins to the Stockholm Convention on “Persistent organic pollutants” of May 22, 2001.

**II.** This Law comes into effect from the date of its publication.

**Ilham Aliyev**  
President of the Republic of Azerbaijan

Baku, December 9, 2003  
№ 554- IIQ



**AZƏRBAYCAN RESPUBLİKASI PREZİDENTİNİN**  
**SƏRƏNCAMI**

**“Azərbaycan Respublikasının Ekologiya və Təbii Sərvətlər Nazirliyi və Birləşmiş Millətlər Təşkilatının Sənaye İnkişafı Təşkilatı (UNIDO) arasında Davamlı Üzvi Çirkləndiricilər (DÜÇ) barədə Stokholm Konvensiyasının yerinə yetirilməsi üzrə ilkin fəaliyyəti asanlaşdırmaq üçün sürətləndirilmiş mümkünləşdirici tədbirlərlə əlaqədar olan xidmətlərin göstərilməsi üzrə Müqavilə”ni imzalamaq səlahiyyətinin verilməsi barədə**

1. “Azərbaycan Respublikasının Ekologiya və Təbii Sərvətlər Nazirliyi və Birləşmiş Millətlər Təşkilatının Sənaye İnkişafı Təşkilatı (UNIDO) arasında Davamlı Üzvi Çirkləndiricilər (DÜÇ) barədə Stokholm Konvensiyasının yerinə yetirilməsi üzrə ilkin fəaliyyəti asanlaşdırmaq üçün sürətləndirilmiş mümkünləşdirici tədbirlərlə əlaqədar olan xidmətlərin göstərilməsi üzrə Müqavilə”ni imzalamaq səlahiyyəti Azərbaycan Respublikasının ekologiya və təbii sərvətlər naziri Hüseynqulu Seyid oğlu Bağirova verilsin.

2. Azərbaycan Respublikasının Xarici İşlər Nazirliyinə tapşırılsın ki, bu Sərəncamın 1-ci bəndində göstərilən Müqaviləni imzalamaq səlahiyyətinin Azərbaycan Respublikasının ekologiya və təbii sərvətlər naziri Hüseynqulu Seyid oğlu Bağirova verilməsi barədə Birləşmiş Millətlər Təşkilatının Sənaye İnkişafı Təşkilatına müvafiq bildiriş göndərsin.

Bakı şəhəri, “ 13  
N 816

**İlham Əliyev**  
**Azərbaycan Respublikasının Prezidenti**

ORDER OF THE PRESIDENT OF THE REPUBLIC OF AZERBAIJAN

On

Delegating authority for signing the Agreement on providing services with respect to the strengthened enabling activities to facilitate early actions on the implementation of the Stockholm Convention on Persistent Organic Pollutants between the Ministry of Ecology and Natural Resources of Azerbaijan Republic and United Nations Industrial Development Organization (UNIDO)

To delegate authority for signing the Agreement between the Ministry of Ecology and Natural Resources of Azerbaijan Republic and United Nations Industrial Development Organization (UNIDO) on providing services with respect to the strengthened enabling activities to facilitate early actions on the implementation of the Stockholm Convention on Persistent Organic Pollutants, to the minister of ecology and natural resources of Azerbaijan Republic Gousseingulu Seyid oghlu Bagirov.

To assign Ministry of Foreign Affairs to send relevant notification to United Nations Industrial Development Organization (UNIDO) which indicates that the authority for signing the agreement mentioned in paragraph 1 of this Order was delegated to the minister of ecology and natural resources of Azerbaijan Republic Gousseingulu Seyid oghlu Bagirov.

Baku, 13  
№ 816

İlham Aliyev,  
President of the Republic of Azerbaijan



## AZƏRBAYCAN RESPUBLİKASI PREZİDENTİNİN SƏRƏNCAMI

**Azərbaycan Respublikası Ekologiya və Təbii Sərvətlər Nazirliyinin  
"Davamlı üzvi çirkləndiricilər haqqında" Stokholm Konvensiyasında  
nəzərdə tutulmuş milli koordinasiya mərkəzinin təyin edilməsi barədə**

Azərbaycan Respublikasının 2003-cü il 9 dekabr tarixli 554-IIQ nömrəli Qanunu ilə Azərbaycan Respublikasının qoşulduğu "Davamlı üzvi çirkləndiricilər haqqında" Stokholm Konvensiyasının 9-cu maddəsinə uyğun olaraq qərara alıram:

1. Azərbaycan Respublikasının Ekologiya və Təbii Sərvətlər Nazirliyi "Davamlı üzvi çirkləndiricilər haqqında" Stokholm Konvensiyasının 9-cu maddəsinə uyğun olaraq məlumatların mübadiləsi məqsədilə Azərbaycan Respublikası tərəfindən milli koordinasiya mərkəzi təyin edilsin.

2. Azərbaycan Respublikasının Xarici İşlər Nazirliyinə tapşırınsın ki, Azərbaycan Respublikası Ekologiya və Təbii Sərvətlər Nazirliyinin "Davamlı üzvi çirkləndiricilər haqqında" Stokholm Konvensiyası üzrə Azərbaycan Respublikası tərəfindən milli koordinasiya mərkəzinin təyin edilməsi barədə həmin Konvensiyanın Katibliyinə müvafiq bildiriş göndərsin.



İlham Əliyev

Azərbaycan Respublikasının Prezidenti

Bakı şəhəri, 29 iyul  
N 329

2004-cü il

### ORDER OF THE PRESIDENT OF THE REPUBLIC OF AZERBAIJAN

on

Appointment of the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan as a national coordination center envisioned in the Stockholm Convention on "Persistent Organic Pollutants"

According to the Article 9 of the Stockholm Convention on Persistent Organic Pollutants which the Republic of Azerbaijan joined with the Law 554-IIQ of December 9,2003 decide:

1. To appoint the Ministry of Ecology and Natural Resources as the national coordination center pursuant to the Article 9 of the Stockholm Convention on Persistent Organic Pollutants.
2. To assign the Ministry of Foreign Affairs to send relevant notification to the Secretariat of the Convention which indicates that the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan was appointed as the national coordination center on Stockholm Convention on Persistent Organic Pollutants.

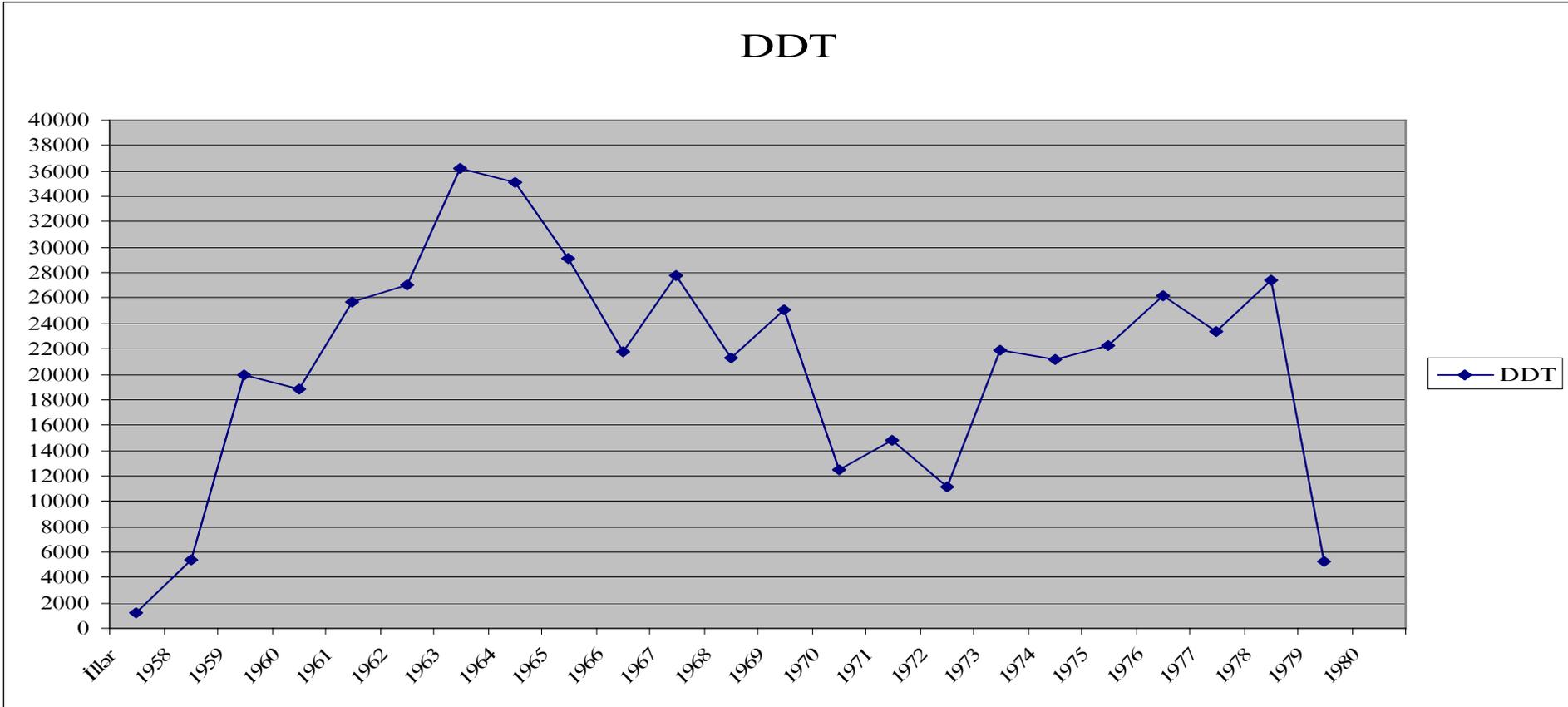
July 29,2004, Baku  
№329

İlham Aliyev,  
President of the Republic of Azerbaijan

Table. Remnants of POPs and POPs pesticides in Azerbaijan (ton)

Facilities	DDT	Mixed with DDT dust	60% polydophen	Dalapon	Isophen	Treflan	dichloreproprinat	Sinep	granozan	Hexachlorine	Sulphur dust
Sumgait DP*	1,0	-	-	-	-	-	-	-	-	-	-
Jangi - landfill	69,3	3876,1	-	-	-	-	-	-	-	-	-
Ganja base	3,0	-	200,0	30,0	-	-	-	5,0	-	3,6	-
Salyan base	2,0	-	200,0	2,0	0,6	-	-	-	-	-	-
Agjabadi base	2,0	-	-	-	-	-	-	5,0	-	3,5	-
Jaililabad base	-	-	-	1,0	-	-	-	-	-	-	-
Sabirabad base	1,5	-	-	-	0,4	-	-	-	-	-	0,7
Kurdamir base	0,8	-	-	-	-	-	-	-	0,9	-	-
Ujar base	0,7	-	-	-	-	-	5,0	-	-	-	-
Goranboy base	0,6	-	-	25,0	-	0,7	-	-	-	-	-
Yevlakh base	-	-	-	-	0,7	-	-	-	-	-	1,5
Siyazan base	-	-	-	-	0,7	-	-	0,6	-	-	0,5
<b>Total:</b>	<b>80,9</b>	<b>3876,1</b>	<b>400,0</b>	<b>58,0</b>	<b>2,4</b>	<b>0,7</b>	<b>5,0</b>	<b>10,6</b>	<b>0,9</b>	<b>7,1</b>	<b>2,7</b>

\* Detergents Plant in Sumgayit city



DDT production over years (ton)

DDT and PCB detected “hotspot» regions are shown in the Map below.

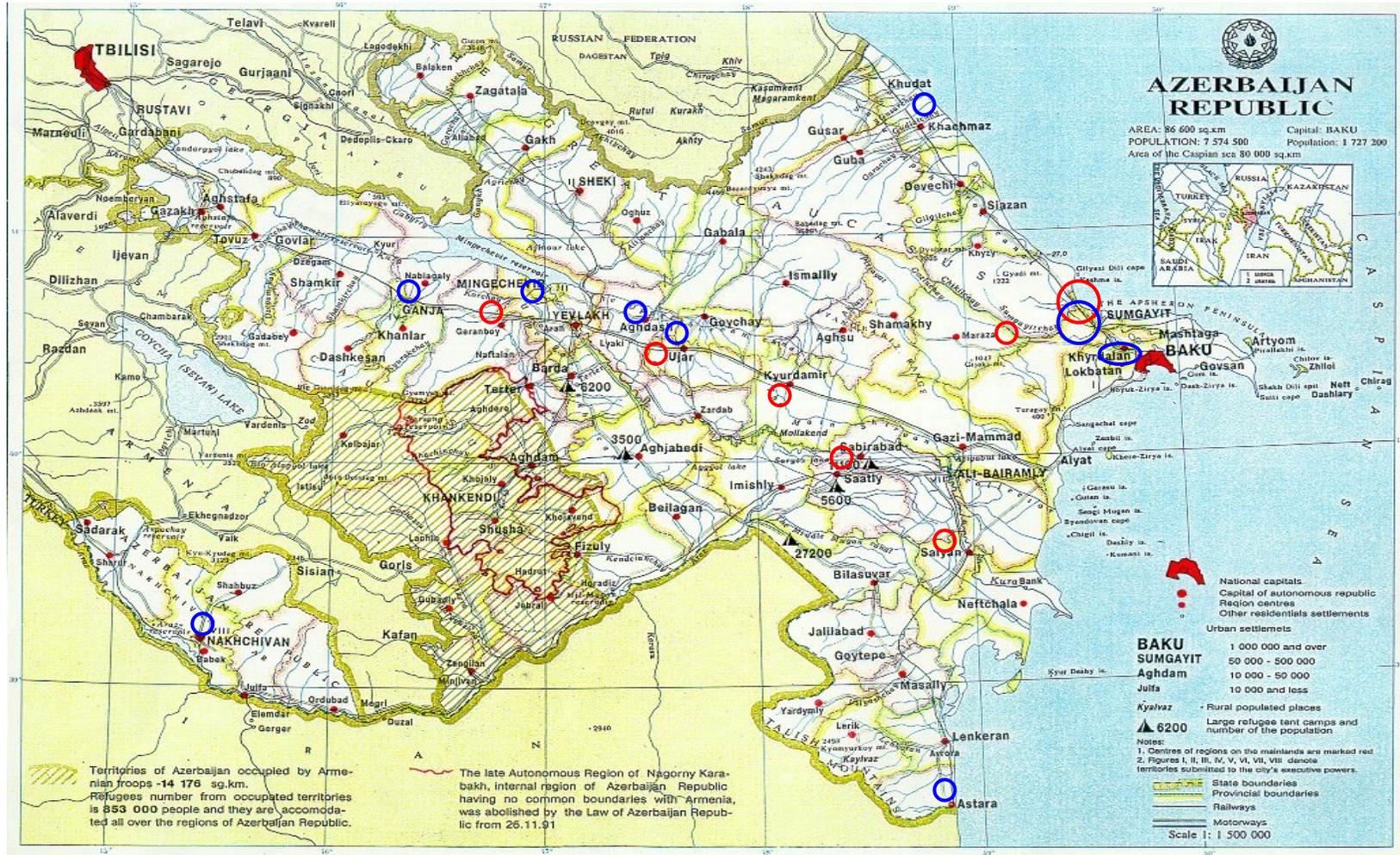


Figure. ○ DDT sampling regions      ○ -Distribution of PCB containing equipments over regions

Table. To continue identifying POPs containing pesticides in the existing deposits (POPs listed in annexes A and B from Stockholm Convention)

Problem area	Target group	Objectives	Measures	Responsible institutions
1	2	3	4	5
<b>Trainings and seminars</b>				
1.1 Impact of tPOPs pesticides on human health and environment	administrational bodies at national and municipality levels; local authorities	To strengthen national capacity and enhance knowledge and understanding among decision-makers	Provide training workshops with information “tool kits” delivering. Training seminars will be targeted to supplement of Administrative instruments of POPs inventories, Institutional arrangements of POPs stockpile sites inspection, methodologies for continue identifying and eliminate the existing POPs pesticides.	MENR,MA, MIE,ME, NGOs
<b>Information campaign for the social groups most affected by POPs pesticides</b>				
1.2 Impact of POPs pesticides on human health and environment	Farmers and local communities; People close to the stockpiles, polygons, waste of toxic substances	To continue identifying POPs containing pesticides in the existing deposits	<p>To conduct questionnaire polling among farmers and local communities, especially in the cotton-growing districts with the goal to gather more information of unknown stockpiles, deposits, sites, contaminated by POPs pesticides (DDT) or presumable POPs. Questionnaire would provide brief info of harmful effects of DDT, about Stockholm Convention, project activities, with given attention to provide contact information.</p> <p>Organize publications in local press, statements in local TV, broadcasting, with attention given on necessity to obtain more reliable and full information of revealed sources of POPs pesticide (DDT) contamination.</p> <p>Prepare and distribute informative materials (brochures, posters, colored leaflets) on the impact of POPs pesticides on human health and the environment.</p>	MENR,MA, MIE,ME, NGOs
	Pregnant women and young mothers	Improve the knowledge of pregnant women and young mothers of the impact of POPs on human health.	Prepare informative material on POPs (DDT pesticides) for distribution through medical centers, ambulance stations by gynecologists, immunologists, endocrinologists to pregnant women and young mothers.	MENR,MA, MIE,ME, NGOs

1	2	3	4	5
<b>Public awareness campaign</b>				
1.3 Impact of POPs pesticides on human health and the environment	Farmers and rural Population; People close to the stockpiles, polygons, waste of toxic substances	To continue identifying POPs containing pesticides in the existing deposits	Organize public hearing in the cotton-growing districts, sites with obsolete POP stocks and wastes, polygons, regional centers of agricultural chemicals and pesticide distribution with information providing of harmful effects of POPs, DDT pesticides, necessity of destroying and utilization as soon as possible. Promote statements from local public, authorities of local communities, local officials during the events. To place posters with brief and remarkable information of POPs (DDT) pesticides alongside of road to villages, districts, polygons with obsolete POP stocks and wastes. To distribute colored leaflets (organize input to consumers bags) with information of POPs (DDT) pesticides, contacts for backward connection in rural, district shops.	MENR,MA, MIE,ME, NGOs
	General Public	Raising of public awareness of activities undertaken in the process of Stockholm Convention principles realization	Organize press-conferences to mass-media representatives with the main goal to information dissemination about activities undertaken to continue identifying POPs containing pesticides or unknown substances presumed to be POPs pesticides in the existing, revealed deposits.	MENR,MH, MA,MIE, ME,NGOs
	Gynecologists, immunologists, endocrinologists	Improve the knowledge of physicians of the impact of POPs on human health	Distribute the prepared materials to medical doctors specializing in occupational diseases, gynecology, immunology, endocrinology. Give presentations on the impact of POPs on human health and up-to-date information on POPs to medical officials and at the Azerbaijan Gynecologist, Endocrinologist Associations annual events.	MENR,MH, MA,MIE, ME,NGOs
	Youth, students and school children from, general education schools, universities, sport complexes	Improve public awareness and knowledge of POPs, its harmful effects on human health	Inform youth, students of the harmful effects of POPs pesticides and the necessity to destroy POPs pesticides as soon as possible by creation websites, providing e-forums, TV, broadcasting, commercial films. Organize preparation and distribution of posters, bags, block notes, stickers, and pens with POPs symbolic for school children close to the stockpiles, polygons of toxic substances.	MENR, MA,MIE, ME,NGO, Municipalities

Table 2- To establish safe management of POPs containing pesticides

Problem area	Target group	Objectives	Measures	Responsible institutions
<b>Training and seminars</b>				
2.1 Impact of POPs pesticides on human health and environment	administrational bodies at national and municipality levels; local authorities	Establish safe efficient management of POPs pesticides	Provide training workshops with information “tool kits” delivering. Training seminars will be targeted to supplement of - Administrative instruments to secure the existing deposits; - Technical instruments to assure the security of POPs; - Institutional arrangements of POPs stockpile sites inspection	MENR, MH, MA, ME, NGOs
<b>Information campaign for the social groups most affected by POPs pesticides.</b>				
2.2 Impact of POPs pesticides on human health and environment	Farmers and local communities; People close to the stockpiles, polygons of toxic substances	Improve the knowledge on the safe efficient of POPs containing pesticide.	Prepare and distribute informative materials, including posters, brochures with instructions on safe management of POPs pesticides, as well as provide information on the correct labeling, maintenance and utilization of POPs containing stocks and wastes.	MENR, MH, MA, ME, mass-media
<b>Public awareness campaign</b>				
2.3 Impact of POPs pesticides on human health and the environment	Farmers and rural Population, People close to the stockpiles, polygons of toxic substances	To establish safe efficient of POPs containing pesticide	Organize public hearing in the cotton-growing districts, sites with obsolete POP stocks and wastes, polygons, regional centers of agricultural chemicals and pesticide distribution with information providing of harmful effects of POPs, DDT pesticides, instructions on safe treatment of POPs pesticides, as well as provide information on the correct labeling, maintenance and utilization of POPs containing stocks and wastes. Promote statements from local public, authorities of local communities, local officials during the events.	MENR, MH, MA
Impact of POPs pesticides on human health and the environment	school children from general education schools, sport complexes, close to the stockpiles, polygons of toxic substances	Improve the knowledge on the safe efficient of POPs containing pesticide.	Organize quiz, competition to increase awareness of POPs, DDT pesticides, to acknowledge of safe regulations in hazardous waste, toxic chemicals, POPS pesticides treatment, labeling of stockpiles and product, containing POPs pesticides, toxic chemicals. Prepare and distribute posters imaging the safe management and treatment of POPs, DDT pesticides.	MENR, ME, MH
<b>Education of stakeholders and those with opportunities to wide distribution of information</b>				

2.4 Education of Harmful effects of POPs	School and kindergarten educators, sport trainers, national military service ideology instructors, close to the stockpiles, polygons of toxic substances.	Improve the knowledge on the safe efficient of POPs containing pesticide.	Suggest to school, kindergarten, national military service, sport complexes that their Environmental study programs include information of Harmful effects of POPs pesticides, DDT pesticides; rules of safe protection from POPs containing pesticide.	MENR, MH,MA, ME,NAS,NGOs
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**Table 3 - To strive for sustainable development of organic agriculture**

Problem area	Target group	Objectives	Measures	Responsible institutions
<b>Training and seminars</b>				
3.1 Impact of POPs pesticides on human health and environment	administrational bodies at national and municipal levels; local authorities	To strive for sustainable development of ecological agriculture	Provide training workshops on policy and decisions on POPs, Fiscal instruments to encourage ecological products.	MENR,MA, NGOs
<b>Information campaign for stakeholders and the social groups most affected by POPs pesticides</b>				
3.2 Impact of POPs pesticides on human health and environment	Farmers and rural Population	To encourage for use of environmental-friendly agriculture products	Prepare and distribute information (brochures), including consulting material and fiscal instruments on reducing of pesticides use, increase the part of organic agriculture, methods of organic agriculture development  Organize publication in local press with accent given to necessity of organic agriculture development, reduce of pesticides use, buffer zone free of pesticides creation close to water sources.	MENR,MA, MIE,ME,N GOs, Municipalities, mass-media
	Scientific and technological community	Stimulating research in the field of sustainable development of ecological agriculture	Websites development, Articles in newspapers, scientific journals, magazines for information, experience exchange goals; Conferences, symposiums, round tables, interactive dialogs on TV, broadcasting, including information material regarding BAT / BEP in agriculture in order to improving, approbation and implementation of BAT/BEP technologies in the field of sustainable development of ecological agriculture.	MENR,MA, MIE,ME,N GOs, NAS
	NGOs – ecological, women, youth, medical, professional unions, etc.	Stimulating project preparation in the field of sustainable development of ecological agriculture	Information campaign providing, based on workshops, round tables, interactive dialogs on TV, e-forums, websites creation on the subject to strive for sustainable development of ecological agriculture	MENR,MA, MIE,ME,N GOs,
<b>Public awareness campaign</b>				
3.3 Impact of POPs pesticides	Farmers and rural Population	To encourage for use of environmental-friendly agriculture products	Supplement the annual agricultural fairs, campaigns to encourage for use of environmental-friendly agriculture products	MENR, MA, NAS,NGOs

on human health and environment	General Public	Raising of public awareness of activities undertaken in the process of Stockholm Convention principles realization	Organize press-conferences to mass-media representatives with the main goal to information dissemination about activities undertaken to encourage for use of environmental-friendly agricultural products	MENR, MA, mass-media
	Farmers and rural Population	To encourage for use of environmental-friendly agricultural products; decrease of using pesticides	Organize regular consultations for farmers with the goal to develop necessary experience and skills of pesticides using , development of organic agriculture.	MENR, MA,NGOs
Education of stakeholders and those with opportunities to wide distribution of information				
3.4 Impact of POPs pesticides on human health and the environment	University teachers, educational staff from medical, professional growth institutions	Education of Harmful effects of POPs pesticides; To strive for sustainable development of ecological agriculture	Suggest to Azerbaijan universities, professional growth institutions that their Environmental study programs include information of harmful effects of POPs pesticides; methods of ecological agriculture, environmental friendly products.	MENR,MH, MA,ME,NA S,NGOs

**Table 4 - To eliminate PXB equipments**

Problem area	Target group	Objectives	Measures	Responsible institutions
<b>Training and seminars</b>				
4.1 Impact of PCBs on human health and the environment	administrational bodies at national and local levels	Enhance knowledge and understanding among decision-makers to eliminate PCB equipments	Provide training workshops with information “tool kits” delivering. Training seminars will be targeted to strengthening policy, improvement of institutional arrangements of PCBs stockpile inventory, inspection; Administrative instruments to secure and eliminate the existing PCB equipments and waste; Enforcement standards and regulation regarding PCB emissions.	MENR,MIE ,Azerenergy SC,MH,ME D
<b>Information campaign for the social groups most affected by PCBs</b>				
4.2 Impact of PCBs on human health and the environment	Persons working, living near PCB containing equipment and waste (including power-, hydro stations, plants, repair or warehouses, there stored one.	Improve the knowledge on the impact of PCBs on human health and the environment	Prepare and distribute informative materials on the impact of PCBs on human health and the environment as well as provide information on the correct labeling, maintenance and destruction of PCB containing equipment.	MENR,MIE ,Azerenergy SC,MH
	pregnant women and young mothers	Improve the knowledge of pregnant women and young mothers of the impact of POPs on human health.	Prepare informative material on PCBs for distribution through medical centers, ambulance stations by gynecologists, immunologists, endocrinologists to pregnant women and young mothers.	MENR,MH, ME
<b>Public awareness campaign</b>				
4.3 Impact of PCBs on human health and the environment	General Public	Raising of public awareness of activities undertaken	Organize press-conferences to mass-media representatives with the main goal to information dissemination about activities undertaken to continue inventory of PCB emissions and PCB equipments exploitation; Utilization of useless PCB equipments and PCB liquid emissions; Safe manage and phase - out of PCB equipments exploitation.	MENR,MIE

	Scientific and technological community	Stimulating research to establish methods for PCB release reduction or elimination	Prepare articles in newspapers, scientific journals, magazines, including information material of BAT / BEP technologies as alternatives to establish methods for release reduction or elimination of PCB stockpiles, waste; clean methodology for remediation of PCB contaminated sites.	MENR,ME, NAS,NGOs
	Gynecologists, immunologists, endocrinologists	Improve the knowledge of physicians of the impact of PCBs on human health	Distribute the prepared materials to medical doctors specializing in occupational diseases, gynecology, immunology, endocrinology. Give presentations on the impact of POPs on human health and up-to-date information on POPs to medical officials and at the Azerbaijan Gynecologist, Endocrinologist Associations annual events.	MENR,MH, NGOs

**Table 5 - To improve the environmental performance in industry, energy and transport sector**

Problem area	Target group	Objectives	Measures	Responsible institutions
<b>Training and seminars</b>				
5.1 POPs dioxin/furan-related environmental and health problems	administrational bodies at national and local levels	To improve the environmental performance in energy, industry, transport sectors	Provide training workshops with information “tool kits” delivering. Training seminars will be targeted to strengthening environment policy in energy, industry, transport sectors; development of national strategy for reduction and elimination of POPs emission; Enforcement standards and regulation regarding dioxin/furan emission, emissions in the combustion plants, vehicle emissions impacts and standards, regulation on fuel efficiency improvements.	MENR,MIE,MT,MED
<b>Information campaign for the social groups most affected by POPs dioxin/furan</b>				
5.2 POPs dioxin/furan-related environmental and health problems	Persons working, living near Industry/Municipality Emissions, the POPs emitting cement kilns, plants, waste dumps and stockpiles, sewerage flows.	Improve the knowledge on the impact of Dioxin and HCB emission on human health and the environment	Prepare and distribute informative materials on the impact of POPs dioxin/furan on human health and the environment as well as provide information on Dioxin and HCB emission arising from Industry/Municipality Wastes and sewerages, open incineration of wastes (including landfills), from animal remains, hospital wastes incineration; vehicle emissions impacts and standards and fuel efficiency improvements.	MENR,MIE,MH, “Azersu” SC,LEP,Municipalities
	pregnant women and young mothers	Improve the knowledge of pregnant women and young mothers of the impact of POPs on human health.	Prepare informative material on POPs dioxin/furan for distribution through medical centers, ambulance stations by gynecologists, immunologists, endocrinologists to pregnant women and young mothers.	MENR,MH
<b>Public awareness campaign</b>				
5.3 POPs dioxin/furan-related environmental and health problems	Farmers and rural Population; People close to the waste dumps and stockpiles, sewerage flows	Improve the knowledge on the impact of Dioxin and HCB emission on health and environment	Supplement the annual campaigns against the open air burning of wood, domestic waste with information on the generation of POPs in the burning process.	MENR,LEP,Municipalities,NGOs
	General Public	Raising of public awareness of activities undertaken	Organize press-conferences to mass-media representatives with the main goal to information dissemination about activities undertaken to improve the environmental performance in industry/energy sector, to reduction and elimination of POPs emission.	MENR,MIE,MT,mass-media

	Gynecologists, immunologists, endocrinologists	Improve the knowledge of physicians of the impact of POPs on human health	Distribute the prepared materials to medical doctors specializing in occupational diseases, gynecology, immunology, endocrinology. Give presentations on the impact of POPs on human health and up-to-date information on POPs to medical officials and at the Azerbaijan Gynecologist, Endocrinologist Associations annual events.	MENR, MIE, NGOs
	Scientific and technological community	Stimulating research in the field of environmental performance improvement in energy, industry, transport sectors	Websites development, Articles in newspapers, scientific journals, magazines for information, experience exchange goals; Conferences, symposiums, round tables, interactive dialogs on TV, broadcasting, including information material of BAT / BEP in industrial processes, waste incineration, chemical manufacture, waste oil refining, fuel efficiency, etc. in order to improving, approbation and implementation of BAT/BEP technologies as alternatives to reduce or eliminate POPs dioxin/furan emissions.	
	Youth, students and school children from, general education schools, universities, sport complexes	Improve public awareness and knowledge of POPs, its harmful effects on human health	Inform youth, students by publishing of booklets, brochures, creation websites, providing commercial films, broadcasting, organize discussions through e-forums, TV dialog of the harmful effects of POPs dioxin/furan, sources of POPs emission and reasons of the generation of POPs in the burning process. Organize production of posters, bags, block notes, stickers, pens with POPs symbolic for school children close to the dumps of domestic waste, POPs emitting cement kilns, plants, sewerage flows.	
	NGOs – ecological, women, youth, medical, professional unions, etc.	Stimulating project preparation, activities undertaken in order to reduce or eliminate POPs dioxin/furan emission	Information campaign providing, based on workshops, round tables, interactive dialogs on TV, e-forums, websites creation on the subject of the impact of POPs dioxin/furan on human health and the environment.	

## National Implementation Plan Key objectives

Action Plan	Allocation of financial resources per years (ths. manat)														Total ths. manat
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
1. Improvement of legislation on POPs substances	20	40	15	-	-	-	-	-	-	-	-	-	-	-	75
2. Destruction of the existing POPs pesticides	50	100	500	500	-	-	-	-	-	-	-	-	-	-	1150
3. To eliminate PCB equipments	50	200	750	1150	500	100	200	200	500	500	500	500	500	500	6150
4. To reduce POPs emission from Industry/Municipality Wastes and sewerages	60	360	1380	1400	2200	4200	800	1500	6300	1500	3500	1500	3000	3000	30700
5. To improve the environmental performance in energy sector	11,1*	134,2*	121,1*	625,1*	322,6*	325,1*	301,1*	300,5*	300,2*	100,1*	100,1*	100,1*	100,1*	100,1*	441,5*
6. To improve the environmental performance in industry sector	40	150	800	1010	2600	5200	2700	2800	6200	3200	5200	3200	4600	4500	42200
7. To enlarge measures on environmental impacts mitigation on transport sector	30	90	580	550	-	-	-	-	-	-	-	-	-	-	1250
8. To decrease the existing not identified POPs	25	85	190	300	300	150	-	-	-	-	-	-	-	-	1050
9. To prohibit production of POPs and other substances that might be included in POPs list in future	50	50	100	100	100	100	100	100	100	-	-	-	-	-	800
10. To strive for sustainable development of ecological agriculture	-	-	10	20	70	10	10	10	10	10	10	10	100	30	300
11. Public awareness-rising on POPs	10% of the envisioned projects														
<b>Total:</b>	<b>325</b>	<b>1075</b>	<b>4325</b>	<b>5030</b>	<b>5770</b>	<b>9760</b>	<b>3810</b>	<b>4610</b>	<b>13110</b>	<b>5210</b>	<b>9210</b>	<b>5210</b>	<b>8200</b>	<b>8030</b>	<b>83675</b>

budget items marked with \* sign are earmarked under state programmes on the Development of Energy Sector

## Execution program of key objectives and measures

Measure	Responsible organizations	Years														Financial resource required ths.manat
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.1	MA, MENR, Parlament	10	10	-	-	-	-	-	-	-	-	-	-	-	-	20,0
1.2	MA, MENR, Parlament	5	10	10	-	-	-	-	-	-	-	-	-	-	-	25,0
1.3	MA, MENR, Parlament	5	20	5	-	-	-	-	-	-	-	-	-	-	-	30,0
2.1.	MA, MENR	20	80	-	-	-	-	-	-	-	-	-	-	-	-	100,0
2.2.	MA, MENR	20	10	20	50	-	-	-	-	-	-	-	-	-	-	100,0
2.3.	MA, MENR	10	10	480	450											950,0
3.1.	«Azerenergy»SC, MENR, SOCAR	20	180	-	-	-	-	-	-	-	-	-	-	-	-	200,0
3.2.	«Azerenergy»SC, MENR, SOCAR	20	10	470	450	-	-	-	-	-	-	-	-	-	-	950,0
3.3	«Azerenergy»SC, MENR, SOCAR	10	10	280	700	500	100	200	200	500	500	500	500	500	500	5 000,0
4.1.	MENR, MH, LEP, Municipalities	10	90	100	300	500	1000	100	100	800	-	-	-	-	-	3 000,0
4.2.	MENR, MH, LEP, Municipalities	10	40	300	350	300	100	100	800	500	500	500	500	500	500	5 000,0
4.3.	MENR, MH, LEP, Municipalities	20	50	330	100	-	-	-	-	500	-	-	-	-	-	1 000,0
4.4.	MENR, MH, LEP, Municipalities	-	-	50	150	300	-	-	-	400	-	-	-	-	-	900,0
4.5.	MENR, «Azersu»SC, LEP, Municipalities	10	90	500	400	1000	3000	500	500	4000	1000	3000	1000	2500	2500	20 000,0
4.6.	MENR, MH	10	90	100	100	100	100	100	100	100	-	-	-	-	-	800,0
5.1.	«Azerenergy»SC, MIE, MENR	10	990	3000	3000	500	1000	1000	400	100	-	-	-	-	-	10 000,0*
5.2.	MIE, MENR	10	90	200	100	100	100	100	50	50	50	50	50	50		1 000,0*
5.3.	«Azerenergy»SC, MIE, MENR	10	90	900	3000	2000	4000	-	-	-	-	-	-	-	-	10 000,0*
5.4.	«Azerenergy»SC, MIE, MENR	100*	3000*	6900*	50000*	20000*	20000*	-	-	-	-	-	-	-	-	100000,0 *
5.5.	«Azerenergy»SC, MIE, MENR	1000*	30000*	700000*	690000*	100000*	100000*	100000*	100000*	100000*	100000*	100000*	100000*	100000*	100000*	1800000,0*
5.6.	«Azerenergy»SC, MIE, MENR	100000*	100000*	500000*	500000*	200000*	200000*	200000*	200000*	200000*	-	-	-	-	-	2200000,0*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6.1.	MIE, MENR, MES	10	20	10	60	100	100	100	100	100	100	100	100	100	-	1 000,0
6.2.	MIE, MENR	-	-	100	100	-	-	-	100	-	-	-	-	-	-	300,0
6.3.	MIE, MENR	-	-	100	200	700	1000	1000	1000	1000	1000	1000	1000	1000	1000	10 000,0
6.4.	MIE, MENR	10	90	500	400	1000	3000	500	500	4000	1000	3000	1000	2500	2500	20 000,0
6.5.	MIE, MENR	10	20	70	200	700	1000	1000	1000	1000	1000	1000	1000	1000	1000	10 000,0
6.6.	MIE, SOCAR, MENR	10	20	20	50	100	100	100	100	100	100	100	100	-	-	900,0
7.1.	MENR, MT, SRP	20	80	100	100	-	-	-	-	-	-	-	-	-	-	300,0
7.2.	MENR, MT, SRP	10	10	480	450	-	-	-	-	-	-	-	-	-	-	950,0
8.1.	NAS, MA, MENR	10	40	100	150	-	-	-	-	-	-	-	-	-	-	300,0
8.2.	NAS, MA, MENR	5	5	40	50	150	-	-	-	-	-	-	-	-	-	250,0
8.3.	NAS, MA, MENR	10	40	50	100	150	150	-	-	-	-	-	-	-	-	500,0
9.1.	MA, MENR, MH	50	50	100	100	100	100	100	100	100	-	-	-	-	-	800,0
10.1.	MA, MENR,	-	-	10	20	70	10	10	10	10	10	10	10	100	30	300,0
<b>Total</b>		<b>325</b>	<b>1075</b>	<b>4325</b>	<b>5030</b>	<b>5770</b>	<b>9760</b>	<b>3810</b>	<b>4610</b>	<b>13110</b>	<b>5210</b>	<b>9210</b>	<b>5210</b>	<b>8200</b>	<b>8030</b>	<b>83675</b>

budget items marked with \* sign are earmarked under state programmes on the Development of Energy Sector



**AZƏRBAYCAN RESPUBLİKASININ NƏQLİYYAT NAZİRLİYİ**

№ A8/01-15/813

“12” aprel 2007 il

**Azərbaycan Respublikası  
Ekologiya və Təbii Sərvətlər Naziri**

**cənab H. Bağirova**

2007-ci il 16 mart tarixli,  
4/708-01 nömrəliyə

**Hörmətli Hüseyn müəllim!**

Azərbaycan Respublikası Prezidentinin 13 may 2005-ci il tarixli Sərəncamı ilə Birləşmiş Millətlər Təşkilatının Sənaye İnkişafı Təşkilatı ilə birlikdə “Davamlı üzvi çirkləndiricilər haqqında” Stokholm Konvensiyasından irəli gələn öhdəliklərin yerinə yetirilməsi ilə bağlı məktubla təqdim edilmiş “Milli Fəaliyyət Planı”na Nəqliyyat nazirliyində baxılmışdır.

Bununla əlaqədar aşağıdakı əlavəni təklif edirik:

- 3.3.7-ci bəndə (əsas məqsəd 7, tədbir 2) “İstismar müddəti bitmiş və istismara yararsız olan avtonəqliyyat vasitələrinin utilizasiya edilməsi” yeni müvafiq bənd kimi əlavə edilsin;

“Milli Fəaliyyət Planı”na dair digər irad və təklifimizin olmadığını bildiririk.

**Hörmətlə,**

**Nazir**

**Z. Məmmədov**





**AZƏRBAYCAN RESPUBLİKASININ  
KƏND TƏSƏRRÜFATI NAZİRLİYİ**

Az 1000, BAKI ŞƏHƏRİ,  
Üz.HACIBƏYOV KÜÇƏSİ, 40

TEL: 493 08 84 FAKS: 493 08 84  
E-MAIL: [aqry@azerin.com](mailto:aqry@azerin.com)

“ 06 ” *aprel* 2007 İL

№ *04/28-08-343*

Azərbaycan Respublikası  
Ekologiya və Təbii Sərvətlər  
Nazirliyinə

4/696-01 nömrəli  
15.03.2007-ci il tarixli  
məktub barədə

Azərbaycan Respublikası Prezidentinin 13 may 2005-ci il tarixli Sərəncamı ilə Birləşmiş Millətlər Təşkilatının Sənaye İnkişafı Təşkilatı (UNIDO) ilə birlikdə «Davamlı üzvü çirkləndiricilər haqqında» Stokholm Konvensiyasından irəli gələn öhdəliklərin yerinə yetirilməsi istiqamətində ilkin mərhələ olan hazırlanmış Milli Fəaliyyət Planına Nazirliyin müvafiq qurumlarında baxılmışdır.

Təqdim olunmuş Milli Fəaliyyət Planında əlavədə qeyd olunmuş irad və təkliflərin nəzərə alınmasını məqsədəuyğun hesab edirik.

Qoşma: 3 vərəq.

Nazir müavini

Aslan Aslanov



**AZƏRBAYCAN RESPUBLİKASI**  
**SƏHIYYƏ NAZİRLİYİ**



**AZERBAIJAN REPUBLIC**  
**MINISTRY OF HEALTH**

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4 Kicik Deniz str., Bakı AZ-1014  
Phone: (994 12) 493 74 37; Fax: (994 12) 498 50 94

04.04.2007 № 08/19-800

№ zə \_\_\_\_\_

№ \_\_\_\_\_

**Azərbaycan Respublikası Ekologiya  
və Təbii Sərvətlər Nazirliyinə**

Ekologiya və Təbii Sərvətlər Nazirliyinin 15.03.2007-ci il tarixli 4/696-01 nömrəli məktubu ilə təqdim olunmuş «Davamlı Üzvi Çirkləndiricilər haqqında Stokholm Konvensiyasından irəli gələn öhdəliklərin yerinə yetirilməsi üzrə Milli Fəaliyyət Planı»na Səhiyyə Nazirliyində baxılmışdır.

Təqdim olunmuş Milli Fəaliyyət Planına dair təkliflər göndərilir.  
Qoşma 1 vərəq.

Nazir müavini

A. Vəlibəyov

AZƏRBAYCAN MİLLİ  
ELMLƏR AKADEMİYASININ  
PREZİDENTİ



THE PRESIDENT  
OF AZERBAIJAN NATIONAL  
ACADEMY OF SCIENCES

AZ 1001, Bakı şəhəri, İstiqlaliyyət küç., 10  
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www.science.az

№ 01-4/127

"30" mart 2007 illy.

Azərbaycan Respublikasının  
Ekologiya və Təbii Sərvətlər  
Nazirliyi

Hörmətli cənab Nazir!

Sizin 16.03.2007 tarixli 4/708-01 sayılı məktubunuza cavab olaraq bildiririk ki, "Davamlı üzvi çirkləndiricilər haqqında" Milli Fəaliyyət Planı AMEA-nın tövsiyyəsi ilə Polimer Materialları İnstitutunun Kimyavi ekologiya laboratoriyasının müdiri Q.Şərifovun iştirakı ilə hazırlanmışdır. AMEA-nın həmin plana əlavə təklifləri yoxdur.

Hörmətlə,  
Prezident

M.K.Kərimov

