Technical assistance for implementation of the EU Persistent Organic Pollutants Regulation

Project overview

Prof. Dr. Ivan Holoubek

Project - Technical Assistance for Implementation of the Persistent Organic Pollutants Regulation - EuropeAid/132428/D/SER/TR

Final Conference
Hotel Wyndham, Ankara, 04/06/2015
What are the persistent organic pollutants?
POPs

Environmental impacts
Production, application, disposal
Environmental Policy and Management

Health impacts

Socio economical impacts

International impacts

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CCl3

C C l
Persistent Organic Pollutants

- Persistent
- Bio-accumulative
- Potential of long-range transport
- Pose a risk of causing adverse effects to human health and the environment
Main groups:

- Technical chemicals
- Pesticides
- Industrial by-products
- Wastes
- Obsolete POPs
- Contaminated sites
Stockholm Convention on Persistent Organic Pollutants (POPs)
The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants. It differentiates between three categories of POPs:

- Intentionally produced POPs that are slated for elimination;
- Intentionally produced POPs are to be reduced and ultimately eliminated, except where there is a specified “acceptable purpose,” such as disease vector control, or exempted usage, in which case the production and/or use of the substance is restricted; and
- POPs that are unintentionally produced as the result of human activity and which are slated for continued minimization and, where feasible, ultimate elimination of total releases derived from anthropogenic sources.
### 12 old Stockholm POPs

<table>
<thead>
<tr>
<th>Pesticide</th>
<th>Industrial Chemical</th>
<th>By-product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldrin</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Chlordane</td>
<td>+</td>
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<tr>
<td>DDT</td>
<td>+</td>
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<tr>
<td>Dieldrin</td>
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<td></td>
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<tr>
<td>Endrin</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Heptachlor</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Mirex</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Toxaphene</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Hexachlorobenzene</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>PCB</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>PCDD</td>
<td>+</td>
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<tr>
<td>PCDF</td>
<td>+</td>
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## 11 new Stockholm POPs

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<td>+</td>
<td></td>
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<tr>
<td>HBB</td>
<td></td>
<td>+</td>
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<tr>
<td>α-HCH</td>
<td>+</td>
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<tr>
<td>β-HCH</td>
<td>+</td>
<td>+</td>
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<td>γ-HCH</td>
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<td>+</td>
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<tr>
<td>PeDBE</td>
<td>+</td>
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<tr>
<td>OCBDE</td>
<td>+</td>
<td>+</td>
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<tr>
<td>PFOS</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>PeCBz</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Endosulfan</td>
<td>+</td>
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<td>HBCD(D)</td>
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EU POPs Regulation
The EC POPs Regulation is the implementing legislation in the EU Member States of the Stockholm Convention.

EU POPs Regulation

EC Persistent Organic Pollutants (POPs) Regulation No. 850/2004 of 29 April 2004 for the protection of human health and the environment + new amendments concerning to newly adopted POPs
Technical assistance for implementation of the EU Persistent Organic Pollutants Regulation
The overall objective of the project is to protect human health and environment from adverse effects of POPs and their waste by prohibiting, phasing out and eliminating their release in line with EU Persistent Organic Pollutants Regulation by the end of 2028.

Purpose of the project is to establish the necessary capacity for effective implementation of EU Persistent Organic Pollutants Regulation in Turkey at national and regional level taking into account social and economic impacts.
Consortium members

NIRAS IC Sp. z o. o. (PL) (Consortium Leader)

IP Consult (DE)

The Finnish Environment Institute (SYKE) (FN)

Ricardo-AEA Ltd (UK)

The AMEC Environment & Infrastructure UK Ltd (UK)

RAST Engineering Services Ltd. Co. (TR)

The Institute for Ecology of Industrial Areas (IETU) (PL)
Project NIRAS director: Mr. Adam Iwasko

Project Team Leader: Prof. Dr. Ivan Holoubek

Deputy Team Leader: Ilona Kirhensteine

Senior POPs Facilitator: Prof. Dr. Ipek Imamoglu

POPs Project Office Assistant: Ms. Özde Öcal

Project Office

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Office Manager

Ms. Gözde Vardar-Smith
Project activities

Activity 1:
Strengthening the institutional and technical capacity for the implementation of POPs Regulation.

Activity 2:
Preparation of legal steps for implementation of the POPs Regulation.
The key issues is NIP update (including New POPs according to UN NIP plan).

Activity 3:
Analysis and determination concern the national and sectorial effects of the POPs Regulation and SC implementation.
## Trainings of Trainers

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Awareness raising

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Project activities
National Implementation Plan of the POPs management in Turkey (POPs NIP)
IP and UP POPs

- Intentionally produced (IP): Polychlorinated pesticides, transformer/capacitor oils (PCB), polybrominated flame retardants, …
- Unintentionally produced (UP): Dioxins/furans (byproducts in thermal processes)

Elimination of stockpiles and wastes (IP) - destruction (conservation)

Elimination of byproducts (UP) - prevention and destruction

Decontamination (IP + UP) - remediation of soils, sludges, water, sediments, …
National Implementation Plan of the POPs management in Turkey (POPs NIP)

Prepared by the team of experts - Prof. RNDr. Ivan Holoubek, CSc., Assoc. Prof. İpek İmamoğlu, Ph.D., Gülün Egeli, M.Sc., Esra Şıltu, M.Sc., Ms. Bursev Doğan Artukoğlu, Mr. Ahmet Daşkınc, Mr. Mahmut Osmanbaşoğlu, Mr. Ertan Öztürk, Perihan Kurt-Karakus, Sinem Erdoglu, Kadir, Gedik
NIP – what we are speaking about

Stockholm Convention on POPs


POPs Protocol
CRLTAP

EU POPs Regulation

POPs

This project is co-financed by the European Union and the Republic of Turkey.
National Implementation Plan of the POPs management in Turkey (POPs NIP) has two parts:

(i) NIP as basic information, overview of country POPs problems and
(ii) supporting information presented in the Annexes of the NIP
Annex I: Persistent Organic Pollutants
Annex II: Country Profile
Annex III: Legal Framework on POPs
Annex IV: Actual results of Turkish national POPs inventory
Annex V: Stockpiling, Wastes and Contaminated Sites – results of inventory
Annex VI: Current Programs and Results on Monitoring of POPs Emissions and Effects on Human Health and Environment
Annex VII: Overview of technical infrastructure for POPs assessment, measurement, analysis, alternatives and prevention measures, management, research and development - linkage to international programs and projects
Annex VIII: Accredited Laboratories that can carry out POPs analysis
Annex IX: List of Stakeholders
Annex X: GAP analysis
Annex XI: SWOT Analysis of POPs management in Turkey
NIP – what we are speaking about

Candidate POPs

CRLTAP POPs

11 new SC POPs

12 old SC POPs
Preparation of new legislation including regulation and enforcement

8 main POPs national priority areas
Inventory of emissions, releases, stockpiles and contaminated sites (for POPs of both Conventions)
Reduction and elimination of releases of intentionally and unintentionally produced POPs, reduction of human exposure to POPs, elimination of legacy POPs stockpiles
8 main POPs national priority areas

Capacity building in the regulating and permitting governmental sector and also in private sector (e.g. POPs management, BAT/BEP implementation)
8 main POPs national priority areas

5 Public education and awareness raising
Monitoring and control of public health and environment
8 main POPs national priority areas

Information exchange and networking, interministerial coordination
Research into the extend of exposure of the population to POPs and the research for safer alternatives

8 main POPs national priority areas
The activities within the scope of the POPs National Implementation Plan are designed to be practiced in short, medium and long term.

The short term activities (period 3-5 years) mostly consist of creating a permanent inventory system and preparation, data gathering and update initial inventory, legislative preparation, sectoral effect assessment and regulatory effect analysis.

Medium term activities (5-7 years) are assessment of the chemicals that need to be banned or restricted by the convention, determination of contaminated sites and the industrial facilities for compatibility with the BAT/BEPs and research studies for implementing these criteria, starting monitoring activities and disposal of some POPs stockpiles left in an environmentally sound manner.

Long term activities (7-15 years) consist of disposing the present POPs stockpiles and POPs waste, remediation of the contaminated sites, constituting a permanent monitoring system on POPs and the studies for management of new chemicals added to the Conventions.

Timetable for Implementation and Measures to Take for Success
Summary of chemicals/POPs problems

Environmental pollution

Chemicals

POPs

MoEU
MoTMAC
MoFWA
MoNEd
MoLSC
MoH
MoD
MoCT
MoFAL
Mo Ec
MoENNR
MoTMAC
MoFWA
MoNEd
MoLSC
MoH
MoD
MoCT
MoFAL
Mo Ec
MoENNR

EIA
Wastes
Production, use
EFFECTS, IMPACTS, RISKS
Air
Water
Soil

MoEU
MoTMAC
MoFWA
MoNEd
MoLSC
MoH
MoD
MoCT
MoFAL
MoEc
MoENNR

Environmental pollution

Chemicals

POPs

MoEU
MoTMAC
MoFWA
MoNEd
MoLSC
MoH
MoD
MoCT
MoFAL
MoEc
MoENNR

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For implementation and management of POPs problems in Turkey, the control mechanism and evaluation of the effectiveness evaluation of the Convention measures have to be clearly defined and established.
Very important for the future implementation of POPs measures is to establish and support the permanent POPs national inventory team(s) which will continue in inventory of obsolete stocks, wastes, emissions, releases, contaminated sites and potential exposure of POPs.
Rising awareness of public for the convention and obligations will help increasing the efficiency of short, medium and long term activities.
A draft by-law is necessary for the full implementation of POPs legislation in Turkey so transposition of EU legislation is essential.

The existence of an institutional and organizational framework for supporting the implementation of the POPs legislation should be supported with legislation.

The identification of competent authorities, relevant authorities and stakeholders and their participation/involvement in the management process on the implementation of the legal requirements should be defined in the draft by-law in order to ascertain their active participation in the management of POPs especially in decision making process.
Now 2015 Future

- Finalisation
- Approval
- Realisation
Operational Plan

Annual budget

Annual control

Now 2015 Future
Teşekkür Ederim