

**6th International HCH & Pesticides FORUM,
Poznań, Poland, from 20-22 March 2001**

Technical summary of sessions

International opinions

- Dealing with obsolete stocks is a global problem. The world total is estimated to be over 500,000 tonnes. We have identified several hundred thousand tonnes of obsolete stocks in developing countries and countries with economies in transition, but believe that there is more.
- The problem is very severe in Central and Eastern Europe where progress continues to be slow, and where the situation may be deteriorating.
- The costs of the problem include the obvious impacts to health and the environment, but also include the less obvious opportunity and replacement costs for the unused pesticides which become obsolete.
- Many international organizations are now working on the obsolete stocks issue. These include FAO, UNEP Chemicals, Inter-Organization Programme for the Sound Management of Chemicals, WHO, UNIDO, Secretariat of the Basel Convention and bilateral donors. Industry and NGOs are also working on this issue.
- Better interlinkage of the sectors environment and health, as stated by WHO, is a basic condition for solution of pesticide problems
- The OECD-UNEP-FAO Workshop in Alexandria, Virginia (US) last year made a number of relevant recommendations. These recommendations should be carried out.
- Global agreements and cooperation are important, but so, too, is Regional Cooperation, e.g., among combinations of countries in Central and Eastern Europe.
- Regional action should be combined with promotion of Integrated Pest Management (IPM) and with efforts to find better disposal options than export to Europe for incineration.

Country	Waste in Tons	Others: soil, water	Remarks
Albania	Former Lindane production		
Azerbaijan	20,000		
Armenia	Incomplete information on possession of considerable stocks of obsolete pesticides		Toxicological studies and proof of serious health effects
Belarussia	6,000 (4,100)		
Bosnia and Herzegovina			
Bulgaria	About 4,000		Measurements of OCPs in water and soil are/were performed
Croatia	Some estimation exists		OCPs and other pesticides are measured in water, sediments, soil, biota and human
Czech Republic	The main part of obsolete pests was destroyed in early 90's. Actual inventory and control is done by new Waste Act and new Chemical Act		The levels of HCHs, DDTs, HCB and many others in the air, water, sediments, soils, biota and human are regularly monitored and controlled, ecological risk assessment of environmental levels of these pollutants is performed
Estonia	700		The levels of OCPs are measured mainly in marine ecosystem

Eastern Germany (former)	Several 100,000s	Large scale soil pollution Mulde aue with HCH and DDT	Leaching from big dump sites into groundwater
Georgia	400 2,000 (report 1999)		High groundwater concentrations in wells and in rivers
Hungary	Ideas for inventory presented and start up of pilot project	49,000 tons soil?	The levels of OCPs are measured in various matrices including ecotoxicological testing
Kazakhstan	Production sites in West-Kazakhstan, East-Kazakhstan in Akmolinsk,	Large diffuse soil pollution Former agricultural aerodromes	Toxicological data and proof of serious health effects
Kyrgyzstan	171	Large-scale diffuse soil pollution ? Former agricultural aerodromes In the Southern regions (Osh) groundwaters are polluted by pesticides and fertilizers	
Latvia	2,000		
Lithuania	3,280	3,500 t polluted soils	
Macedonia	Former Lindane production 33-38,000		
Moldavia	6,600		
Poland	50-60,000 huge amount of time bombs (bunkers) 160,000 - stored in the former producers area	direct spread from bunkers to surrounding soil and threat to groundwater	Measurements of OCPs and other pests in water, sediments, soils, biota and human were/are performed
Romania	1,030	Big chemical plants from Bacau, Râmnicu Vâlcea, Craiova, Pitesti, Turda produced in the past large quantities of pesticides. High HCH and DDT concentration around the lindane factory within Râmnicu Vâlcea along 4-7 km distance is between 0.017-1.907 ppm and 0.031-1.204 ppm. Agricultural regions with an intensive former land use: regions of Arges, Ialomita, Big Island of Braila and Dobrogea.	Measurements of OCPs in water and soil are/were performed
Russian Federation	17-20,000 former production at 23 factories		
Slovenia	350-400		Measurements of OCPs and other pests in water, sediments, soils and human were/are performed
Slovak Republic	Ideas for inventory presented and start up of pilot project		The levels of OCPs and other pests were/are measured in water, sediments, soils, biota including man
Tadjikistan		Large soil pollutions in the Amu-Darya and Syr-Darya basins	
Turkmenistan	1,671		
Ukraine	15,000	Large regional diffuse soil pollution	
Uzbekistan	10,000 - 12,000	Large diffuse soil pollution Fergona, Andijan and Khorezm regions. Agricultural aerodromes	

The information concerning to the levels of OCPs and other POPs you can find in the Report: The persistent, bioaccumulative and toxic substances in the Central and Eastern European countries - The-State-of-the-Art Report (<http://recetox.chemi.muni.cz/>)

Soil session

- Inventory of the polluted sites regarding concentration and transport of pollutants forms a basis for risk assessment and technical solutions
- Risk assessment is a basic tool for setting priorities. This means that the location has to be assessed for waste, soil, water, air and health.
- Technical solutions for polluted soil
 1. Conventional solutions such as controlled disposal
 2. In situ microbiological degradation, using a combination of anaerobic and aerobic treatment (**set-up of network**)
 3. Phytoremediation promising, but more research is necessary (**set-up of network**)

Waste session

- Risk assessment is a basic tool for setting priorities.
- Several presentations on field experience. A lot of knowledge is built up on:
 1. Planning and management
 2. Legal issues
 3. Involvement of local participation
 4. Transport and infrastructure are important
- Technical solutions
 1. Semi-mobile incineration
 2. Gas-phase chemical reduction
 3. Liquid propellant rocket engine technology
 4. Disposal in cement kilns
 5. BCD-process
 6. Perspectives for non-combustion technology
 7. Controlled landfill

Next to the conventional methods, new methods have been presented. Practical experience has been shown on BCD and Gas-phase chemical reduction.

- Assessment as a decision making tool for selection of technical solutions is a basic instrument. Public participation is essential from the first stage.
- The GEF/UNIDO demonstration project on alternative destruction in Slovakia and Philippines should be followed closely.

Concerted actions

- Presentations have been given by UNIDO, INTAS, ICS/UNIDO, GEF/UNIDO, showing the various mechanisms and programs which could stimulate international cooperation on pesticide issues.
- The GEF/UNIDO mechanism established by the POPs-Convention has become an important mechanism for tackling obsolete pesticide problems.

Linking to important initiatives

Dealing with the (obsolete) pesticides problems has obtained increasing global attention by among others

- The POPs negotiations in December 2000 in Johannesburg and the coming negotiations in Stockholm in May this year
- First Continental Conference for Africa on the Environmentally Sound Management of Unwanted Stockpiles of Hazardous Wastes and their Prevention, held in January this year in Rabat
- OECD-FAO-UNEP Workshop on Obsolete Pesticides in September last year in Alexandria
- Recent Creation of the IOMC Coordinating Group on Obsolete Stocks

The Conference for Africa has lead now to a political demand from the African continent for the establishment of a programme of action and the necessary financial tools.