

OPENING ADDRESS OF WHO-ECEH

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Our Centre is pleased to be associated with this workshop for a number of reasons: Currently two major political developments of pan-European dimension are taking shape: the so-called "Environment for Europe" Process, which encompasses all Ministries of Environment and which led to the formulation of the European Action Plan and the WHO driven process which led to the European Interministerial Conference on Environment and Health which took place two months ago in Helsinki and which resulted in the European Environment and Health Action Plan. Both programmes state clearly that the issue of hazardous waste management is a prime issue to be addressed with highest priority by policy makers in the European region. But we were also encouraged to see the integrated approach taken in preparation of this event – looking at all aspects of hazardous waste management, from the environmental perspective, from the health perspective, but also looking at policy options, legal frameworks, public participation, transboundary issues etc. This integrated approach is at the heart of the objectives which have led to the establishment of our centre.

THE DIMENSION OF THE PROBLEM OF HAZARDOUS WASTES

We have to realize that every year 700 to 1000 new chemical compounds join those 90 000 already in commercial use. Staying abreast of the potential health and ecological effects of these chemicals is a difficult task. It is estimated that between 300 to 400 million tons of hazardous waste is produced globally each year. If not properly dealt with, this waste eventually finds its way into the environment.

HUMAN HEALTH AND ENVIRONMENTAL EFFECTS

We are gathered here in Prague at the centre of Europe. Almost every country in the European region has operating or disabandoned hazardous waste sites that could endanger the environment or human health. Furthermore – and in particular when we look at the formerly centrally planned economies of Central- and Eastern Europe – waste sites have traditionally been located close to industrial areas. Due to the prevailing investment patterns these areas are unfortunately in or near major centres of human population. A number of health studies have estimated the results of chronic exposure, but direct cause effects relationships are still difficult to establish. But, we know that in particular long term exposure especially of sensitive population groups may result in the development of chronic sometimes irreversible ill-effects. For a number of reasons the exposure of a population has seldom been properly assessed. First, the waste consists of complex mixtures of compounds. Second, the toxicity of a single agent may vary over time or through environmental degradation. Finally, routes of exposure can vary.

Another problem is the choice of the health outcomes to investigate. From the methodological point of view the main categories are biological markers, clinical markers and reported syndromes. It is unfortunate but important to underline that safe levels of contaminants in the environment from a public health standpoint still pose a difficult dilemma.

Efforts in the direction of establishing safe levels are carried out in the form of the WHO drinking water guidelines and air quality guidelines which are currently being revised by our centre. Or, take as an example the joint WHO/UNEP IPCS programme which stands for International Programme on Chemical Safety which outlines safe levels and the fate of chemicals in the environment.

EUROPEAN SITUATION

But still, inadequate treatment and disposal of hazardous waste constitutes a potential environmental health hazard for the entire European region.

Our centre is currently publishing a report on the Environment and Health situation in the entire European region. The approach taken was to carry out an exposure assessment, looking at the population density, overlaying this with the concentration of pollution, so that we know how many people are exposed to potentially harmful concentrations. We then looked at the existing epidemiological literature and estimated how many people might potentially be affected.

The CE report concludes that in relation to hazardous waste management, a large number of people in the European region are exposed to contaminated ground water and soils affected by leakage from sanitary landfills.

I have however to underline that most of the available data relate to those European countries that belong to the EU and the OECD but there are good reasons to expect that the potential environmental health risks from waste disposal are given greater in the CCEE and the NIS.

MANAGEMENT OF HAZARDOUS WASTE

The types of management of hazardous waste varies widely within the region. Incineration is increasingly used for the disposal of hazardous waste but the disposal of hazardous waste in landfills is still practiced. But other similar effective waste recycling schemes operate in some countries of the European region.

While in those European countries which are members of the OECD more than 70 % of hazardous waste is dismissed in landfill sites about 8 % is incinerated and 10 % is recovered. In CCEE, however, the management of hazardous waste had much lower priority than industrial output, the CCEE have many thousands of dumps of unprocessed industrial waste which pose serious potential environmental hazards to health.

SANITARY LANDFILLS, INCINERATION

Dumping in sanitary landfills continues to be the prevailing option for waste disposal in Europe. The difficulty of finding adequate new sites and the increasing concern about the consequences from the disposal of untreated waste landfills, however are leading to increasing use of other methods.

Of the technological options for waste treatment and disposal incineration plants have probably undergone the most extensive technical evolution in the last fifteen years owing to concerns about the emission of hazardous compounds to the atmosphere. In the 70s and 80s the general public began to

show such an increasing concern about the issue of Environment and Health. The public's concern resulted from the Seveso accident. Extensive campaigns to monitor incinerators were carried out detecting PCDDs and PCDFs. However, only a few studies have examined the possible adverse health effects of exposure to emissions from incinerators.

PUBLIC OPINION

Understandably, the public is concerned about the effects of hazardous waste disposal. Let me provide you with an example: A survey carried out in 1990 by the department of the environment in the UK found that the public was more concerned about the disposal of hazardous waste than any other environmental issue. Our task during this workshop is to come up with a realistic estimate, ensuring that false health claims, made in good will or following a political agenda, might not result in inappropriate decision-making with respect to future investment, in particular here in CCEE. And it is here where our Centre sees a crucial role to play. The technical cooperation activities which are carried out through our National Integrated Programmes on Environment and Health (NIPEHs) aim at building up a national capacity to ensure that

appropriate information becomes available to the decision-makers in Central- and Eastern Europe. I am glad to say that Mr. Philip Rushbrook from our Nancy Unit will later provide you with a more in depth overview about this issue.

TRANSFRONTIER MOVEMENT OF WASTE

Also the movement of hazardous waste across national borders has reached a significant dimension. More than two million tonnes of hazardous waste moves across the frontiers of European members of the OECD. In addition, European market economy countries seem to continue sending large amounts of waste to eastern Europe. To control the movement of waste the OECD adopted some principles which were later embodied in an EU directive and included into the Basel convention on the control of Transboundary Movements of hazardous wastes and their disposal. Unfortunately not all member states of the WHO European Region have so far signed the Convention.

It is a personal pleasure to welcome in this respect a colleague, Ms. Nalini Basavaraj-Schroth, who is now working with the secretariat of the Basel convention.