Background and objectives of Environmental Monitoring of POPs in East Asian countries

Yoshitoku YOSHIDA Environmental Health and Safety Division Ministry of the Environment

BACKGROUND

a. Introduction

The Stockholm Convention on Persistent Organic Pollutants (POPs) is the first global, legally binding instrument whose aim is to protect human health and the environment by controlling the production, use and disposal of toxic chemicals.

Article 16 of the Stockholm Convention requests comparable monitoring data on the presence of POPs. Environmental monitoring data are essential for evaluating the effectiveness of the Stockholm Convention to prevent the global detrimental effects of POPs.

b. Past 2 Workshops

In order to facilitate the regional POPs monitoring in East Asia, the Ministry of the Environment of Japan hosted two workshops, held on 2-4 December 2002 and on 14-15 December 2003 respectively. These Workshops were attended by government officials and/or experts from ten countries (Cambodia, China, Indonesia, Japan, Republic of Korea, Malaysia, the Philippines, Singapore, Thailand and Vietnam), as well as experts from UNEP, GEF and AMAP (Arctic Monitoring and Assessment Programme).

The Chairman's summary from the 1ST Workshop was as follows:

- 1. The Workshop shared information on the levels of 12 POPs in the environment in East Asian countries.
- 2. Recognizing insufficient information on the levels of POPs in the environment, the Workshop agreed that further efforts should be made to fill in the data gaps.
- 3. The Workshop recognized a need to draw an overall picture of environmental

pollution caused by POPs in the East Asian region in response to the requirements of article 16 of the Stockholm Convention on POPs.

- 4. The Workshop stressed that regional cooperative efforts in the East Asian region are crucial for identifying the environmental levels of POPs.
- 5. The Workshop acknowledged that availability of financial and technical assistance is a key factor for the promotion of POPs monitoring in the East Asian region.
- 6. The Workshop recommended that regional efforts should be promoted to establish a framework for environmental monitoring of POPs that suits the East Asian region by taking into account all the various conditions relevant to the countries in the region.
- 7. The Workshop agreed that discussions on technical aspects for environmental monitoring of POPs in the East Asian region should be initiated by having a second Workshop. The Ministry of the Environment, Japan, expressed a willingness to host the Workshop.

The Chairman's summary from the 2nd Workshop was as follows:

- 1. The Workshop shared information on relevant international activities for the effectiveness evaluation of the Stockholm Convention, including the outcomes of UNEP chemical's workshop on Global POPs Monitoring Programme (GMP) which had been held in March 2003. The Workshop has been informed that a draft guidance document on environment monitoring will be developed by the experts of GMP by March 2004.
- 2. In order to develop regional strategies, the Workshop discussed four topics that had been the issues at the GMP workshop, including:
 - 1) Sample Matrices, Site Selection and Sampling Techniques
 - 2) Substances and Analytical Techniques
 - 3) QA/QC and Data treatment
 - 4) Data communication

Recognizing needs of information on the levels of POPs in the environment, the Workshop has agreed that further efforts should be made to fill in the data gaps.

3. Based upon the results of the discussion, the Workshop then discussed future works

in the region.

The Ministry of the Environment of Japan has expressed its willingness to support regional activities on environmental monitoring, by:

- providing technical support of sampling (e.g. air sampling);
- supporting analysis of samples collected in the region, by providing training of POPs analysis; and,
- contributing to data validation, QA/QC and data treatment for the data gained through above activities.

Participants have welcomed Japan's offer and have agreed to consider possible cooperation with regard to this activity. The Ministry of the Environment, Japan, will invite respective countries in the region in January 2004 to participate in trial phases that will be started during 2004. The countries that would like to support these activities in the region are expected to contact Japan by the end of February 2004. Republic of Korea has expressed its general support to Japan's proposal and mentioned that Republic of Korea will announce concrete contents of its contribution later. In addition to that, Republic of Korea proposed that its willingness to contribute to the region's information warehouse on national/regional level activities related to POPs monitoring.

The Workshop has decided that details of the proposed activities will be further discussed by an expert-working group, which had been agreed to be established in the first Workshop in 2002. The Workshop has noted that UNU's ongoing activity in East Asia is a good model of capacity building in this region. The Workshop has recognized importance of both data confidentiality and transparency.

- 4. The Workshop further discussed possible works of the expert-working group. The possible works have included establishing criteria on sites/species selection and introduction of bioassay and bioanalytical tools. Several participants noted that the experts for the working group are needed to be designated by the governments. A participant mentioned that criteria of expert selection, by which established by international organization might be useful for countries to nominate experts. The Workshop discussed definition of region and concluded that the definition should be refined based on several factors including the conference of parties of the Stockholm convention' decision.
- 5. The Workshop has agreed that the outcome of this Workshop should be reported to the first conference of parties of the Stockholm Convention and the relevant

international organizations/institutions including the UNEP Chemicals.

- 6. The Workshop has recommended that regional efforts should be continued to establish a framework for environmental monitoring of POPs that suits the East Asian region by taking into account all the various conditions relevant to the countries in the region.
- 7. The Workshop has agreed that further discussions on designing regional monitoring of POPs in the East Asian region should be continued in the third Workshop. The Ministry of the Environment of Japan has expressed a willingness to host the future Workshop.

c. Trial POPs monitoring in East Asian countries

Based on the discussion in these Workshops, the Ministry of the Environment of Japan proposed a trial phase of the monitoring initiative.

Participants have welcomed Japan's offer and have agreed to consider possible cooperation with regard to this activity. The Ministry of the Environment, Japan, hosted the 1st Expert Working Group on 24 January 2005 before starting the trial phase of the monitoring initiative. Experts from Indonesia, the Republic of Korea, the Philippines and Vietnam attended in the Expert Working Group meeting, in order to prepare for their participation in the trial monitoring.

The trial phase of the monitoring initiative started in spring 2005. Experts from Indonesia, the Republic of Korea and the Philippines and experts from the National Institute for Environmental Studies (Japan) and Japan Environmental Sanitation Center cooperated the sampling, analysis with GC/MS, data validation and QA/QC.

In order to share information on the POPs Monitoring Initiative in East Asia, the Ministry of the Environment of Japan organized a side event at the first meeting of the Conference of the Parties to the Stockholm Convention in Punta del Este, Uruguay in May 2005.

OBJECTIVES OF THE 3RD WORKSHOP

The 3rd Workshop follows on the last two workshops and discusses the following issues:

(1) Ways to establish a monitoring plan for the evaluation of the effectiveness of the

- Stockholm Convention in East Asia
- (2) Evaluation of the POPs pollution using existing monitoring data
- (3) Evaluation of the capacity for analyzing POPs in East Asia and possible international co-operation in POPs analysis
- (4) Progress report of the trial monitoring
- (5) Plan for the continued POPs monitoring in East Asia.