Session 3

Current Status and Future Directions of Activities under the Waste Management Partnership

> Tokyo, Japan 10 March 2010

Outline of Session 3

Part 1: Report on Current Status and Future Directions of Activities under the Waste Management Partnership

Part 2: Collaboration Possibilities with Other Partnership Areas

Part 3: Discussions on Future Activities under the Waste Management Partnership

Points for Discussion in Session 3

- What are the challenges in implementing activities under the Waste Management Partnership Area?
- 2. What activities are lacking in order to reduce mercury release from waste management in each country?
- 3. How will we create the Resource Person List?
- 4. How can this Partnership Area collaborate with other Partnership Areas?
- 5. How will we revise the Business Plan?

Part 1. Report on Current Status and Future Directions of Activities Under the Waste Management Partnership

Outline of the Presentation

- a. Recommendations from the First Meeting of the Partnership Advisory Group on the Waste Management Area
- b. Current Status and Challenges Regarding the Activities under the Waste Management Partnership
- c. Discussion on Creation of a Resource Person List

a. Recommendations from the First Meeting of the Partnership Advisory Group on the Waste Management Area Overview of the Partnership Advisory Group Meeting

- Held in Geneva, 31 mar 2 April 09
- Objective: to encourage, review and exchange information on work of UNEP global mercury partnership
- Japan, as leading country of waste management area, reported:
 - Results of the 1st face-to-face meeting (12-13 mar 09)
 - Finalized business plan
 - Plan to develop BAT/BEP guidance document on waste incineration

Recommendation 1: Separate Collection and Take-back Programmes should be promoted

Segregation and take-back programmes are introduced & promoted through the BAT/BEP Guidance

> Formulation of such projects will be promoted through the Partnership

Recommendation 2: Various projects should be designed to demonstrate different waste management techniques & practices

Various techniques & practices are introduced & promoted through BAT/BEP Guidance

> Formulation of such projects will be promoted through the Partnership

Recommendation 3: Business plan should clearly explain efforts in <u>different stages of waste management</u> (i.e. Collection, separation, incineration, final disposal)

Recommendation 4: <u>Life-cycle</u> <u>approach</u> is needed (e.g. reduction of mercury in products through involving manufactures)

Realized partly through cooperation with Mercury-Containing Products Partnership Area Recommendation 5. Increased cooperation with the Mercury-Containing Products Partnership Area should be promoted

- Each area is invited to meetings of the other area
- Further collaboration will be discussed in later in the session

b. Current Status and
Challenges Regarding the
Activities under the Waste
Management Partnership

Current Status and Challenges: How they were identified

- Source of information
 - Request for Information (RFI) answered by Meeting Participants
 - Information from contact persons of projects listed in Business Plan

Information was gathered based on indicators of progress, which were agreed upon in the 1st Waste Management Partnership Area Meeting (Tokyo, 12-13 Mar 09) Indicator 1: Estimated amount of mercury diverted from waste stream by the implementation of the projects under the Partnership (including estimates of impacts of pilot projects implemented in a country) (1)

Country/ Name of Estimated amount of mercury diverted from Organizat **Project/Activity** waste stream as a result ion Thailand Collection & 4.2 kg of Hg diverted as a result of diversion of 700,000 waste lamps (if average content of recovery of waste mercury in the fluorescent lamp is about fluorescent lamps 6mg/unit) USA National Vehicle Removed 635,000 mercury switches since 2006 Mercury Switch Removal Program GPNP Put the batteries 3 tonnes of products containing mercury or with the batteries around 1,000 Kg-Hg in the 1st year

Estimated amount of mercury diverted reported by participants:

GPNP = Grupo Parques Nacionales Panama/Zero Pollution Alliance (Panama)

Indicator 1: Estimated amount of mercury diverted from waste stream by the implementation of the projects under the Partnership (including estimates of impacts of pilot projects implemented in a country) (2)

Reports from projects in Mercury-Containing Products Partnership Area (cross-referenced in Business Plan):

Name of Project	Estimated amount of mercury diverted from waste stream as a result
Costa Rica Hospital Assessment Project	5.4 kg (approximate, as reported to USEPA)
Chile Hospital Assessment Project	54.0 kg (approximate, as reported to USEPA)
China Hospitals Project	22.146 kg of mercury diverted from 1-year pilot project in 2 hospitals in Beijing



There are 27 Partners in the Waste Management Partnership Area, as of 4 February 2010

- 7 Governments
- 2 International organizations
- 13 NGOs
- 5 Others

In Dec 08, the number of Partners was 12. Since then, <u>15 new Partners have joined!</u>

Information: How to Become a Partner

- Interested entities/individuals submit (1) letter of support and (2) registration form to UNEP
- In the letter, entities/individuals should specify how they can contribute to the UNEP Global Mercury Partnership.
- For more information, please visit the UNEP Website



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http://www.chem.unep.ch/mercury/Sector-Specific-Information/Current_partners.htm

Indicator 3: Available information on identification and characterization of mercury contained in waste streams

Available information reported by participants:

Country/ Organization	Name of project/activity	Information gained through project/activity on identification & characterization of mercury in waste streams
UNIDO	Activities in artisanal and small-scale gold mining *	Mercury-containing tailings easily become methylated and bio-accumulable. Thus action at production level is essential in this area
Cambodia	Project on Mercury Inventory, 2007	Estimated amount of mercury release from waste stream is 466.556 kg/year (minimum) to 4665.56 kg/year (maximum), based on UNEP Mercury Toolkit
Thailand	Collection & recovery of waste fluorescent lamps	Most mercury was accumulated in the phosphor powder
GPNP	Put the batteries with the batteries	Much mercury exists in batteries in homes and businesses, as well as in dental clinics and hospitals

* = Project listed under the Business Plan

Indicator 4: Completion of BAT/BEP Guidance Document

The First Draft has been formulated, as presented and discussed in Day 1

Indicator 5: Number of national projects on ESM of mercury waste implemented

National ESM projects assisted through <u>bilateral/multilateral cooperation</u>:

Supporting Country/ Organization	Target Region/ Country	Name of Project/Activity
SBC/USA	Latin America (Uruguay, Costa Rica, Argentina	ESM of mercury waste in Latin America implemented through Basel Convention Regional and Coordinating Centre in Uruguay
UNEP	Cambodia, Philippines, Burkina Faso, Chile, Pakistan	Project on "Management of Mercury and Mercury- Containing Wastes" (from 2009)
UNIDO	Uruguay (similar project in the Philippines)	Project on end-of-life compact fluorescent lamps
	Brazil, Sudan, Tanzania, Indonesia, Laos, etc.	Activities in artisanal and small-scale gold mining with training and introduction of cleaner technologies*
Japan	Asian Countries	JICA training course on hazardous waste management & disposal *

* = Project listed under the Business Plan

Indicator 5: Number of national projects on ESM of mercury waste implemented

Other national ESM projects:

Country/ Organization	Name of Project/Activity
Japan	Research on long-term storage of collected mercury
Thailand	Capacity building for local governments on household hazardous waste management
GPNP	Segregation program for batteries

Indicator 6: Number of countries that prepared national inventory of mercury waste (1)

Inventories formulated through <u>bilateral/multilateral</u> <u>cooperation</u>:

Supporting Country/ Organization	Target Region/ Country	Name of Project/Inventory
UNEP	Cambodia, Pakistan, the Philippines and Syria	 Asia Mercury Inventory Toolkit Pilot Project in Cambodia, Pakistan, the Philippines and Syria Example of inventory reports: Cambodia Mercury Inventory Report (2008) Mercury Assessment for the Philippines Using UNEP Inventory Toolkit (2008) Inventory of mercury releases in Syrian Arab republic (2009)
USA	Various countries	Funds mercury inventories in various countries

Indicator 6: Number of countries that prepared national inventory of mercury waste (2)

Other inventories or statistics made available:

Country/ Organization	Name of Project/Inventory
Germany	Official statistics cover mercury and mercury-containing wastes. Newest report on hazardous wastes is published in 2008 and valid for 2006 (in German)
Japan	 National Mercury Emission Inventory (inventory of emission in 2005, published in 2007)
USA	Waste generators must report amount of mercury waste to EPA, and EPA makes public report of this information
	Facilities using mercury must report to Toxics Release Inventory, which is made publicly-available
GPNP	Mercury inventory released in Dec 2008, which includes mercury releases from waste treatment & waste dumping
	2

Indicator 7: Number of projects to promote awareness and education (1)

Awareness-raising activities reported by participants

Country/ Organization	Project/activities to promote awareness and education
UNEP	Development of brochures, guidelines, assessments, and other information materials (accessible from Web Page)
UNIDO	Awareness raising component in Uruguayan project in order to increase collection of used florescent lamps
Philippines	"A Management Guidebook, Mercury-Containing Lamp Waste Management", developed through collaboration among DOE, industry and UNDP
Panama	Poster campaign
GPNP	Awareness and educational campaign through newspapers, magazines and Art & Info mercury workshops
USA	Publishes information on safe management and disposal of mercury- containing products and how to package, transport, and dispose mercury
	Encourages schools to prevent mercury splits through efforts such as provision of "Mercury: An Educator's Toolkit"
	 Makes public information on how to address dental amalgam waste through websites

Indicator 7: Number of projects to promote awareness and education (2)

Awareness raising components in Mercury-Containing Products Partnership Area projects (cross-referenced in Business Plan):

Name of Project	Activities to promote awareness and education
China Hospitals Project	 Awareness raising among health care workers, who then instruct patients
Basel Mercury Waste Project	 Trainings of national governments on managing mercury waste
Chile Hospitals Project	 Educational seminars on proper collection, management, clean-up and disposal
Costa Rica Hospitals Assessment Project	 Development of Mercury-Containing Materials Disposal Plan Educational seminars on proper collection, management, clean-up and disposal
Regional Workshops on Elimination of Mercury in Healthcare	 Organization of 4 regional workshops in South East Asia, Latin America, Southern Africa and South Asia to promote substitution of mercury in health care in developing countries

Challenges faced in implementing activities under the Waste Management Partnership Area

(Responses from the Participants to 'Request for Info')

- Lack of political will
- Lack of awareness and public participation (e.g. due to poverty)
- Lack of laws and regulations or lack of their enforcement (e.g. illegal import of e-waste due to lack of enforcement of Basel Convention)
 - Lack of appropriate techniques (including those for final disposal & storage)
- Lack of funding

c. Discussion on Creation of a Resource Person List

Background: Why create a resource person list?

In the 1st Waste Management Partnership Area Meeting (Tokyo, 12-13 Mar 09), participants agreed to prepare a list of resource persons in the field of mercury waste management.



Resource Person List: For what purpose? (1)

- Objective: To create a list of resource persons that Partners can consult with when they wish to start/implement a project on mercury waste management.
- Usage: Partners may consult with resource persons through e-mails or may hire the person as adviser or trainer for a project.

Resource Person List: For what purpose? (2)

- Objective: To create a list of resource persons that can provide expertise for activities under the Waste Management Partnership Area (e.g. for meetings, BAT/BEP Guidance, etc.)
- Usage: Partners may consult with the resource persons through e-mails or invite them to participate in Partnership Area Meetings.

Resource Persons: In What Areas of Expertise? Some ideas...

Technical

- 1. Collection and recycle of products (amalgam, lamps, EEE, batteries, measurement devices, etc)
- 2. Flue gas and leachate treatment
- 3. Sludge and fly ash treatment
- 4. Long-term storage and disposal of elemental mercury
- 5. Remediation of mercury-contaminated sites

Institutional

- 1. Laws and regulations
- 2. Awareness raising, public participation

Resource Persons: What information do we want about the resource persons?

- 1. Area of expertise
- 2. Name
- 3. Post, organization
- 4. Working language
- 5. Contact information (e-mail address, postal address, etc)

Resource Person List: For whom?

Option 1: For Partners only (closed for non-Partners)

Option 2: Non-partners can also utilize the list if they request through the Secretariat

Option 3: Open to the general public through Internet

Resource Persons List: How will it be managed?

Initially, the Government of Japan could manage the resource person list, receiving inputs from Partners and other stakeholders.

In the future, its management may be transferred to an appropriate international entity.

Thank you for your attention!

Let us know your ideas!