参考資料

参考資料１　　UNEP 世界水銀パートナーシップ廃棄物管理分野　ビジネスプラン
（カバーシート及び更新されたビジネスプラン）

- カバーシート

UNEP Global Mercury Partnership
Waste Management Area

Partnership Area Leads: Professor Masaru TANAKA, Tottori University of Environmental Studies, Japan/Ministry of the Environment, Japan

1. Issue, Objective, and Strategy:

The objective of the Waste Management Partnership Area is to minimize and, where feasible, eliminate mercury releases to air, water, and land from mercury waste by following a lifecycle management approach.

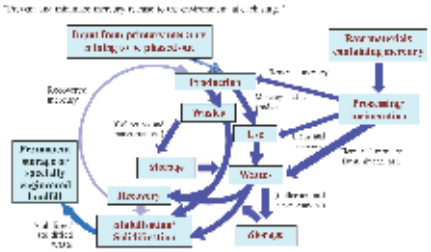

Figure 1. Basic concept of mercury management

To attain this objective, the partnership area puts priority on the following actions:

a) Identify and disseminate environmentally sound collection, transportation, treatment and disposal techniques/practices for different kinds of mercury wastes to reduce mercury releases from waste by following a lifecycle management approach;

b) Assess environmental impacts of current waste management practices and processes, including providing support to countries to assess their national situation and needs; and

c) Promote public awareness of the hazards regarding mercury wastes and their management and support community engagement in the activities of the Waste Management Partnership.

Figure 2. Overview of the Waste Management Partnership Area

2. Contribution to Implementation of the Minamata Convention:

Specific needs of countries to ratify and implement the Minamata Convention have been identified as (1) review of existing laws/regulations and waste management infrastructure to meet the requirements, and (2) information on technologies and costs to implement ESM of mercury wastes (cost information upfront) in the 3rd face-to-face meeting of the Waste Management Partnership Area. The Waste Management Partnership Area could meet such needs by providing information on successful stories and case studies on the above items in both developed and developing countries.

3. Outreach Activities:

Three face-to-face meetings have been held since 2008, and representatives from other partnership areas have attended the meetings.

4. Featured Project(s):

1) Resource Person List: A list of resource persons who could give advice from technical standpoint on activities of this area and those for reducing mercury releases from waste management has been prepared (currently in 3rd version).

2) Draft Good Practices for Management of Mercury Releases from Waste (Draft Good Practice Document): The 1st draft was presented as non-paper at INC2 in Jan 2011 (currently under revision).

3) Fluorescent lamp compaction plant & final disposition of mercury containing waste (dilution and solidification) controlled area: The project aims to construct the first fluorescent lamps compaction plant in Panama region, and prepare for the final disposition of mercury containing waste. [Carried out by Alianza Contaminacion Cero, NGO]

5. Future Work to be carried out to support implementation of the Minamata Convention:

Key upcoming, planned partnership area efforts to support implementation of the Minamata Convention are:

1) Provide necessary support in the update, revision, dissemination and implementation of the Basel Convention Technical Guidelines

2) Update the Good Practice Document including experiences in establishing legal framework to ratify and implement the Convention and in applying technologies

3) Support the development of UNEP's Practical Sourcebook on Mercury Waste Storage and Disposal

4) Increase public awareness on mercury and mercury-added products and wastes and their impact on human health and the environment

6. Collaboration with other partnership areas and relevant stakeholders:

Future collaboration plan with other partnership areas includes sharing information, coordinating activities and designing joint projects. Specific collaboration fields are;

- Mercury-Containing Product: Sharing information on available mercury-free alternatives (So far, Information on mercury-added product labeling requirements has been provided as an input to the Good Practice Document)/ Coordination of activities such as utilization of the Basel Convention Technical Guidelines/ Designing joint projects such as R&D of mercury-free alternatives

- Supply & Storage: Coordination of activities such as utilization of the Basel Convention Technical Guidelines, testing stabilization & solidification technologies, and collecting information to develop storage criteria for different types of mercury wastes (So far, information on the technology of mercury stabilization & solidification has been provided as an input to the Good Practice Document)

- ASGM: Sharing recognition of importance of reduction/elimination of mercury use in ASGM.

For More Information:

Visit our web site:
http://www.unep.org/chemicalsandwaste/Mercury/GlobalMercuryPartnership

Or contact the Waste Management Partnership Area lead: ehs@env.go.jp

- 更新されたビジネスプラン

UNEP Global Mercury Partnership[61]

Draft Revised Business Plan of the Mercury Waste Management Partnership Area - July 2014 -

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This Business Plan describes the activities of the Mercury Waste Management partnership area of the United Nations Environmental Programme (UNEP) Global Mercury Partnership. It serves as a planning and communication vehicle both for Partners and others.

The purpose of the business plan is to provide a framework for developing and implementing projects. The business plan is to serve as a resource for providing a common, cohesive structure for implementing the UNEP Global Mercury Partnership on Waste Management.

Through UNEP Governing Council Decision 24/3, UNEP is requested, working in consultation with Governments and other stakeholders, to strengthen the UNEP Global Mercury Partnership. The Government of Japan initiated this partnership area in early 2008 as a means of strengthening the UNEP Global Mercury Partnership on Waste Management.

The partnership is open for government and stakeholder participation. In UNEP Governing Council Decision 24/3 part IV paragraph 27, UNEP is tasked with working in consultation with Governments and stakeholders to strengthen the UNEP Global Mercury Partnerships. New activities and partners are encouraged within the UNEP Global Mercury Partnership.

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[61] The UNEP Global Mercury Partnership is a *voluntary initiative* where government, non-government, public and private entities have agreed to work together to achieve the goal of the Partnership. For more information on the UNEP Global Mercury Partnership, please see Overarching Framework UNEP Global Mercury Partnership" available from http://www.unep.org/hazardoussubstances/LinkClick.aspx?fileticket=rsuIRqojHyc%3D&tabid=269&language=en-US

I. Summary of the Issue

Mercury waste[62] is not readily identifiable since waste consisting of elemental mercury, containing or contaminated with mercury enters the waste stream along with other municipal, medical, agricultural and industrial waste. Therefore, mercury concentrations in most waste streams are directly related to the level of mercury in the products or materials.

This partnership aims to support the objectives of Overall Goal of Partnership; minimize and, where feasible, eliminate mercury releases to air, water, and land from waste containing mercury and mercury compounds by following a lifecycle management approach.

Lifecycle management (LCM) is a framework to analyse and manage the sustainability performance of goods and services (UNEP/SETAC 2009). When it is applied to waste management, in the narrow sense, lifecycle of waste management covers waste separation at source, collection, transportation, treatment and disposal, and in the broad sense, lifecycle of waste management covers material procurement, production, product use, and waste collection, transportation, treatment and disposal.

Efforts to reduce generation of mercury wastes will be realized through cooperation with the Mercury-containing Products Partnership Area and the promotion of environmentally sound storage will be realized through cooperation with the Supply/Storage Partnership Area.

The partnership area puts priorities in the following actions:

a. Identify and disseminate environmentally sound collection, transportation, treatment and disposal techniques/practices for different kinds of mercury wastes to reduce mercury releases from waste by following a lifecycle management approach;

b. Assess environmental impacts of current waste management practices and processes, including providing support to countries to assess their national situation (e.g. development of national mercury waste inventories and priority setting) and needs; and

c. Promote public awareness of the hazards regarding mercury wastes and their management and support community engagement in the activities of the Waste Management Partnership.

II. Objective of the Partnership Area

The overall goal of the UNEP Global Mercury Partnership is to protect human health and the global environment from the release of mercury and its compounds by minimizing and, where feasible, ultimately eliminating global, anthropogenic mercury releases to air, water and land.

The objective of this waste partnership is:

- Minimize and, where feasible, eliminate mercury releases to air, water, and land from mercury waste by following a lifecycle management approach.

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[62] Throughout this document "mercury waste" refers to waste consisting of elemental mercury and waste containing or contaminated with mercury

Part of the overall approach to achieve the objective above is to strengthen the capacity of all countries and stakeholders while focusing on the needs of developing countries and countries with economies in transition to effectively deal with mercury waste.

In order to achieve the objective, environmentally sound management of mercury wastes is needed in all aspects of the waste collection, transportation, treatment and disposal practices as well as in the reduction of atmospheric emissions of mercury from incineration and other industrial processes.

Public awareness raising, community engagement and training for workers exposed to mercury need to be included to reduce mercury exposures and releases. Implementation of effective mercury waste treatment methods will be included as well.

III. Priority Actions

The partnership area has the following priority actions:

a. Identify and disseminate environmentally sound collection, transportation, treatment and disposal techniques/practices for different kinds of mercury wastes to reduce mercury releases from waste by following a lifecycle management approach, including:
    - Identify and characterize mercury contained in waste streams by taking into account contamination level and waste volumes.
    - Facilitate activities contributing to the finalization of "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury". Ensure coordination between Secretariat of the Basel Convention and its respective subsidiary bodies.
    - Prepare and promote utilization of "Good Practices for Management of Mercury Releases from Waste"
    - Implement national projects on environmentally sound management (ESM) of mercury waste that can be used as case studies/demonstration projects.
    - Ensure cooperation with the other relevant areas of the partnership such as products and supply/storage
b. Assess environmental impacts of current waste management practices and processes, including providing support to countries to assess their national situation (e.g. development of national mercury waste inventories and priority setting) and needs.
c. Promote public awareness of the hazards regarding mercury wastes and their management and support community engagement in the activities of the Waste Management Partnership.

IV. Partner Efforts and Timelines

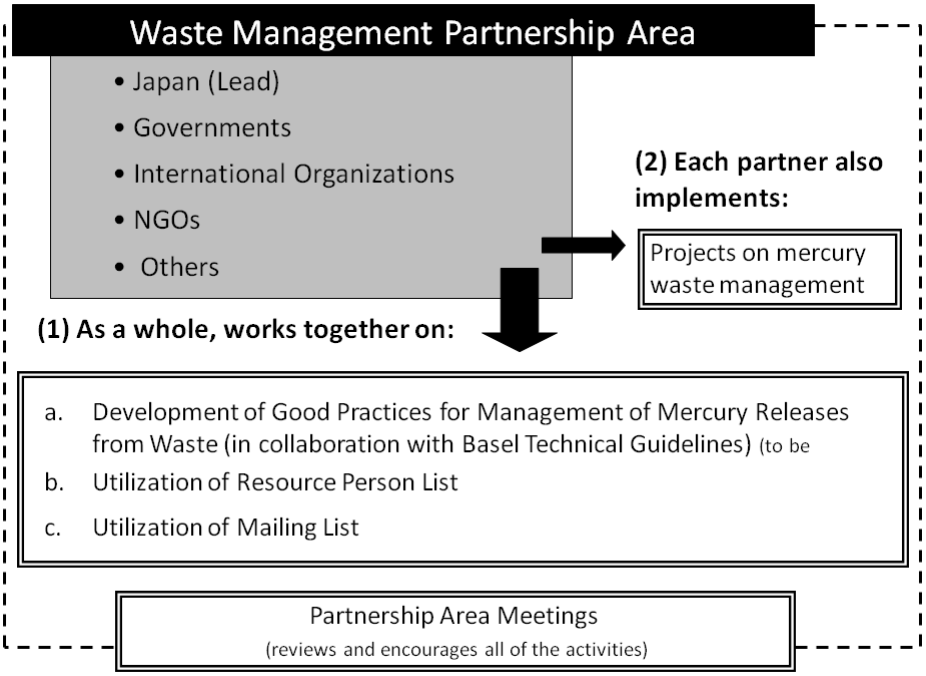
As shown in Figure 1, there are activities under the Waste Management Partnership Area at two levels. First, there are activities being implemented by the Waste Management Partnership Area as a whole, involving all Partners, which include the following:

a. Drafting of "Good Practices for Management of Mercury Releases from Waste"

b. Utilization of Resource Person List on mercury waste management

c. Utilization of mailing list among Partners and other interested parties

Second, there are projects on mercury waste management implemented by each Partner. In order to review and encourage all of these activities, the Partnership Area Meetings are organized periodically.



Note: Activities regarding development of the Good Practices for Management of Mercury Releases from Waste are currently suspended. Details will be determined upon the development of the Basel Technical Guidelines and upon consultations with the relevant groups.

Figure 1. Activities of the Waste Management Partnership

The partners are conducting various projects with regard to mercury waste management. Here, the projects have been classified by the type of wastes they deal with, as shown in the box below.[63]

[63] Among the projects that deal with the same types of wastes, the projects that are already completed are listed first, followed by those that are on-going and under planning. Among the projects that deal with the same type of wastes and are at the same phase of implementation (i.e. completed, on-going or under planning), the projects that are implemented at the multilateral level are listed first, followed by those that are implemented at the bilateral, then the national, and then the local level.

Types of wastes addressed by the projects[64]:

1. Multiple Types of Mercury Wastes
2. Waste Products Containing Mercury (e.g. batteries, fluorescent lamps)
3. Healthcare Wastes (e.g. thermometers)
4. Mine Tailings [65]
5. Sites Contaminated with Mercury Wastes

For each project, (1) the priority action addressed by the project and (2) the stage of waste management addressed by the project are indicated. This information has been provided by the project contact persons. The list of priority actions and stages of waste management that the projects address are shown in the box below[66].

(1) Priority action addressed by the project

a.1. Identification and characterization of mercury in waste streams

a.2. Contribution to the finalization of Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury"

a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects

b. Assessment of environmental impact of waste management practices (including development of mercury emission inventories)

c. Promotion of awareness and education regarding mercury waste

(2) The stage of waste management addressed by the project

a. Development of policy framework

b. Reduction of mercury wastes (e.g. substitution of mercury-containing products)

c. Collection/separation of mercury wastes

d. Temporary or short-term storage pending disposal of collected mercury-containing products or wastes

e. Recovery of mercury from mercury-containing products and byproducts

[64] These types of wastes have been categorized based on the content of partner efforts submitted by Partners.

[65] Tailings are residue of raw material or waste separated out during the processing of crops or mineral ores (Reference: US EPA (1997) Terms of Environment: Glossary, Abbreviations and Acronyms.

http://www.epa.gov/OCEPAterms/)

[66] This categorization has been conducted in response to the suggestions made in the Partnership Advisory Group Meeting held in March to April 2009 and in the Second Waste Management Partnership Area Meeting held in Tokyo, March 2010.

f. Removal of mercury in flue gas and wastewater from waste management activities

g. Stabilization and solidification of mercury wastes

h. Final disposal of mercury wastes[67]

i. Other

A. Activities Implemented by the Waste Management Partnership Area as a whole

Followings are on-going activities that are being implemented under the initiative of the Lead and the Ministry of the Environment, Japan and through consultation with the Partners.

Type of waste	Multiple Types of Mercury Wastes
Phase of project	☐ Completed ☒On-going ☐Under planning
Level of intervention	☒ Multilateral ☐ Bilateral ☐ National ☐Local
Name of Project	**Development of a document titled "Good Practices for Management of Mercury Releases from Waste" (formerly called "Draft BAT/BEP Guidance on Reduction of Mercury Releases from Waste Management")[68]**
Contribution to Partnership Area objectives	(1) Priority action addressed by the project ☒ a.1. Identification and characterization of mercury in waste streams ☒ a.2. Contribution to the finalization of "Draft Basel Convention Updated Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury and Wastes Containing or Contaminated with Mercury" ☒ a.3. Implementation of national projects on ESM of mercury waste as case studies/demonstration projects ☒ b. Assessment of environmental impact of waste ,management practices (including development of mercury emission inventories) ☒ c. Promotion of awareness and education regarding mercury waste

[67] Final disposal of mercury waste may include options such as permanent storage of waste elemental mercury recovered from mercury waste or disposal of stabilized mercury waste in specially engineered landfill sites. Its definition may be discussed in the process of the intergovernmental negotiating committee to prepare a global legally binding instrument on mercury (INC).

[68] After consultation with the UNEP Chemicals and the Secretariat of the Basel Convention, the title of this document has been changed due to considerations to the Intergovernmental Negotiating Committee (INC) to prepare a globally legally binding instrument on mercury (started from June 2010). Given that the BAT/BEP can be discussed at the INC under its own context, the expression "BAT/BEP" should be deleted from the title of this document to avoid confusion between the INC process and the UNEP Global Partnership.

	(2) <u>The stage of waste management addressed by the project</u> ☒ a. Development of policy framework ☒ b. Reduction of mercury wastes (e.g. substitution of mercury-containing products) ☒ c. Collection/separation of mercury wastes ☒ d. Temporary or short-term storage of collected mercury-containing products ☒ e. Recovery of mercury from mercury-containing products and byproducts ☒ f. Removal of mercury in flue gas and wastewater from waste management activities ☒ g. Stabilization and solidification of mercury wastes ☒ h. Final disposal of mercury wastes ☒ i. Other (please specify: remediation of contaminated sites)
Implementing agency, partners	UNEP Global Mercury Partnership, Japan (Ministry of the Environment) and other partners
Aim of the project	To provide information that supports the implementation of good practices contributing to the reduction of mercury releases from waste by following a lifecycle management approach. The document will be composed mainly of practical cases that are provided by Partners and that realise the principles of "Draft Basel Convention Updated Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes containing or Contaminated with Mercury [69]" (to be determined).
Activities	The Lead will compile information about good practices to manage mercury releases from waste based on information and comments provided by Partners and relevant parties, taking into account consistency with "the Basel Convention Updated Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" (to be determined).
Achievements up to the present	The preliminary draft had been developed and was discussed at the Mercury Waste Management Partnership Area meeting in March 2010 (at that time called BAT/BEP Guidance). The first draft was presented as non-paper at INC 2 in January 2011. The document is expected to be updated as appropriate, based upon further inputs from Partners and for being more useful to the readers.
Budget	Funded by the Government of Japan

[69] "Draft Basel Convention Updated Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" and this document will work in a mutually complementary manner, avoiding overlaps in roles; the former will focus on "the principles of environmentally sound management of mercury waste" whereas the latter will provide information about "practical cases" that would assist readers to implement an important part of the "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury".

Project starting/ completion date	Started in June 2008; The first version was provided to INC 2 in January 2011. Completion date: to be determined
Contact information	Ministry of the Environment, Japan: Tel +81-3-5521-8260
Last updated on	07/2014

Other Activities

Utilization of Resource Person List on Mercury Waste Management

A Resource Person List on Mercury Waste Management has been prepared with the objectives to (1) provide a list of resource persons that the partners could contact when they wish to obtain advice from the technical standpoint in formulating or implementing projects to reduce mercury releases from waste management and (2) to provide a list of resource persons who could provide advice on the activities of the Waste Management Partnership Area such as organizing face-to-face meetings or drafting/revising "Good Practices for Management of Mercury Releases from Waste".

25 nominations have been received for the first version of the list; all of which have been approved by the Partners to be Resource Person. The completed list has been shared among the Partners through Waste Management Area's mailing list and its summarized version has been made public through the UNEP Chemicals website. The list was revised in March 2012 for the first time, and in September 2014 for the second time. Revised list will be circulated with Partners and other stakeholders later in 2014.

Utilization of Mailing List among Partners and Other Interested Parties

A mailing list is created under the Waste Management Partnership Area with the objectives to facilitate communication between the Partners and the Lead and also among the Partners and potential Partners. Those currently participating in the mailing list include representatives of the Partner organizations of the Waste Management Partnership Area, participants of the Waste Management Partnership Area Meetings and others interested in joining the mailing list and are nominated by someone of the above.

The mailing list is currently used principally for disseminating information from the Lead to the Partners and relevant parties regarding activities under the Waste Management Partnership such as those regarding "Good Practices for Management of Mercury Releases from Waste", the Resource Person List or the Business Plan. In the future, it is anticipated that the mailing list would be further utilized by the Partners and other relevant parties for purposes such as request for information regarding mercury waste management activities, reporting of activities, notification of events, etc.

B. Projects Implemented by Each Partner

1. Projects Implemented by Each Partner at a Glance (On-going & Under planning)

Type of waste addressed	Name of project	Phase of project	Level of inter-vention	Implementing agencies
a. Multiple Types of Mercury Wastes	Implementation of Basel Convention Technical Guidelines on Certain Wastes (other than "Draft Updated Basel Convention Technical Guidelines for the Environmentally Sound Management of Wastes Consisting of, Containing or Contaminated with Mercury or Mercury Compounds")	On-going	National	- Parties of the Basel Convention
	"Draft Updated Basel Convention Technical Guidelines for the Environmentally Sound Management of Wastes Consisting of, Containing or Contaminated with Mercury or Mercury Compounds"	On-going	Multi-lateral	- COP of the Basel Convention - With support from Japan serving as lead country and from the Secretariat of the Basel Convention (SBC)
	Sub-regional Capacity Building and Technical Assistance Project on Mercury Waste in Health and Other Sectors in Latin America and the Caribbean (LAC) Region	On-going	Multi-lateral1	- Secretariat of the Basel Convention (SBC) - Basel Convention Coordinating Centre (BCCC) in Uruguay - Governments of Argentina, Uruguay and Costa Rica
	Mercury Storage and Waste Project	On-going	Multi-lateral	- UNEP/Division of Technology, Industry and Economics (DTIE) Chemicals Branch in coordination with the Secretariat of the Basel Convention.
	Environmental Sound Management of Mercury Containing Wastes	Under Planning	National	- National bodies of Syria
	Mercury Management Toolkit (including development of mercury emission inventories)	On-going	Local	- Global Environment Facility - Society of Environmental Toxicology and Chemistry - UNEP-DTIE
b. Waste Products Contain-ing Mercury	Mercury Dental Amalgam Collection and Recovery in Massachusetts, USA	On-going	Local	- Commonwealth of Massachusetts

Type of waste addressed	Name of project	Phase of project	Level of inter-vention	Implementing agencies
	Zero Mercury Mission, Get on with Batteries & Get on with CFLs and fluorescent lighting & HID Lamps: a Mercury containing products Collection Programs (in Panama)	On-going	National	- Zero Pollution Alliance, Panama - Ecologic, S.A., Panama - UNEP Regional Office - Hormigon Express - Gabriela Batista
	Fluorescent lamp compaction plant & final disposition of mercury containing waste (dilution and solidification) controlled area	On-going	National	- Alianza Contaminación Cero, Panama - Ecologic, S.A., Panama
	Specially engineered landfill for mercury contaminated waste's final disposal	Under-planning	Local	- Zero Pollution Aliance, Panama - Ecologic, S.A., Panama - Hormigon Express - National Waste Management Authority, Panama - Health Ministry, Panama - National Environmental Authority, Panama - GEF
	Quantification and Characterization of Hospital Wastes and Set up of the ESM Systems for Hospital Wastes in Cameroon	On-going	National	- Research and Education Center for Development (CREPD) - Ministry of Public Health of Cameroon
	Awareness-raising and Educational project on collecting Mercury-added Lamps	On-going	National	- Association of Lighting and Mercury Recyclers, USA
	ULAB and Fluorescent lamp Collection Center (SENEGAL)	Under Planning	Local	- CFC (UN Agency) - GEF for Senegalese Agency for Rural Electrification
	Capacity Building Project of Management and Recycling of used fluorescent lamps	On-going	Bilateral	- Ministry of Economy Trade and Industry (METI), Japan - The overseas Human Resources and Industry Development Association (HIDA), Japan - Nomura Kohsan Co., Ltd.
c. Health-care wastes	UNDP GEF Healthcare Waste Project (in Argentina, India, Latvia, Lebanon, Philippines, Senegal and Vietnam)	On-going	Multi-lateral	- Funding Agency: Global Environment Facility - Implementing Agency: United Nations Development Program - Principle Cooperating Agencies: World Health

Type of waste addressed	Name of project	Phase of project	Level of inter-vention	Implementing agencies
				Organization and Health Care Without Harm
	Environmentally Sound Implementation of Healthcare Waste Management Plan in Nigeria	On-going	National	- Government of Nigeria
d. Mine tailings	Currently, there are no project implemented (as of July 2014)			
e. Sites Contaminated with Mercury Wastes	Peerless Green Initiative: Kodaikanal Mercury Thermometer Plant Pollution Assessment and Integrated Waste Management	On-going	Local	- Peerless Green Initiatives - EVIDENCE, India (NGO) - SDDIT, India (NGO) - Department of Forestry, India - Government of India, Eco-Tribunal - Anna University, Chennai (proposed) - National Atomic Laboratory, Hyderabad (proposed)
	Mercury Contamination of a Water-catchment at an at-risk Eco-sensitive Rainforest Inhabited by Disenfranchised Tribals Caused by Pollution from Mercury Thermometer Factory in Kodaikanal, Tamil Nadu, India	Under Planning	Local	- Peerless Green Initiatives - EVIDENCE, India (NGO) - SDDIT, India (NGO) - Department of Forestry, India - Government of India, Eco-Tribunal - Anna University, Chennai (proposed) - National Atomic Laboratory, Hyderabad (proposed)
	Reduce exposure of mercury to human health and the environment by promoting sound chemical management in Mongolia	On-going	National Local	- UNIDO - Ministry of Nature and Green Development of Mongolia - Mine Reclamation Corporation (Mireco), Ministry of Health
	Preparatory project to facilitate the implementation of the legally binding instrument on mercury (Minamata Convention) in Argentina to protect health and the environment	Under Planning	National Local	- UNIDO - Associación Argentina de Médicos por el Medio Ambiente - Argentinean Society of Doctors for the Environment (AAMMA)

Type of waste addressed	Name of project	Phase of project	Level of inter-vention	Implementing agencies
	Upper Goulburn River Feral mercury recovery project	On-going	National	- H.G.Recoveries Pty.Ltd., Australia
	ICI/Orica Botany NSW mercury cell Chlor-Alkali plant emissions quantification and impacts potential for local Botany area Residents	On-going	Local	- Hg Recoveries Pty Ltd., Australia
	Costerfield Antimony/Gold Mine, Victorian Australia	On-going	National	- Hg Recoveries Pty Ltd., Australia
	Open Cut Gold Mine, Heathcote, Victorian Australia	On-going	National	- Hg Recoveries Pty Ltd., Australia
	Underground Gold Mine, Bendigo, Victorian Australia	On-going	National	- Hg Recoveries Pty Ltd., Australia
	Walhalla Goldfields, Victorian Australia – gaseous mercury emissions	On-going	National	- Hg Recoveries Pty Ltd., Australia
	Woodvale Evaporation Ponds, Bendigo, Victorian Australia	On-going	National	- Hg Recoveries Pty Ltd., Australia
	Botany New South Wales Australia – Gaseous Mercury Emissions offsite from a closed ChlorAlkali plant	On-going	National	- Hg Recoveries Pty Ltd., Australia
	Botany New South Wales Australia – Gaseous Mercury Emissions from a Storm water drain ocean outfall	On-going	National	- Hg Recoveries Pty Ltd., Australia
	Willoughby New South Wales Australia – Gaseous Mercury Emissions from a Storm water drain ocean outfall	On-going	National	- Hg Recoveries Pty Ltd., Australia

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3. CROSS-REFERENCE: Relevant activities under other partnership areas

The following activities are conducted under different partnership areas. For more details on these projects, please see the Business Plans of the corresponding partnership area[70].

[70] "UNEP(DTIE)/Hg/PAG.2/3 - Partnership area business plans" is available from

http://www.unep.org/hazardoussubstances/Portals/9/Mercury/Documents/PAG-meetings/DRAFT%20HG%20PAG%202-3%20Business%20plans.pdf

Mercury-Containing Products

The objective of this partnership area, led by the U.S. Environmental Protection Agency, is to phase out and eventually eliminate mercury in products and to eliminate releases during manufacturing and other industrial processes via environmentally sound production, transportation, storage, and disposal processes.

The cooperation between the Waste Management Partnership and the Mercury-Containing Products Partnership is especially important in order to encourage and implement environmentally sound management of mercury waste by following a lifecycle management approach.

Some of the key activities of the Mercury-Containing Products include the following.

(a) On-going health-care projects aimed at reducing the use of mercury-containing measuring and control devices, including projects in Argentina, Brazil, Chile, Costa Rica, Ecuador, Honduras, Mexico, Nepal and Tanzania;

(b) Five year project (to 2012) with the Secretariat of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal to build capacity and promote best management practices for addressing mercury waste collected from health care products and in other sectors addressing mercury in products. Projects are focused in Argentina, Costa Rica and

(c) On-going mercury inventory and risk management planning activities sponsored by the United States of America and implemented through the United Nations Institute for Training and Research in Chile, Ecuador, Panama and South Africa.

(d) Project on production of an educational video for hospital personnel on mercury waste management in English and Spanish implemented by Health Care Without Harm (HCWH) under the WHO-HCWH Global Initiative for Mercury-Free Health Care (the production is scheduled to be completed in September 2011)

Artisanal and Small-scale Gold Mining

This Partnership, jointly led by United Nations Industrial Development Organization (UNIDO) and the Natural Resources Defense Council (NRDC), aims for continued reduction and elimination of mercury uses and releases in artisanal and small-scale gold mining (ASGM). Some of its recent activities include facilitating formulation of AGSM strategic plans, providing input on Standard Zero (promotion of responsible mercury and cyanide use), development of technical guidance and legalization/formalization guidance documents.

The ASGM Partnership has a strong interest in reducing the amount of mercury present in tailings. Close links will be established with the Mercury in Waste Partnership.

Mercury Supply and Storage

This partnership, led by the Zero Mercury Working Group, has a short anticipated life or only until 2013. The partnership focuses on Kyrgyz Republic Primary Mercury Mining project, regional projects to provide storage options of metallic mercury and technical support to INC.

The Mercury Supply and Storage Partnership Area will cooperate with the Mercury Waste Partnership Area particularly regarding storage aspects. Coordination with projects on the environmentally sound of management of mercury waste (UNEP Chemicals-SBC projects in Burkina Faso, Cambodia, Chile, Pakistan, Philippines and the USEPA-SBC projects in Argentina, Costa Rica, and Uruguay (joint project with Products partnership area) is expected. (For details, please see the Business plan of the Artisanal and Small Scale Gold Mining (ASGM) Partnership Area).

V. Opportunities:

Possible actions in response to the priority actions include the followings:

Priority action a): Identify environmentally sound collection, transportation, disposal and treatment techniques for mercury waste following a lifecycle management approach.

- Develop a training manual for countries to apply "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury", including sector specific guidance.
- Formulate and implement projects utilizing "Good Practices for Management of Mercury Releases from Waste".
- Review available information on existing BAT/BEP for mercury waste management. In doing so, cooperate with other partnership areas, chemical conventions, Strategic Approach to International Chemicals Management (SAICM) and the INCs.
- Target pilot projects on mercury waste management in cooperation with other partnerships, institutions, organizations (*e.g.* Secretariat of the Basel Convention) and public interest and health NGOs. Such projects may include waste separation, segregation, collection transportation, recovery or disposal technologies and may address air emissions, landfill design and operation including evaporation and seepage water, and use of appropriate stabilization/solidification technologies.

Priority action b): Assess environmental impacts of current waste management practices and processes, including providing support to countries to assess their national situation, interests and needs.

- Enhance information/knowledge, including improving release inventories (including the Mercury Toolkit, European Monitoring and Evaluation Programme (EMEP) Guidebook and

national/regional Pollutant Release and Transfer Registers) with an emphasis on mercury waste streams.

- Assess the importance of mercury waste in the national mercury inventories and make suggestions for the improvement of the UNEP Mercury Toolkit.
- Promote safe handling procedures for collection, transportation and management for the segregated mercury wastes and waste handling devices.

Priority action c): Promote awareness and education on mercury waste:

- In cooperation with civil society and NGOs, develop and disseminate educational materials including practical and simple advice on steps to deal with current mercury waste issues of concern (*e.g.*, what to do with discarded mercury fever thermometers, sound temporary storage and safeguarding solutions).

VI. Evaluation

The partnership areas will report biennially to UNEP in accordance with the UNEP reporting format, which includes the report on progress in terms of the Partnership Area Progress Indicators.

Progress indicators

The Waste Management Partnership Area has developed its own progress indicators, which correspond to its priority actions. The indicators have been categorized as (1) output indicators and (2) process indicators, as shown in the table below.

Objective/Action	Indicator of Progress	Type of Indicator
Overall Objective: Minimize and, where feasible, eliminate unintentional mercury releases to air, water and land from mercury waste by following a lifecycle management approach.	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)	Output Indicator
	Estimated amount of mercury releases from waste that are reduced from implementation of the projects under the Partnership	
	Number of Partners	Process Indicator
Priority Action a: Identify and disseminate	Available information on identification and characterization of mercury contained in waste streams	

Objective/Action	Indicator of Progress	Type of Indicator
environmentally sound collection, treatment, transportation and disposal techniques/practices to reduce mercury releases from waste by following a lifecycle approach	Completion of "Good Practices for Management of Mercury Releases from Waste" that supplements "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury"	
	Number of good practice cases added in "Good Practices for Management of Mercury Releases from Waste"	
	Number of projects formulated utilizing "Good Practices for Management of Mercury Releases from Waste"	
	Number of national projects on ESM of mercury waste implemented	
	Amount of financial resources for projects aimed for reducing releases of mercury from waste management	
Priority Action b: Assess environmental impacts of current waste management practices and processes, including providing support to countries to assess their national situation (e.g. development of national mercury waste inventories and priority setting) and needs	Number of countries that prepared national inventory of mercury waste, if possible, mercury release estimation from waste treatment and waste dumping	
	Number of countries with national policy frameworks/action plans with regard to mercury waste management [4]	
Priority Action c: Promote public awareness of the hazards regarding mercury waste and support community engagement in the activities of the Waste Management Partnership.	Number of projects to promote awareness and education regarding mercury waste	

VII. Resource Mobilization

Partners are encouraged to contribute financially and also to offer in-kind assistance.

Partners can develop specific initiatives, work with non-partners, or pursue projects consistent with the partnership objectives. It is hoped that the UNEP Global Mercury Partnership will serve as a mechanism to consolidate and leverage funding for large, strategic projects.

Partners are encouraged to apply for funding to relevant funders and regional organizations. Developing countries and countries with economies in transition can submit requests for funding to UNEP under the UNEP Mercury Small Grants Program (*see* www.chem.unep.ch/mercury/Overview-&-priorities.htm). UNEP and other partner implementing

agencies stand ready to assist countries to develop proposals addressing mercury issues under the SAICM Quick Start Programme (*see* www.chem.unep.ch/saicm/qsp.htm).

In this perspective, Waste Management Partnership has prepared 'Wish List', which is a list of project proposals planned by each partner as of 25 April 2014. Projects were prioritized through scoring procedure by partners, evaluating five criterion such as; relevance, outcome, cost effectiveness, replicability, implementation mechanism.

VIII. Business Planning Process

Business planning will take place annually for the partnership area. Business planning will be undertaken in close collaboration with the partners and the relevant Partnership Areas such as the Mercury-Containing Products Partnership Area and the Mercury Supply and Storage Partnership Area. The content of this Business Plan will be reviewed and revised in order to reflect the developments in the INC process to the extent possible.

The process in developing and reviewing business plans will be outlined in this section. Partnerships will take stock of efforts and test direction and productivity in moving forward and will adjust planning accordingly.

In accordance with Section 4 of the Overarching Framework for the UNEP Global Mercury Partnership, the business plan will be periodically reviewed and updated to reflect progress in implementation and changing circumstances. The arrangements for Administrative and Management Support are set out in Table below.

Administration and Management Support (will vary across the Partnerships)		**Source of Support**
Partnership Lead	▪ Facilitation and support of the partnership.	Japan (Prof. Dr. TANAKA)
Organization Point of Contact	• Preparing Business Plan. • Preparing for meetings. • Logging meeting notes, tracking action items. • Collaborating with partners to strategically link to overall partnership goals and objectives.	Japan, Ministry of the Environment
UNEP Secretariat Support	• Managing the clearinghouse/website. • Taking in funding from multiple sources to fund projects. • Developing activity proposals in collaboration with partners. • Assisting the lead in following up activities by partners. • Other tasks as requested.	UNEP Chemicals
Face to face meetings	Estimated once per year. All attempts will be made to host face to face meetings of the partnerships in the most cost effective way (e.g. back-to-back with other related meetings and have the ability to call in).	Japan, Ministry of the Environment hosts the meeting when the budget is available UNEP will support some limited travel of developing countries/NGOs in face to face meetings, rest is in-kind support from partners for their own travel.
Teleconferences	In case of necessity	Japan, Ministry of the Environment

IX. Linkages

The Waste Management Partnership Area will closely work with other Partnership Areas such as the following. In particular, close cooperation with the Mercury-Containing Products is expected, as that area is the upstream of the waste management issues.

- Mercury-Containing Products
- Artisanal and small scale gold mining
- Reductions from the Chlor-Alkali Sector
- Reduction of Mercury Release from Coal Combustion
- Supply and Storage

Possible collaboration areas with some of the Partnerships Areas include the followings:

<Mercury-Containing Products>

- Coordinate activities (e.g. input to and utilization of "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" and "Good Practices for Management of Mercury Releases from Waste")
- Identify and design joint projects to meet objectives of the two Partnerships
- Enhance communication (e.g. attending meetings)

<Supply and Storage>

- Input to and usage of "Draft Basel Convention Technical Guidelines for the Environmentally Sound Management of Waste Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury" and "Good Practices for Management of Mercury Releases from Waste"
- Identification of gaps of two Partnerships

X. Partners

As of 23 June 2014, there are 69 Partners in the Waste Management Partnership Area, consisting of 17 Governments, 4 International organizations, 28 NGOs, and 20 others[71].

Current partners of the Waste Management Partnership Area (as of 23 June 2014)

Government (17):

- Burkina Faso
- Cambodia
- Cote d'Ivoire

[71] Here, the Government of Japan, as Lead of the Waste Management Partnership Area, and UNEP, which provides administrative support for the UNEP Global Mercury Partnership, are also counted as "Partners".

- Georgia
- Germany
- Japan
- Liberia
- Malawi
- Mali
- Mexico
- Norway
- Nigeria
- Philippines
- Senegal
- Syrian Arab Republic
- Tanzania
- United States of America

International Organizations (4):

- Secretariat of the Basel Convention
- UNEP
- UNIDO
- UNITAR

NGO (28):

- AAMMA (Asociación Argentina de Médicos por el Medio Ambiente)
- Artisanal Gold Council
- Balifokus
- Ban Toxics
- Blacksmith Institute
- Center for Public Health and Environmental Development
- CREPD (Centre de Recherche et d'Education pour le Dèloppement)
- EDUCAF(Education for All in Africa)
- Environmental Health Council
- Environment Health and Disaster Management Initiative
- Alianza Contaminación Cero
- International Academy of Oral Medicine and Toxicology-Europe
- IFDEA (International Federation of Dental Educators and Association)
- International POPs Elimination Network (IPEN)
- International Society of Doctors for the Environment (ISDE)
- ISE-POPS-CI (Informer, Sensibiliser, Eduquer sur les Polluants Organiques Persistants en Cote d'Ivoire)
- IUGS-GEM (International Commission on Geosciences for Environmental Management (GEM), a comission of the International Union of Geosciences (IUGS))
- New World Hope Organization (NHWO)
- Pollution Control Association of Liberia
- Pro-Biodiversity Conservationists in Uganda (PROBICOU)
- Safe Minds
- SETAC(Society of Environmental Toxicology and Chemistry)
- Sustainable Development Policy Institute (SDPI)

- Uganda Network on Toxic Free Malaria Control (UNETMAC)
- World Dental Federation(FDI)
- World Medical Association(WMA)Zero Mercury Working Group
- Zoï Environment Association

Others (20):

- ARCADIS-US, Inc.
- Association of Lighting and Mercury Recyclers(ALMR)
- Cardno ENTRIX
- CETAC
- Department of Toxicology Faculty of Chemical Science and Pharmacy (University of San Carlos of Guatemala)
- Encinal Resources
- Econ Industries GmbHg
- Environmental Visual Artist Gabriela Batista
- Geological Survey of Denmark and Greenland
- GEOMIN
- Hg. Recoveries Pty. Ltd.
- Institute for Combustion Science and Environmental Technology (ICSET)
- International Association for Dental Research (IADR)
- International Dental Manufacturers (IDM)
- Nomura Kohsan Co., Ltd.
- OIKON-Institute for Applied Ecology
- Peerless Green Initiatives
- Umwelt Technik Metalrecycling UTM
- Young Naturalist Network
- Yonsei University

参考資料２　　廃棄物管理分野リソースパーソンリスト

Resource Person List under the UNEP Global Mercury Partnership Waste Management Partnership Area

(Third Version, as of September 2014)

Waste Management Partnership Area's website provides information on recent activities of this area, including documents regarding Resource Person List referred in this document.

http://www.unep.org/chemicalsandwaste/Mercury/InterimActivities/Partnerships/WasteManagement/tabid/3535/language/en-US/Default.aspx

1. About this List

- This Resource Person List was created with the following objectives:
  (1) To provide a list of experts (Resource Persons) that the partners could contact when they wish to obtain advice from the technical standpoint in formulating or implementing projects to reduce mercury releases from waste management
  (2) To provide a list of experts (Resource Persons) who could provide advice on the activities of the Waste Management Partnership Area such as organizing face-to-face meetings or drafting/revising the Good Practices Document
- The letter from the Partnership Lead regarding the preparation of this list, which includes in its Annex the details of the preparation process, can be found on the Waste Management Partnership Area's website.

2. How to utilize this List

- Partners may contact the Resource Persons directly through the contact information provided in the detailed List[72] or through the Contact Person indicated below. Non-Partners who wish to contact the Resource Persons may also contact them through the Contact Person.
- NOTE: The detailed List which includes personal information should be shared only among the Partners of the Waste Management Partnership Area.
- If one would like to obtain, for instance, answers to some simple questions from the Resource Person, it is most likely that charges will not occur. If one wish to request for time-consuming work such as hiring the Resource Person as a project advisor or a trainer, it is most likely that charges will occur. Financial matters are to be discussed directly between the Resource Person and those requesting for his/her assistance.

3. Additions/changes to the List

- Those who wish to nominate candidates to be added to this List should fill-in and send to the Contact Person the registration form, which is available on the Waste Management Partnership Area's website.

[72] A detailed List, which includes information such as contact information and work experience of the Resource Persons, has been shared among official Partners of the Waste Management Partnership through e-mail.

- Requests for changes or corrections to the List should also be sent to the Contact Person.
- In response to these nominations and/or requests for changes, the List will be revised.

4. Contact Person

- Mr. Mitsugu SAITO, Deputy Director, Environmental Health and Safety Division
  Ministry of the Environment, Japan (MOEJ)
  Tel: +81-3-5521-8260; Fax: +81-3-3580-3596; Email: ehs@env.go.jp

List of Resource Persons at a Glance

Name	Working Language	Expertise												
		1. Technical issues										2. Institutional issues		3. Others
		1.1. Collection of and recovery of mercury from products containing mercury	1.2. Treatment of flue gas and effluent containing mercury	1.3. Treatment of sludge and fly ash containing mercury	1.4. Storage and disposal of elemental mercury	1.5. Remediation of sites contaminated by wastes containing mercury and mercury compounds	1.6. Measurement and analysis of mercury levels	1.7. Engineering	1.8. Toxicology	1.9. Environ-mental science	1.10. Waste manage-ment in general	2.1. Laws and regulations	2.2. Awareness raising, public participation	
Mr. Abernathy, Paul	English	X			X	X	X			X	X	X	X	Public policy, infrastructure and business expertise for mercury management
Dr. Adegoke, Oluwafeyisola S.	English	X			X	X	X			X	X	X	X	
Dr. Akagi, Hirokatsu	Japanese, English						X							Environmental mercury monitoring, human exposure assessment
Mr. Alo, Babajide	English	X		X			X			X	X	X	X	Research & Training in Mercury in the Environment Issues
Dr. Asari, Misuzu	Japanese, English										X		X	
Dr. Azhar Uddin, Md.	English, Japanese, Bengali		X	X						X				
Mrs. Clark, Pam	English	X												Specific knowledge on dental amalgam capture
Dr. Eisele, Jean-Luc	English, French, German	X									X		X	
Mr. Fujita, Yasuyuki	Japanese, English		X											
Mr. Garcia, Arturo Gavilan	English, Spanish									X		X		

Name	Working Language	Expertise												
		1. Technical issues										2. Institutional issues		3. Others
		1.1. Collection of and recovery of mercury from products containing mercury	1.2. Treatment of flue gas and effluent containing mercury	1.3. Treatment of sludge and fly ash containing mercury	1.4. Storage and disposal of elemental mercury	1.5. Remediation of sites contaminated by wastes containing mercury and mercury compounds	1.6. Measurement and analysis of mercury levels	1.7. Engineering	1.8. Toxicology	1.9. Environ-mental science	1.10. Waste manage-ment in general	2.1. Laws and regulations	2.2. Awareness raising, public participation	
Dr. Hossain, Shahriar	English, Bengali				X	X				X	X	X	X	Policy advocacy, IEC campaign, Media Advocacy, Ecosystem and Biodiversity conservation, Climate change adaptation, Natural resources management
Dr. Ito, Shigeo	Japanese, English		X	X			X	X						
Dr. Khwaja, Mahmood A.	English, Urdu						X			X	X	X	X	Monitoring/Survey/field work at dental sites; Mapping/Assessment of hazardous chemicals Hot Spots; Inventory development; etc.
Dr. Kida, Akiko	Japanese, English						X			X	X			Development of mercury emission inventory
Prof. Lee, Tai Gyu “Teddy”	English, Korean	X	X	X	X		X	X		X	X	X	X	
Mr. Miura, Hiroshi	Japanese, English	X		X	X						X			
Dr. Moritomi, Hiroshi	Japanese, English	X	X					X		X	X		X	Abatement technology on toxic heavy metals
Dr. Naruse, Ichiro	Japanese, English		X					X			X			
Dr. Ohki, Akira	Japanese, English						X							

Name	Working Language	Expertise												
		1. Technical issues										2. Institutional issues		3. Others
		1.1. Collection of and recovery of mercury from products containing mercury	1.2. Treatment of flue gas and effluent containing mercury	1.3. Treatment of sludge and fly ash containing mercury	1.4. Storage and disposal of elemental mercury	1.5. Remediation of sites contaminated by wastes containing mercury and mercury compounds	1.6. Measurement and analysis of mercury levels	1.7. Engineering	1.8. Toxicology	1.9. Environ-mental science	1.10. Waste manage-ment in general	2.1. Laws and regulations	2.2. Awareness raising, public participation	
Professor Osibanjo, Oladele	English					X	X		X	X	X	X	X	
Dr. Petrlik, Jindrich	English, Czech, Russian					X	X				X	X	X	Mercury in Chlor-alkali industry and handling of wastes from these processes Mercury releases from waste incineration
Dr. Spiric, Zdravko	English, Croatian	X	X	X	X	X	X	X	X	X	X		X	
Mr. Sun, Shaofeng	Chinese, English	X	X	X	X					X	X	X		
Mr. Taguchi, Masashi	Japanese, English, Spanish						X			X				
Dr. Takaoka, Masaki	Japanese, English		X	X	X			X		X	X			Development of mercury emission inventory
Dr. Takeuchi, Fumiaki	Japanese, English					X								
Professor Tanaka, Masaru	Japanese, English										X			
Mr. Wang, Qi	Chinese, English and Japanese	X		X							X	X		
Dr. Yamamoto, Hiroshi	Japanese, English		X					X						

Name	Working Language	Expertise												
		1. Technical issues										2. Institutional issues		3. Others
		1.1. Collection of and recovery of mercury from products containing mercury	1.2. Treatment of flue gas and effluent containing mercury	1.3. Treatment of sludge and fly ash containing mercury	1.4. Storage and disposal of elemental mercury	1.5. Remediation of sites contaminated by wastes containing mercury and mercury compounds	1.6. Measurement and analysis of mercury levels	1.7. Engineering	1.8. Toxicology	1.9. Environ-mental science	1.10. Waste manage-ment in general	2.1. Laws and regulations	2.2. Awareness raising, public participation	
Dr. Yasuda, Kenji	Japanese, English		X				X							
Dr. Yokoyama, Takahisa	Japanese, English		X	X			X						X	

参考資料３　PAG 会合における廃棄物管理分野発表資料

The 6th Meeting of
Partnership Advisory Group

UNEP GLOBAL MERCURY PARTNERSHIP

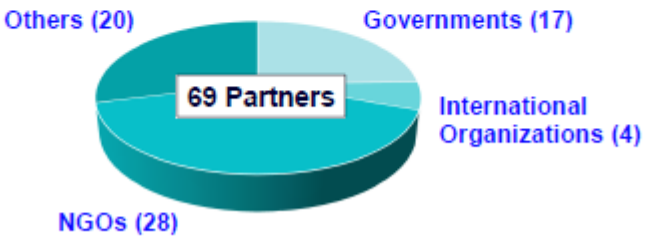
WASTE MANAGEMENT PARTNERSHIP AREA

Masaru Tanaka
Tottori University of Environmental Studies, Japan

Bangkok, 31 October 2014

Overview of the Waste Management Partnership Area

- **Lead**: Professor Masaru Tanaka
  Ministry of the Environment, Japan
- **Number of Partners**: 69 as of June 2014
  (16 increase since April 2012)



Effective tools to promote activities of the Waste Management Partnership

1. Face-to-face Meetings
2. Resource Person List
3. Good Practice Document
4. Business Plan

Effective tools for promoting activities:
1. The 3rd Waste Management Area Meeting (1/4)

- 10-11 Dec 2013 (Manila, the Philippines)
- 26 participants
  (3 countries, 3 IOs, 3 NGOs, 3 private sectors and Supply and Storage Partnership Area)

Effective tools for promoting activities:
1. The 3rd Waste Management Area Meeting (2/4)

- **Topics of the discussion**

1. Ways to support countries towards early ratification and implementation of the Convention
2. Collaboration possibilities with other Areas, local authorities and private-sectors
3. Updating/Developing relevant documents (e.g. Good Practice Document, Basel TG, UNEP's Sourcebook on Mercury Storage and Disposal)
4. Taking action on implementing Waste Management Area's future projects

Effective tools for promoting activities:
1. The 3rd Waste Management Area Meeting (3/4)

- **Priority activities** agreed in the meeting:
  - Provide necessary support in the update, revision, dissemination and implementation of the Basel Convention Technical Guidelines
  - Update the Good Practice Document including experiences in establishing legal framework to ratify and implement the Minamata Convention and in applying technologies
  - Support the development of UNEP's Practical Sourcebook on Mercury Storage and Disposal
  - Increase public awareness on mercury and mercury-added products and wastes and their impact on human health and the environment (local, regional, and global public campaign)

Effective tools for promoting activities:
1. The 3rd Waste Management Area Meeting (4/4)

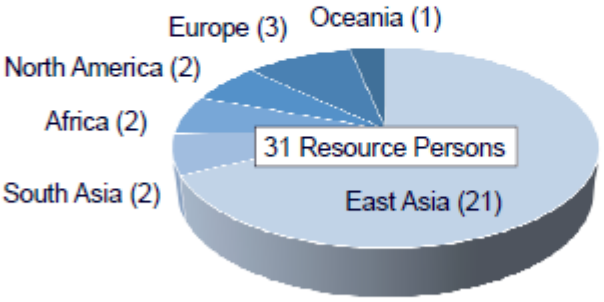
- Face-to-face meetings enhance partner-partner communication, within the Partnership area and across Partnership areas.
- To hold meetings periodically, securing funds and maintaining network among Partnership area is necessary.

Effective tools for promoting activities:
2. "Resource Person List" (1/2)

- **Objective**: provide partners with information about experts that could give advice from technical standpoint on:
  - Activities of the Waste Management Partnership Area
  - Activities for reducing mercury releases from waste management
- 6 newly registered, 31 in total (as of Sept 2014)
- Summarized List can be found on the UNEP website:
  http://www.unep.org/hazardoussubstances/Portals/9/Mercury/Waste%20management/Resource%20Person%20List_version1.pdf

Effective tools for promoting activities:
2. "Resource Person List" (2/2)

- 5 resource persons received a request for advice or instruction through the list (March 2011 to June 2014)



We need to further promote the utilization of the list

Experts from various regions, fields are welcome to join in this initiative

Regional division of Resource Persons

Effective tools for promoting activities:
3. "Good Practice Document"

- "Good Practice for Management of Mercury Releases from Waste" (Good Practice Document)
- **Basic concept** for updating this document:
  - Working from October 2014 to March 2015
  - Compile information of practices/technologies related to mercury waste management
  - Add description on preconditions to replicate the practice and suggestions to enhance ESM of mercury wastes for each practices/technologies, to provide readers with further information.

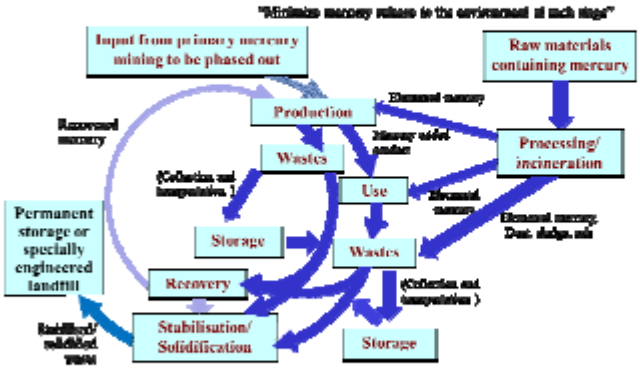
(Utilize existing resources such as Resource Person List and the mailing list)

Effective tools for promoting activities:
4. Business Plan (1/2)

- Updated in July 2014 (42 projects listed)

Target Waste Type of Business Plan Projects

Effective tools for promoting activities:
4. Business Plan (2/2)



Basic Concept of Mercury Waste Management
(Revised, according to BASEL OEWG9 discussion)

Which part of the life cycle does the project focus on?

Is there any part of the life cycle that lack information of specific practice?

Open Burning in the Backyard of Hospital (Cambodia)

March 9 ,2013 Bhaktapur ,Nepal

Gazipur Disposal Site, Delhi, India

MIX COLLECTION AND DISPOSAL→OPEN DUMPING AND BURNING→AIR POLLUTION AND WATER POLLUTION →PUBLIC HEALTH PROBLEMS

END OF PIPE APPROACH →LIFE CYCLE APPROACH

INDIVIDUAL APPROACH →INTEGRATED APPROACH

→UPGRADING TOTAL WASTE MANAGEMENT

Mercury Free Battery

1980～
Mercury pollution by battery became a serious problem in waste management.

Product Development
1991
Mercury Free Mn Battery
1992
Mercury Free Li Battery

"Mercury free"

19