

Global Mercury Partnership Partnership Advisory Group Fourth meeting Rome, 27-28 September 2012

Reporting of the mercury emissions from waste partnership area

UNEP Global Mercury Partnership

Note by the Secretariat

Individual partnership area evaluations have been prepared by the partnership areas in response to Annex I Section 3.f.iv of the UNEP Global Mercury Partnership Overarching Framework. The mercury releases from waste partnership area has drafted a partnership area evaluation. It is available in the annex to this document for information.

Reporting Format, UNEP Global Mercury Partnership

-- Version of 19 March 2012 --

4.0 Proposed Reporting Format for individual partnership areas

Please note: individual partnership areas are asked to respect a 4-page maximum reporting limit.

1.1 Individual partnership area: 1.2 Individual partnership area lead: 1.3 Individual partnership area lead: 1.4 How many meetings were held over the reporting period? 1.5 How many partners are parts of this partnership area? 1.6 Government: 1.7 Government: 1.8 How many partners are parts of this partnership area? 1.9 Individual partnership area? 1.10 Individual partnership area lead: 1.11 Lead: Prof. Dr. Masaru TANAKA, chair of committee on waste management, Central Environment Council of Japanese Government. 1.8 Individual partnership area lead: 1.9 Individual partnership area lead: 1.10 Individual partnership area lead: 1.11 Lead: Prof. Dr. Masaru TANAKA, chair of committee on waste management, Central Environment Council of Japanese Government. 1.11 Individual partnership area lead: 1.12 Individual partnership area lead: 1.13 Reporting year/period: 1.14 How many meetings were held over the reporting 2012 1.15 How many partners are parts of this partners as of April 2012 (20 increase since the last reporting) -15 Governments, 4 International organizations, 22 NGOs, 12 Others. 1.5 How many partners are parts of this partnership area? 1.5 How many partners are parts of this partnership area? 1.6 Government: Burkina Faso, Cote d'ivoire, Cambodia, Georgia, Germany, Japan, Liberia, Malawi, Mali, Mexico, Nigeria, the Philippines, Syrian Arab Republic, Tanzania, United States of America 1.6 Secretariat of the Basel Convention, UNEP, UNIDO, UNITAR 1.7 Number of face to face meetings: 0 1.8 Number of face to face meetings: 0 1.9 Number of face to face meetings: 0 1.1 Number of face to face meetings: 0 1.2 Number of face to face meetings: 0 1.3 Number of face to face meetings: 0 1.4 How many partners are parts of this partnership area? 1.5 Number of face to face meetings: 0 1.5 Number of face to face meetings: 0 1.6 Other: 0 1.7 Other: 0 1.8 Other: 0 1.9 Other: 0 1.9 Other: 0 1.9 Other: 0 1.0 Other: 0 1.0 Other: 0 1.0 Other: 0 1.1 Other: 0 1.1 Other: 0 1.2 Others: 0 1.3 Oth
Lead country: Japan (Ministry of the Environment) Lead: Prof. Dr. Masaru TANAKA, chair of committee on waste management, Central Environment Council of Japanese Government. July 2010 to June 2012
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Health Council, Alianza Contaminacion Cero, International Academy of Oral Medicineand Toxicology, IPEN(International POP's Elimination Network, ISE-POPS-CI(Informer, Sensibiliser, Eduquer sur lesPolluants Organiques Persistants en Cote d'ivoire), ISDE(International Society of Doctors for the Environment, Pollution control Association of Liberia, PROBICUO(Pro-Biodiversity Conservationists in Uganda), SETAC(Society of Environmental Toxicology and Chemistry), UNETMAC(Uganda Network on Toxic Free Malaria Control), WMA(World Medical Association), Zero Mercury Working Group, Zoï Environment network Others: ARCADIS US Inc, ALMR(Association of Lighting and Mercury Recyclers), USAC(Department of Toxicology Faculty of Chemical Science and

	Artist), Geological Survey of Denmark and Greenland, GEOMIN, Hg. Recoveries Pty.Ltd, ICSET(Institute for Combustion Science and Environmental Technology), IADR(International Association for Dental Research), IDM(International Dental Manufacturers), OIKON(Institute for Applied Ecology), Peerless Green Initiatives
1.6 How much funding was raised through this partnership area? What about in-kind assistance?	AU\$ 412 million (Total cost of newly reported projects; 'Mercury Dental Amalgam Collection and Recycling in Victoria Australia'; June 2008-Sept 2011; AU\$12 million, 'Upper Goulburn River Feral mercury recovery project' :Oct 2010-2020; AU\$400 million)

1.7 What is the objective of the individual partnership area?

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

2. MONITORING PERFORMANCE

(tracking partnership activities and partner contributions)

2.1 Please provide a short overview of key partnership area efforts completed since the previous Governing Council (brief description, outcomes, costs, timeframe).

- Resource Person List: a list of resource persons who could give advice from technical standpoint on activities of the Waste Management Partnership Area and those for reducing mercury releases from waste management was prepared for the first time in March 2011 and revised in March 2012.
- Basel Convention Technical Guidelines on Environmentally Sound Management of Wastes Consisting of Elemental Mercury and Wastes Containing and Contaminated with Mercury (hereinafter referred to as "Basel Convention Technical Guidelines"): The seventh draft was prepared by the Small Intersessional Working Group and presented for consideration at the COP10 in October 2011. With several changes the draft was adopted at the COP10 (unedited version is now available on the Basel Convention website).
- <u>Draft Good Practices for Management of Mercury Releases from Waste (hereinafter referred to as "Draft Good Practice Document")</u>: the first draft was presented as non-paper at INC 2 in January 2011.

*These were funded by Japan.

2.2 Please provide a short overview of the key current partnership area efforts (brief description, expected outcomes, budget, timeframe).

- Basel Convention Capacity Building Programme in the Latin America and Caribbean Region: To implement the Draft Basel Convention Technical Guidelines, this programme is carried out in Costa Rica, Uruguay, and Argentina. The programme includes development of inventories of mercury containing wastes at the national level in the health sector and plans for the sound management of mercury wastes, and building of a temporary storage facility in at least one country (Costa Rica) and institutional capacity to manage mercury containing wastes in a sound manner. This programme commenced in December 2009 and is funded by USA.
- Revision of the Guideline "Safe Management of Wastes from Health Care Activities": This guidance document describes the elements on the ESM of waste from health care facilities, including wastes containing mercury. The first edition was published by WHO in 1999 and is under revision leading to the second edition.

2.3 Please provide a short overview of any key upcoming, planned partnership area efforts (brief description, expected outcomes, budget, timeframe).

• To explore the possibilities for further collaboration with other Partnership Areas, in particular with Mercury-Containing Products Partnership, and Mercury Supply and Storage Partnership, e.g. in elaborating the draft Good Practice Document.

2.4 Identify the priority actions for the forthcoming reporting cycle (2 years).

To promote environmentally sound collection, disposal and treatment techniques for mercury waste following a lifecycle management approach through the development, dissemination and implementation of the Basel Convention Technical Guidelines, including possible further collaboration with other Partnership Areas. (We

have found that many countries are having difficulties in handling waste products containing mercury after they are collected.)

3. TRACKING PERFORMANCE RELATED TO UNEP GOVERNING COUNCIL PRIORITIES

3.1 In response to Governing Council Decision 25/5, paragraph 34/c:

Please summarize the key results achieved to date by the partnership area in terms of the following areas (as applicable).

- i) Providing information on best available techniques and best environmental practices and on the conversion of mercury-based processes to non-mercury based processes;
- Preparation of the Draft Basel Convention Technical Guidelines
- ii) Enhancing development of national inventories on mercury;
- Development and/or review of national inventories: see 4.2 below.
- Providing information about names of products containing mercury and average amount of mercury in the products through the draft Good Practice Document.
- iii) Raising public awareness and supporting risk communication;
- National workshops and regional workshops conducted under the UNEP <u>Mercury Waste Management Project and the Basel Convention Capacity Building Programme</u> have contributed to raising awareness of relevant sectors in the targeted countries.
- Partners reported a variety of awareness raising activities: see 4.2 below.
- iv) Providing information on sound management of mercury;
- Preparation of the "Draft Basel Convention Technical Guidelines"
- Preparation of "draft Good Practice Document"
- Partners reported a number of relevant activities such as publication of information on safe management and disposal of mercury-containing products and how to package, transport, and dispose mercury, and how to address dental amalgam waste.
- 3.2 (a) Please specify whether the promotion of non-mercury technologies (where suitable economically feasible alternatives do not exist) is relevant to the partnership area. Yes
 - (b) If it is relevant, how is the partnership area specifically addressing the promotion of non-mercury technologies?
- Basic principles for the reduction of mercury releases from waste management include promoting the
 development and use of mercury-free equipment, supplies, products and processes, and thus minimizing
 inclusion of mercury into waste stream. The Basel Convention Technical Guidelines and the Draft Good
 Practice Document illustrate these principles.

4. ASSESSING EFFECTIVENESS

(measuring the impact of partnership activities on target beneficiaries)

4.1 What are the partnership area indicators of progress? If no indicators, please specify why.

- Estimated amount of mercury diverted from waste stream by the implementation of the projects under the Partnership
- Number of partners
- Available information on identification and characterization of mercury contained in waste streams
- Number of national projects on ESM of mercury waste implemented
- Number of countries that prepared national inventory of mercury waste
- Number of projects to promote awareness and education

4.2 Please report on progress in terms of each of the partnership area indicators outlined within the partnership area business plan.

- Estimated amount of mercury diverted from waste stream by the implementation of the projects under the Partnership (only amount reported after July 2010): Panama (4.3 tones of mix used batteries including alkaline, bottom, rechargeable, cadmium, lithium, nickel and mercury batteries), Panama (13 pounds of elemental mercury, 3000 fluorescents tubes and 3kgs of mercury from light bulbs), H.G Recoveries Pty Ltd. (Removal of about 4,900 tons of mercury from historical gold mining area)
- Number of partners: increased to 53 in June 2012 from 33 in July 2010.
- Number of national projects on ESM of mercury waste implemented (accumulative): 12 including Basel

Convention Capacity Building Programme in the Latin America and Caribbean Region (Uruguay, Costa Rica, Argentina), UNEP Mercury Waste Management Project (Cambodia, Philippines, Burkina Faso, Chile, Pakistan), UNIDO Project on end-of-life Compact Fluorescent Lamps (Uruguay), Japan's research on long-term storage of collected mercury, Panama's battery and fluorescent lamp collection projects, Project on mercury containing wastes by National bodies of Syria

- Number of countries that prepared national inventory of mercury waste (accumulative): 8+ including Cambodia, Pakistan, the Philippines and Syria through Asia Mercury Inventory Toolkit Pilot Project; Germany; Japan; USA; Panama; various countries through USEPA funded projects
- Number of projects to promote awareness and education: UNEP's development of brochures, guidelines, assessments, and other information materials (accessible from Web Page), GPNP's awareness and educational campaign through newspapers, magazines and Art & Info mercury workshops in Panama, USA's activities (publishes information on safe management and disposal of mercury-containing products and how to package, transport, and dispose mercury; encourages schools to prevent mercury spills through efforts such as provision of "Mercury: An Educator's Toolkit"; makes public information on how to address dental amalgam waste through websites), and others as one component of the projects listed in the business plan.

4.3 What are the strengths of the partnership area?

- Contribution to show the variety of measures: Partners conduct various activities including national efforts and bilateral/multilateral cooperation. Exchanging information about the results of these activities through this partnership would be summarized as "show case" of measures, which is useful considering the variety of current waste management style in countries.
- Cross cutting: The activities under this partnership area will be conducted in close relationship with Mercury-Containing Partnership and Supply and Storage Partnership Areas. That enables partners to consider lifecycle approach to reduce mercury emission to the environment.

4.4 What are the weaknesses and/or major challenges for this the partnership area?

- Major challenges include: ensuring environmentally sound management of collected waste products and
 treated residues for the countries that have established waste collection systems; enhancing capacities of
 managing municipal waste, of which banning and stopping open burning is the highest priority for mercury
 waste management followed by changing open dumping to sanitary landfills with periodical surface
 coverage); and raising awareness of the public and political leaders.
- Weakness of this partnership has been a limited interaction among the Partners (major interaction has been an annual face-to-face meeting which were not held during the last two years).

4.5 Can the weaknesses or major challenges be addressed through the partnership? If yes, what is the best strategy to address such weaknesses / major challenges in moving forward?

- Resource person list could be utilized to obtain specific advice for mercury waste management.
- The draft Good Practice Document will provide information about feasible solutions to deal with collected waste products and treated residues containing mercury.
- A mailing-list that has been set up could promote increased interactions among partners.

4.6 In view of above, how should the partnership area be modifying its approach in the coming two year cycle? Should the objective and indicators of the partnership area be revised in moving forward?

• The partnership area needs to promote activities as partner. Also, the number and the content of indicators should be reconsidered, for collecting information updating these indicators might be very hard for some partners.

5. FUTURE COLLABORATION

5.1 Please identify whether there are potential areas of effort for the partnership that would benefit from enhanced collaboration within the overall UNEP Global Mercury Partnership.

- With Mercury-Containing Product Partnership: Coordination of activities such as utilization of the Basel Convention Technical Guidelines, inputs to the draft Good Practice Document, and design of joint projects to meet objectives of the two Partnerships
- With Supply and Storage Partnership: Coordination of activities such as utilization of the Basel Convention Technical Guidelines, inputs to the draft Good Practice Document

6. OTHER

6.1 Please outline how this report was drafted and who was consulted with in doing so.

This report was drafted by the lead of the Partnership Area and circulated and consulted with the Waste Management Partners.

6.2 This section is intended for other relevant comments.