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**Global Mercury Partnership  
Partnership Advisory Group, Sixth meeting**  
Bangkok, Thailand, 31 October – 1 November 2014

**Report on activities undertaken within the UNEP Global Mercury  
Partnership (July 2013 – July 2014)**

**Note by the Secretariat**

The Overarching Framework of the UNEP Global Mercury Partnership outlines that one of the responsibilities of the UNEP Global Mercury Partnership Advisory Group is to report on activities undertaken within the UNEP Global Mercury Partnership.

The UNEP secretariat has drafted a report on activities within the UNEP Global Mercury Partnership, which is set out in the annex to the present note. The current version reflects input received from the partnership area leads.

The Partnership Advisory Group may wish to discuss and provide input on the report on activities.

## Annex

### I. Introduction

1. The Overarching Framework of the UNEP Global Mercury Partnership specifies that one of the responsibilities of the UNEP Global Mercury Partnership Advisory Group is to report on activities undertaken within the UNEP Global Mercury Partnership. The following document is a report of the partnership activities from July 2013 – July 2014. It reflects input received from the partnership areas.
2. Under the Global Mercury Partnership, eight partnership areas have been established, including: artisanal and small-scale gold mining, mercury cell chlor-alkali production, fate and transport, mercury in products, coal combustion, mercury waste management, mercury supply and storage, and mercury releases from cement industry.
3. This report provides a list of the highlights of partnership area activities over the period of July 2013 to July 2014, per partnership area.

### II. Global Mercury Partnership Participation

4. The number of official partners is steadily growing:
  - a) As of 30 June 2013, there were 118 official partners in the Global Mercury Partnership, including 25 governments, 5 intergovernmental organizations, 48 non-government organizations, and 40 others.
  - b) On 1 September 2014, there were 131 official partners in the Global Mercury Partnership, including 26 governments, 5 intergovernmental organizations, 54 non-government organizations, and 46 others.
  - c) Some of the partners are global industry partners that collaborate and represent a large number of national associations. In addition, the Partnership works with a number of stakeholders that have not yet officially joined.

#### i) Artisanal and small-scale gold mining

5. The United Nations Industrial Development Organization (UNIDO) and the Natural Resources Defence Council (NRDC) are jointly leading the artisanal and small-scale gold mining partnership area.
6. Key activities in this area include:

#### **Priority Action 1: Support governments in setting national objectives/targets**

- d) The Partnership assisted UNEP in planning and organizing the second Global Forum to reduce mercury use in ASGM. The forum was held on the 3-5 of September 2013 in Lima, Peru. The report of the meeting is available on the Partnership website.
- e) The Partnership also assisted UNEP to organize an Andean forum on ASGM which was held on 20-22 November 2013 in Medellin, Colombia, to encourage regional cooperation among countries in the region on this issue. The report of this meeting is available on the Partnership website.
- f) Through UNIDO, SAICM has provided funding to Mali and Cote d'Ivoire to establish an inventory of the extent of the sector in the countries as well as

finalizing their National Action Plan. Mali has produced their NAP, and the work is continuing in Côte d'Ivoire with the first inventories undertaken this year.

- g) With support from the GEF, UNIDO and the Artisanal Gold Council (AGC) are working in Burkina Faso and Senegal to develop the national action plans. Work is under way and plans should be produced soon.
- h) Through a US State Department grant, the Environmental Law Institute is working in Nigeria with various stakeholders to assess the ASGM sector and develop legal and policy recommendations to assist the Nigerian government to address mercury and lead poisoning issues associated with ASGM.
- i) The European Environment Bureau, a member of the Partnership, funded a project entitled *Facilitating and Strengthening National Concerted Effort through "Priority Setting Activities" for Mercury Treaty Implementation in Nigeria*, carried out by SRADEV, a Nigerian NGO. One component is to facilitate activities that will help with the development of a National Action Plan (NAP) on ASGM Activities. As part of this project, SRADEV conducted an appraisal of ASGM activities in the State of Osun (one of the ASGM states). On the national level, meetings with the Federal Ministry of Environment (focal point on Mercury Convention) as well as with Director, Ministry of Mines & Mineral Development (Head of ASGM), were held, to try to come to agreement on a way forward for the development of NAP component.
- j) USEPA has provided funding to revise the guidance document for National Action Plan formulation. A drafting meeting was organized by NRDC in Washington DC in August 2014 with the participation of the following partners: AGC, Ban Toxic, Biodiversity Research Institute, UNIDO, US State Department and USEPA. A draft has been circulated for comments.
- k) NRDC, co-leader of the Partnership, launched the DC Roundtable on ASGM. The group includes more than 50 individuals from all of the major U.S. government and international donor agencies located in Washington, DC that work on ASGM (U.S. State Department, U.S. EPA, USGS, U.S. Department of Labor, USAID, the World Bank, IADB, and various academics and NGOs). The Roundtable has created a space for discussion among organizations to find ways to work together to accelerate progress and to prioritize ASGM on the funding agendas. The group has held quarterly meetings, promoted informal collaborations, created information platforms for ASGM (including a project library and a wiki site), and held special sessions of the Roundtable when ASGM specialists visit DC.

**Priority Action 2: Eliminate worst practices and promote alternatives**

- a) A GEF project, developed in Ecuador and Peru, aims to demonstrate and replicate mercury emission reduction methods and non-mercury gold extraction for the artisanal and small-scale gold mining sectors of located in the Puyango-Tumbes river basin region. The project is implemented by UNIDO with strong involvement of other partners, including INIGEMM, the national counterpart in Ecuador; ALA, the local water authority in Tumbes, Peru; and the University of British Colombia.
- b) Ban Toxics together with the Danish NGO, Dialogos, the Department of International Health, Immunology and Microbiology (ISIM) of the University of

Copenhagen (Faculty of Health Sciences), International Committee of Environmental, Occupational and Public Health (Danish Society of Environmental and Occupational Medicine), Geological Survey of Denmark and Greenland, and the Benguet Federation of Small-Scale Gold Miners, Inc. have embarked on a multi-year, multi-pronged project to introduce mercury-free techniques utilizing miner-to-miner, rural health worker trainings, and community information campaigns. The project focuses on indigenous expertise and excellent progress has been made in convincing and motivating miners to move away from mercury, particularly in indigenous communities. At least 1,700 miners have been trained in the project area. Currently the project is beginning to monitor the amount of mercury reduction induced by the project and create local structures that will sustain the achievements long after the project's end. This work has been complemented by a GEF project implemented by UNIDO and executed by Ban Toxics.

- c) The US State Department has ongoing demonstration project in Francophone West Africa to develop and implement an intervention model that self-replicates, to reduce and eventually eliminate mercury use in small scale gold mining operations, while improving health, environment and wealth of ASGM communities. The project seeks to improve economic opportunities for miners and their communities, increased knowledge of health safety, and environment, and a measured reduction in mercury use. The implementing agency is the Artisanal Gold Council. To date, the AGC has: developed detailed inventories of 36 different ASGM sites in Burkina Faso; strengthened the Burkina Faso ASGM national estimates and supply chain mapping as a result of the collection of additional information; conducted comprehensive ASGM inventory training of our Burkina Faso representative; and most notably, constructed a community-level mercury-free processing plant, which is both operating well, and serving as a model/training center for surrounding communities. The construction of the plant required developing technical specifications, as well as managing logistical requirements for ordering, importing, assembling, and maintaining materials. These experiences will serve to help with the more rapid construction of future plants. Another plant will be set up in Senegal in the last quarter of 2014.
- d) Since 2011, now extended to 2014, the US State Department is funding a sub-regional mercury storage project in the Philippines and Indonesia. This project brought stakeholders together to develop a national approach to the environmentally sound management of mercury, with focus on the storage of mercury from the ASGM sector. The project includes nationwide mercury monitoring in ASGM hotspots, development of technical and non-technical methodologies to identify mercury use, and understanding gender roles in small-scale mining and contribution of women to mercury-free transition in the sector.
- e) The US State Department is also supporting a project, implemented by BanToxics and Balifokus, on developing capacity in Indonesia and the Philippines to estimate mercury, trade, use and release in the ASGM sector through training of local governments and stakeholders on conducting mercury inventory studies.
- f) UNEP, with funding from USEPA and in collaboration with its project partner (Blacksmith Institute) has been implementing a training and technology transfer project on reducing mercury use in ASGM in Indonesia. The project primarily focuses on technical interventions to significantly reduce mercury emission from

ASGM. Since the inception of the project, ninety retorts, ten sluices (to ore processors) and fifty water-box condenser systems have been distributed, helping in reducing mercury use in specific regions of the country. The project is also working on promoting health awareness, training of miners and outreach through media. During the project, multi-stakeholder workshops were held to promote the development of a national strategic plan. The Government of Indonesia has now produced a draft national action plan for addressing mercury use in ASGM.

- g) PLAGBOL (Bolivia) together with Blacksmith Institute, the Danish NGO, Dialogos, Geological Survey of Denmark and Greenland, the Danish NGO ICOEPH and the Federation of Small-Scale Miners, in La Paz Bolivia, embarked on a one year pilot project to introduce mercury-free techniques utilizing miner-to-miner trainings, training of health care workers and awareness raising in mining societies in Bolivia. The project is financed by Empleomin (an EU funded entity in Bolivia) and the Danish Embassy. The project is bringing miners from the Philippines to reach out to Bolivians miners to train them on the adoption of mercury-free techniques. The project is focusing on indigenous expertise that improve upon gravitational methods (e.g. use of sluice box and panning) and the use of direct smelting at the refining stage of the process, as demonstrated in the Philippines project mentioned above. The project has started a mapping of problematic mercury polluted areas and later this year trials with the mercury free method is taking place alongside the trainings and awareness-raising.
- h) The US Department of State is funding a project in Nicaragua implemented by AGC to: develop and implement a technical and governance model; reduce and, where feasible, eliminate mercury use in Nicaragua's ASGM sector without diminishing economic opportunity; build capacity and raise awareness on mercury reduced/free technologies, and health and safety; and implement activities to build institutional capacities in ASGM policy development.
- i) The US Agency for International Development is working to support the efforts of Colombia's national, regional and local authorities and local miners' organizations in promoting economic and social development in the gold mining regions of Northern and North-eastern Antioquia, through the formalization of small illegal/informal mining operations. This includes strengthening the capacity of informal miners' organizations in Northern Antioquia to assist members in adopting environmentally sound technologies, accessing legal services and markets that reward best practices (including certification if feasible), and enhancing their ability to negotiate agreements and contracts with formal mining operations on fair and equitable terms; and improving the environmental and economic performance of small-scale mining operations through the generation and transfer of environmental best practices and technologies to lower costs, increase recovery efficiency, and mitigate negative environmental impacts (including pilot initiatives to develop and disseminate alternatives to decrease the amount of mercury per unit of gold produced, as well as the restoration of degraded areas).
- j) EEB also funded a project entitled *Mercury Measuring in Educational, Health, Dentistry and Artisanal and Small Scale Mining in Tanzania*, carried out by AGENDA, a Tanzanian NGO. The project objective was to analyze mercury exposure levels within education, healthcare, dentistry, and artisanal and small scale mining centers, and to build understanding of teachers, healthcare workers,

dental personnel, artisanal miners on levels of exposures. The information gathered by the study is to be used for advocacy to push the government to take serious efforts in phasing out mercury use in education, healthcare as well as artisanal and small scale gold mining activities. AGENDA implemented the project in four regions of Tanzania namely Dar-es-salaam, Mbeya, Mwanza and Geita regions. They found high levels of mercury in burning areas (>50,000ng/m<sup>3</sup>) as well as in open areas near the miners sites. After conducting measurement AGENDA convened a short meeting with miners within the site for information sharing about the results obtained as well as explaining to miners on health effects of mercury and available alternatives that could be used in order to eliminate mercury uses. While miners seemed aware of mercury risks, they were not aware of alternatives and technologies to protect themselves from exposure, but showed interest in receiving adequate and efficient safe technologies to improve their working conditions as well as capturing more gold to improve their livelihoods.

- k) The US State Department is developing a series of formalized training modules on appropriate mining technologies to improve efficiency, gold recovery and reduce reliance on mercury among artisanal gold miners in the Andean region.

### **Priority Area 3: Exploring innovative market-based approaches**

- a) An UNIDO led project, funded by FFEM (Fonds Français pour l'Environnement Mondial) and GEF is underway in Francophone West Africa (Burkina Faso, Mali and Senegal). Implemented by Alliance for Responsible Mining (ARM) and AGC, the project focuses on transferring technologies that eliminate mercury emissions from the sector and introducing the Fairmined standard at selected sites in the three countries. This project has collected data; initiated discussions on formulating a National Action Plan; distributed, and where feasible, demonstrated the Technical Guidance document, produced by the Partnership, in the field. With a strong focus on formalization, the implementation of Fairmined Standard best practice has led to the formation of the first Miners Cooperative in Burkina Faso, and obtaining of a mining title by an artisanal miners organization in Senegal.
- b) A regional project is implemented by ARM and its local partners Red Social, Cumbre del Sajama and ASOMIRCOL in the Andean countries of Latin America (Bolivia, Colombia, Peru). It is funded by Inter-American Development Bank, Fondo Acción Ambiental and Tiffany Foundation and works with over 20 ASM organizations to implement Fairmined Standard best practice, including reduction of mercury.

#### **ii) Mercury cell chlor-alkali production**

- 7. The United States of America is acting as lead in this partnership area.
- 8. Key activities in this area include:
  - a) The partnership has completed its update to the global mercury-cell chlor-alkali facility inventory.
  - b) The partnership is planning to continue to update and improve the global inventory, especially for those facilities where limited data has been available.

- c) The partnership continues to share information in the areas of technical cooperation for mercury use and release reduction and on conversions (including storage, management, and financing).
- d) The World Chlorine Council submits annual reports to UNEP describing trends in members' mercury use and release, as well as conversions to non-mercury technologies.
- e) The partnership has posted a video by Euro Chlor describing best practices for operation, waste management, and decommissioning of mercury-cell chlor-alkali plants.
- f) UNIDO is pursuing a project to ensure proper mercury waste management in a converted chlor-alkali plant in Tunisia.

9. Progress:

- a) The partnership promotes a reduction in demand to 250 tonnes by 2015. This target presents a 50% reduction in mercury demand by 2015 based on a 2005 baseline of 500 tonnes. The World Chlorine Council, which includes more than 80% of the global mercury-cell chlorine capacity, reported an average mercury use of 170 tonnes per year from 2011-2013. Based on this, it is likely that global demand is already below 250 tonnes per year.
- b) In addition, our global inventory shows that global mercury-cell chlorine capacity decreased from 9000 Kt Cl in 2005 to about 5100 Kt Cl in 2013. The number of chlor-alkali facilities also decreased from about 140 in 2005 to 81 in 2013, and conversions and closures continue at a sustained pace. Euro Chlor has committed to closing all their mercury-cell facilities, which represent almost all mercury-cell production in Europe, by 2020. The Minamata Convention includes a requirement for parties to not allow mercury-cell chlor-alkali production by 2025 (although exemptions beyond this date are possible).

10. Future plans of the partnership

- a) The partners believe that advances are being made but that challenges remain with regards to conversion and storage. The path forward depends greatly on the establishment of technical and regulatory capacity within the affected countries and regions for surplus mercury management, and on financial capacities within the specific industries.
- b) Looking forward, the partnership area will focus on three main areas (specific activities will depend on individual partners and available resources). First, the partnership area will continue efforts to encourage and facilitate conversions of mercury-cell facilities. Partners have previously discussed assisting governments and facilities with accessing financing for conversions through multilateral development banks and similar institutions. Next, we will attempt to assist in ensuring environmentally sound decommissioning of facilities and sound waste management practices. This could include disseminating guidance from a variety of sources, including the Basel Convention, UNEP Mercury Sourcebook, private firms offering waste management services, and environment ministries. Finally, the partnership area is aware of the significant challenge of dealing with large amounts of mercury from decommissioned plants in accordance with the provisions of the Minamata Convention. We will work together with the Supply and Storage partnership area to attempt to provide assistance in this critical area.

### iii) Mercury air transport and fate research

11. The CNR- Institute of Atmospheric Pollution Research, Italy is leading this partnership area.

12. The objective of the partnership area (F&T) is to increase global understanding of international mercury emissions sources, fate and transport by accelerating the development of sound scientific information to address uncertainties and data gaps in global mercury cycling and its patterns (e.g., air concentrations and deposition rates, source-receptor relationships, hemispheric and global air transport and transformation and emission sources), by enhancing information sharing among scientists and between them and policymakers and by providing technical assistance and training, where possible, to support the development of critical information.

13. The F&T is primarily engaged in the development of sound scientific information; enhancing sharing of such information among scientists and policymakers; providing technical assistance and training; enhancing the development of a globally-coordinated mercury observation system to monitor the concentrations of mercury species in air and water ecosystems.

14. Key activities in this area include:

In the framework of the project Global Mercury Observation System (GMOS-[www.gmos.eu](http://www.gmos.eu)), the following major mid-term results were obtained:

- a) Establish of the global monitoring system for mercury with 28 land based monitoring sites (see GMOS website – [www.gmos.eu](http://www.gmos.eu));
- b) Completion of oceanographic and aircraft measurement campaigns;
- c) Planning and implementation of a centralized repository archive and established advanced web services;
- d) Establishment of a database of historical, current and future scenario mercury emissions.

Ongoing activities within the F&T and the GMOS project:

- a) Continuing collection of atmospheric mercury species concentrations;
- b) Continuing collection of precipitation samples for mercury analyses;
- c) Improvement, validation and intercomparison of regional and global scale atmospheric mercury models (the latter with external partners within the GMOS Mercury Modelling Task Force (MMTF));
- d) Model application to evaluate source-receptor relationships, temporal trends and future emission scenarios;
- e) Preparation of a white paper, still in progress, aiming to provide a framework for using GMOS as a model for global monitoring of mercury under Minamata Convention on mercury, that will be supplied to all partners by the end of 2014;
- f) Close cooperation with major international programs including the UNEP Global Mercury Partnership, the Task Force on Hemispheric Transport of Air Pollutants (TF HTAP) of the LRTAP Convention, the GEO Task HE-02-C1 "Tracking Pollutants" and the Arctic Monitoring and Assessment Programme (AMAP);
- g) Support to the Italian National Reference Centre for Mercury (CNRM-[www.cnrmerc.org](http://www.cnrmerc.org)).

Results from the activities have been made available on GMOS website ([www.gmos.eu](http://www.gmos.eu)) and the F&T web portal for scientists, policy makers and stakeholders (<http://www.unep.org/chemicalsandwaste/Mercury/InterimActivities/Partnerships/AirTrans>



portandFateResearch/tabid/3532/language/en-US/Default.aspx ).

#### Meetings:

During the period January 2013 - July 2014 the F&T members have met several times. Below are the most relevant meetings to which F&T has contributed:

In 2013 the F&T has taken part to the following meetings, workshops and committees:

- a) Fifth INC - Intergovernmental Negotiating Committee to prepare a global legally binding instrument on Mercury and relative exhibition space, held in Geneva (Switzerland), on January 13th – 18th, organized by UNEP.
- b) From 10th to 13rd June, F&T has organized a Workshop in Rome on the “Revision of GMOS Standard Operating Procedures, QA/QC Procedure and ad-hoc Software and Data Policy” developed in the framework of the global GMOS network. It is a centralized system based on a unique and separate QA/QC methodology able to assure and control the quality of mercury datasets coming from the GMOS network and aimed to process raw data by integrating information coming from station e-logbooks (i.e. centralized electronic logbooks) and from automated Quality Assurance (QA) scripts (used as flagging criteria) related to specific procedures for the measurement of atmospheric mercury data;
- c) On July-August 2013 the F&T has met during the Fifth PAG - Partnership Advisory Group meeting, organized by UNEP, and at the 11th ICMGP (International Conference on Mercury as a Global Pollutant) held in Edinburgh, Scotland (UK), from July 28th – August 2nd 2013. A special session titled ‘Development of a Global Mercury Observation System toward the preparation of the global mercury treaty (GMOS)’ coordinated by the CNR - Institute of Atmospheric Pollution Research and the Biodiversity Research Institute was held at the 11th ICMGP 2013. The Special session focused on the development of a Global Mercury Observation System (GMOS) aimed to provide spatial and temporal variations of mercury concentrations in ambient air and precipitation, as well as in the marine and terrestrial ecosystems, toward the preparation of the global mercury treaty (<http://www.mercury2013.com/conference-topic-overview/>).
- d) From 16 to 18 September 2013 F&T has joined the AMAP WG Meeting in Torshavn, Faroe Islands (Denmark);
- e) In October 2013 the F&T has taken part to the Conference of Plenipotentiaries on the “Minamata Convention on Mercury” which was held in Minamata and Kumamoto, Japan, from October, 9th to 11th and was preceded by an open-ended intergovernmental preparatory meeting from October, 7th to 8th 2013. During the Preparatory meeting, the Italian Ministry for the Environment Land and Sea (IMELS) and the Italian National Research Council — Institute of Atmospheric Pollution Research (CNR-IIA), have organized a side-event, on the “Italian National Reference Centre for Mercury and its potential role within the Minamata Convention”. The side event has presented the Italian Reference Centre for Mercury (CNRM), established at the end of 2012 to tackle the problem of mercury pollution, and promoted it as International Centre to support national and international organisations in the implementation of the Minamata Convention.

In 2014 the F&T has taken part to the following meetings, workshops and committees:

- f) From 25th to 28th February 2014 has participated to the Workshop on Pollution of Open Ocean which was held at International Atomic Energy Agency (IAEA) Environment Laboratories in Monaco under the aegis of the Joint Group of Experts on the Scientific Aspects of Marine Protection (GESAMP);
- g) In April 2014 (14-15th April), The GMOS Mercury Modelling Task Force has taken place at the CNR-IIA, in Rome. The meeting was attended by colleagues from the US, Canada, Russia and Germany, with a number of colleagues worldwide connected via videoconferencing;
- h) In July 2014, from 9th to 10th F&T has organized a workshop in Rome on the GMOS Data Quality Management System (G-DQM) in the framework of the global GMOS network;
- i) On July 28-30, F&T has taken part to the 3rd International Conference on Earth Science & Climate Change, San Francisco, USA, 2014.

During the period 2013-2014, the Partnership has had several teleconferences and other forms of communication with other F&T partners in order to assure an efficient exchange of information and, in the same period, has taken part in many meetings and workshops.

#### 15. Future plans of the partnership:

Areas identified within the F&T Partnership for further investigation include:

- a) Harmonization of mercury emission and releases inventories;
- b) Development of a global observing system to monitor and model mercury contamination at regional and global scale. This could be done using GMOS as a framework, considering that GMOS is currently the only international initiative aiming to build a global observing system for mercury, to support the implementation of future legally binding instrument aiming to reduce the impact of mercury emissions on human health and ecosystems that are under preparation (INC process) in the framework of the UNEP Mercury Program and last GC meeting's decisions.
- c) Close coordination with the Group on Earth Observations (GEO), the organization working to built GEOSS (the Global Earth Observation System of Systems), to include mercury in GEOSS work plans;
- d) Further involvement of the F&T partners in several International Conferences such as 2014 AGU Fall Meeting to be held on December 2014 in San Francisco;
- e) Further coordination and liaison with various organizations and programs (such as United Nations Economic Commission for Europe, Arctic Monitoring and Assessment Programme, UNEP Regional Seas Program);
- f) Further development of a global biotic Hg database that will provide a baseline of mercury levels from which to evaluate Mercury Treaty effectiveness. Place particularly emphasis on marine coastal and open ocean fish and other food items which are important to monitor for human health purposes. Link Hg data with harvest data from the FAO;
- g) To explore opportunities to integrate current or proposed Hg monitoring programs for biota in the western hemisphere that can be used for global monitoring purposes and linked with measurements of air deposition and watershed releases;
- h) To expand the scope of F&T to include dispersed sources of mercury to the global mercury budget, such as re-emission of mercury from contaminated sites

- (including emissions to the atmosphere and water cycle);
- i) To expand the scope of F&T by including ecosystems that are sensitive to the mercury load (i.e.; biological mercury hotspots). Indicators and metrics still to be developed;
  - j) To liaise with supporting activities already provided through regional meteorological institutions. This link will enhance and strengthen the quality of measurement results and secure worldwide comparability (stronger collaboration with the WMO is suggested) and may assure a sustainability of efforts and coordination globally;
  - k) To develop global protocols for monitoring of waters, sediments & biota in terrestrial, freshwater, and marine ecosystems that will assist in model development
  - l) To join new European Projects, such as the Research Project “ENV51 Metra: Traceability for mercury measurements” (SRT-v11) to support the requirements of national and international legislation (e.g. the UNEP Minamata Convention on Mercury), which aims at controlling mercury emissions and releases, selected and approved by the European Metrology Research Programme (EMRP) Call 2013 – Energy and Environment. The EMRP is funded by the EMRP participating countries within EURAMET and the European Union. The project coordinated by the JRP-Laboratoire national de métrologie et d'essais (LNE), France will start on the 1st of October 2014 and be of 3 years duration.
  - m) To join new Global Projects, such as the UNEP/GEF Global project on the ‘Development of a Plan for Global Monitoring of Human Exposure to and Environmental Concentrations of Mercury’, led by UNEP DTIE Chemicals Branch, aiming at harmonizing approaches for monitoring mercury in humans and the environment, and at strengthening the capacity for mercury analysis in humans and the environment to accurately determine their concentrations globally. The project, approved and funded by the GEF will be of a 2 year duration.
  - n) To hold F&T partnership meeting(s) and/or teleconferences subsequent to INC-6, as appropriate, to discuss path forward on how F&T partnership can assist with implementation of the Minamata Convention requirements.

**iv) Mercury-containing products**

- 16. The United States of America is acting as lead in this partnership area.
- 17. The partnership area objective 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. Numerical targets have been set for 2017 for various product categories (including batteries, lamps, dental amalgam, measuring and control devices, electrical and electronic devices and others such as cosmetics, pharmaceuticals and traditional and ritual uses).
- 18. Key activities, including those completed during the reporting period include:
  - a) Completed the Basel Mercury Waste Capacity Building from Products Partnerships cooperative agreement, which helped build capacity and best management practices for managing discarded mercury products collected from health care facilities and other sectors. Key outcomes included conducting Conducted workshops on developing national plans for managing mercury waste in Argentina, Costa Rica, and Uruguay.

- b) Completed the Health Care Cooperative Agreement to Provide Technical Support for Mercury Reduction in Hospitals, a four-year initiative to expand existing and launch new health care mercury inventory, reduction, waste management, and training pilots. Key outcomes included expansion of reduction projects in Latin America (Brazil, Costa Rica, Ecuador, Mexico).
- c) Completed the Phasing Down Dental Amalgam country case studies, an effort to conduct case studies where countries have “phased down” the use of dental amalgam, including the prevalent trends, variations and commonalities. Key outcomes included describing prevalent trends, variations and commonalities among countries achieving reductions in the use of dental amalgam.
- d) Held November 2013 teleconference to allow Partners to propose potential projects should funding become available. Thereafter, Partners informally ranked those proposals to prioritize projects and other areas of interest.
- e) Worked with UNEP to create the “Alternatives to Mercury-Containing Products” brochure.
- f) Increased the total Partnership to 53 members.

19. Potential next steps include:

- a) Re-evaluating the structure and scope of the business plan, including the indicators of progress, and discussing co-leadership of the Products Partnership.

**v) Mercury releases from coal combustion**

20. The International Energy Agency (IEA) Clean Coal Centre is acting as lead in this partnership area.

21. The objective of this partnership area is the continued minimization and elimination of mercury releases from coal combustion where possible. No numerical targets are established for this partnership area.

22. Key activities in this area include:

- a) The POG and iPOG, (process optimization guidance materials for the coal sector for mercury reduction) produced under the previous reporting period, have been disseminated widely at meetings and workshops. The POG is recognized as a useful document and was accepted as the basis for the new BAT/BEP guidance materials being produced for the coal sector. Experts from the Coal Partnership have been attending and advising at the meetings of experts and have provided the majority of work on the text of the document. Experts from the Coal Partnership have been attending and advising at the meetings of experts, have incorporated approaches developed during the guidance process to countries into the BAT/BEP discussions and document preparation, and have provided the majority of work on the text of the document.
- b) The Coal Partnership is also working to establish a list of potential case studies to be made available in support of the BAT/BEP guidance. The Coal Partnership is also working to collate a list of experts to be made available as a Steering Committee to review and process these case studies.
- c) The Coal Partnership has continued to provide details of the previous work (studies in China, Russia, South Africa and India) at international meetings and conferences using the remaining funds from the European Commission. Further technical assistance has been provided to India, Russia and South Africa in order to complete various projects on mercury control which had been established

under previous periods of funding.

- d) The Coal Partnership has liaised with the British Standards Institute in order to establish a new CEN/ISO (European Standards Committee and International Standards Committee) working group on mercury measurement using sorbent traps. The sorbent trap method is standard in the USA. However, other countries were using methods based on wet chemistry, which are known to be awkward and unreliable. The new CEN/ISO standard will be based on the US method and will therefore ensure that the same monitoring method is used for mercury worldwide. This will go a long way to aligning emission data and making it more comparable.
- e) A new discussion document, currently in draft, has been prepared highlighting synergies and similarities between the UNFCCC and Minamata for the coal sector which a view to highlighting potential benefits from projects which consider both conventions simultaneously.
- f) The outreach by members of the Coal Partnership is international with papers having been presented in India, China, Malaysia, Russia, South Africa, USA, Poland and many more.

**vi) Mercury waste management**

23. The Government of Japan is acting as lead in this partnership area and collaborates closely with the Basel Convention.

24. The objective of the partnership area is to minimize and, where feasible, eliminate unintentional mercury releases to air, water, and land from waste containing mercury and mercury compounds by following a life cycle management approach.

25. Key activities in this area include:

- a) Face-to-face meeting: 3rd Waste Management Partnership Area meeting was held in Manila in December 2013. The meeting was funded by Japanese government, with assistance provided by Environmental Management Bureau, the Philippines. Participants reviewed previous activities and consulted about the future plan of Waste Management Partnership area, including further collaboration with other Partnership areas/local authorities/private sectors, updating/developing relevant documents, and utilization of Resource Person List and Wish List.
- b) 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. The list is currently under revision as of July 2014, and information on activities made by each resource person will be integrated.
- c) Draft Good Practices for Management of Mercury Releases from Waste (hereinafter referred to as “Draft Good Practice Document”): the first draft was presented as non-paper at INC2 in January 2011. In the 3rd Waste Management Partnership Area meeting, participants agreed that further development is necessary in line with the Basel Convention Technical Guidelines, and additional input from partners and other Partnership area is needed.
- d) Fluorescent lamp compaction plant & final disposition of mercury containing waste (dilution and solidification) controlled area: This project aims to construct the first fluorescent lamps compaction plant in Panama region, and prepare for the final disposition of mercury containing waste. 1.5 million lamps are planned

to be processed by 2020.

26. Future plans of the partnership:

- a) Provide necessary support in the update, revision, dissemination and implementation of the Basel Convention Technical Guidelines.
- b) Update the Good Practice Document (a compendium of good practices) including experiences in establishing legal framework to ratify and implement the Minamata Convention and in applying technologies.
- c) Support the development of Practical Sourcebook on Mercury Storage and Disposal.
- d) 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).

**vii) Mercury supply and storage**

27. The governments of Spain and Uruguay are jointly leading the supply and storage partnership area.

28. The objective of the mercury S&S partnership area is to reduce mercury supply considering a hierarchy of sources, and support the retirement of mercury from the market to environmentally sound storage.

29. Relevant activities for the mercury S&S partnership area:

Supply/Primary mercury mining:

- a) UNEP is supporting Kyrgyzstan in its efforts to reduce environmental and health risks from primary mercury mining in Khaidarkan. With funding from the Global Environment Facility (GEF) and the Government of Norway, UNEP is assisting the Kyrgyzstan in its efforts to move from primary mercury mining to alternative sustainable economic activities.
- b) The Kyrgyz project has established a project team to coordinate the GEF project. The Khaidarkan Mine management did not participate at the inception workshop (June 2014). They agreed to participate in the project only if an expert from the mine is part of the project team and if there is a local project office in the Batken region. This request is currently being implemented. Additionally, the local government in Batken has offered its support to the project and is willing to be more involved, especially with the work in communities.
- c) Currently, the project is waiting for the formalization of the Batken office and the official nomination of the project team (with the inclusion of the Khaidarkan representative). Additionally, the project has undertaken a number of awareness raising activities, including a presentation of the project to key high level politicians. The socio-economic study and the pilot decontamination will take place in the next months.

30. Other relevant projects and activities:

- a) The Ministry of Agriculture, Food and Environment of the Government of Spain prepared and published the document entitled “Buscando soluciones para la gestión medioambiental responsable del mercurio” to offer solutions for the safe management of mercury. The document was prepared in collaboration with the Spanish National Technological Centre for Mercury Decontamination (CTNDM), is published in Spanish language and is available at:  
<http://www.magrama.gob.es/es/calidad-y-evaluacion->

ambiental/publicaciones/gestion\_medioambiental\_mercurio\_tcm7-284629.pdf

- b) UNEP concluded the implementation of a national storage and disposal project in Mexico and Panama in August 2013. Supported by the Government of Norway, the project provided an assessment of relevant national legislation and regulatory frameworks and an inventory of hazardous waste treatment facilities that could serve as temporary mercury storage facilities. The project resulted in national action plans aimed at the environmentally sound storage and disposal of mercury in both countries. A workshop took place in Mexico City, on 3-4 July 2013, to present the results of this project.

<http://www.unep.org/chemicalsandwaste/Mercury/PrioritiesforAction/SupplyandStorage/Activities/StorageandDisposalCentralAmerica/tabid/106665/Default.aspx>

- c) Under the Mediterranean Action Plan (UNEP/MAP) of the Barcelona Convention there was a decision to prepare the document “Guidelines on BEPs for the environmentally sound management of Mercury contaminated sites”. The decision was taken in the context of the “Regional Plan on the reduction of inputs of Mercury in the framework of the implementation of Article 15 of the LBS Protocol”. The document was prepared by the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) under the technical direction of the Spanish National Technological Centre for Mercury Decontamination (CTNDM). The document will be submitted to the next Meeting of the Contracting Parties to the Barcelona Convention, in 2015, for approval.
- d) The 3rd Waste Management (WM) Partnership Area Meeting was held in Manila (Philippines) in December 2013 organised by Japan lead country of that area. Spain, as co-lead of the SS area was invited to participate in the meeting and presented there the objectives and main activities of the supply and storage area. The need of collaboration between the two areas was highlighted during the meeting and a precise activity was identified: Spain to prepare updated information on stabilization/solidification technologies for chapter 6 of the “Draft Good Practice Document”, related to the disposal of mercury waste; the referred information was prepared by Spain and circulated to both WM and S&S areas in March 2014.

31. Ongoing activities

- a) A joint initiative of UNEP Chemicals Branch, the International Solid Waste Association (ISWA) and the International Environmental Technology Centre (IETC) is the development of a ‘Practical Sourcebook on Mercury Storage and Disposal’. The project is being funded from the government of Norway, the Mercury Trust Fund and the IETC. A face-to-face meeting to discuss the draft sourcebook was held in August 2014 in Vienna involving representatives of governments, IGOs, industry and civil society; a revised draft sourcebook was circulated for comments at the end of September.
- b) The partnership co-leaders, Spain and Uruguay, are contacting the Basel and Stockholm Regional Centres in order to inform about objectives, priorities and activities of the mercury supply and storage partnership area. The aim of this initiative is to share knowledge and experiences, actively involve the regional centres in the mercury issue and to identify regional priorities and areas for possible collaboration. A number of Regional Centres have already confirmed their willingness to participate.
- c) The Government of Uruguay (Ministry of Housing, Land Planning and

Environment) hold a National Workshop on "Stabilization Technologies of Mercury Containing Waste". The aim of the workshop is to explore the applicability of the stabilization technology on characterized wastes from the chlor-alkali industry previous to their final disposal.

- d) The workshop is scheduled on 21 – 22 October 2014 in Uruguay with the participation of international experts.

**viii) Mercury releases from cement industry**

32. The World Business Council for Sustainable Development (WBCSD), Cement Sustainability Initiative (CSI) is leading this partnership area.

33. The objective of this partnership area is to minimize mercury releases to the environment from cement manufacture. The partnership area aims to supplement existing programs in key, strategically selected ways to ensure that reductions are globally significant.

34. The partnership area is currently discussing the best option for future work.

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