



**United Nations
Environment
Programme**

Distr.: General
23 February 2016
English only

**Global Mercury Partnership
Partnership Advisory Group, Seventh Meeting**
Dead Sea, Jordan, 8 March 2016

Business Plans and Partnership Area Summaries of the UNEP Global Mercury Partnership

Note by the Secretariat

The Overarching Framework of the UNEP Global Mercury Partnership sets out a business plan template to provide guidance to the partnership areas in developing the business plans.

The Partnership business plans may be updated for each Advisory Group meeting. The Secretariat maintains the most current version of the business plans on the Partnership website, on each Partnership area page.

The most current business plans for each of the Partnership areas can be found at the web links below:

- [Reducing Mercury in Artisanal and Small-Scale Gold Mining](#)
- [Mercury Control from Coal Combustion](#)
- [Mercury Supply and Storage](#)
- [Mercury Air Transport and Fate Research](#)
- [Mercury-Containing Products](#)
- [Mercury Waste Management](#)
- [Mercury Reduction in the Chlor-Alkali Industry](#)
- [Mercury Releases from the Cement Industry](#)

In addition, Partnership area summaries (also called business plan cover sheets) were developed by Partnership area leads as a result of discussions at the Sixth Meeting of the Partnership Advisory Group. These two-page summaries are posted on the Partnership website and also reproduced below.

UNEP Global Mercury Partnership

Artisanal and small-scale gold mining Area

Partnership Area Leads

co-lead: **Susan Keane** (Natural Resources Defense Council)

co-lead: **tbd.**

Issue

Artisanal and small-scale gold mining (ASGM) is the largest anthropogenic user and emitter of mercury. Because ASGM is often tied to poverty, the issues faced by the sector are complex and require the collaboration of multiple stakeholders and disciplines to develop and implement successful solutions. The ASGM partnership area assembles a wide range of partners from Government, IGOs, NGO and academia who, together, can identify and implement sustainable solutions for the sector.



Mercury use in Tanzania

Objective

The Partnership promotes a concerted approach at national and international levels to encourage the formalization of the ASGM sector and to reduce the amount of mercury used and emitted.

Strategy

The Partnership fosters dialogue among practitioners, government policy makers, and donors about practical and effective ways to reduce mercury while supporting the economic benefits of the sector; disseminates information about the sector at national,

regional and international events and through active expert networks and on-line platforms; and contributes to the formulation and implementation of innovative approaches to reduce mercury use, from national policies and planning, to on-the-ground projects in ASGM communities.

Contribution to Implementation of the Minamata Convention

Throughout the negotiations of the Convention, the ASGM Partnership Area provided key information that assisted negotiators in the development of the text relating to ASGM under Article 7 and Annex C. The Partnership is now focused on assisting governments to prepare to address ASGM obligations under the Convention, by: creating guidance material for ASGM National Action Plan (NAP) development; assisting key governments in the development of their own NAPs; and by helping to identify and implement practical projects.

Artisanal and Small-Scale Gold Mining is addressed in **Article 7** and corresponding **Annex C** of the Minamata Convention.

Outreach Activities

The ASGM Partnership has regularly participated in and sponsored participation of partners in international fora, including two Global Forums on ASGM, regional conferences, and the bi-annual International Conference on Mercury as a Global Pollutant. The ASGM Partnership has produced

important technical and policy guidance material, including a technical guide for mercury management in the sector and a study on formalization. The Partnership Area also contributed to the development of a website where information on mercury use by the sector in each country is available.



Presence of children in ASGM in Mali

Featured Projects

ASGM in Francophone West Africa: In 2012, selected partners developed a joint programme aimed at supporting the ASGM sector in Francophone West Africa with activities covering technology transfer to eliminate mercury use, health education programmes and improved market access for the miners through the introduction of ethical gold standards. The Partnership area was key in bringing the project actors together and in securing the financing of the various components.

NAP Guidance: In 2014, the Partnership Area created a draft guidance document for the development of National Action Plans on ASGM under the Minamata Convention. A number of partners contributed to the drafting and revision of the document. The Partnership is now revising and finalizing the product ahead of its submission to the Interim Secretariat at the next meeting of the INC.

Future Work to be Carried out to Support Implementation of the Minamata Convention

With the entry into force of the Convention foreseen in the next year or two, the ASGM Partnership Area will continue to serve as an

ideal platform for partners to share information and jointly develop interventions to reduce mercury use in ASGM. As the GEF is the main financing mechanism of the Convention, co-financing sources must be identified for these projects. Unfortunately, ASGM typically occurs in countries which do not have the means to co-finance activities to the level required and the private sector has been very cautious in getting involved. Therefore, the Partnership area will continue to focus on bridging the gap between project needs and co-financing potential from other donors in the international community.

Additionally, as further research is undertaken to develop technical solutions and to monitor the success of the Convention, the ASGM Partnership area will continue to act as the primary mechanism for sharing this critical information among Parties to the Convention.

Collaboration with Other Partnership Areas and Relevant Stakeholders

ASGM generates a large amount of tailings which, when mercury is used in the process, poses a risk of mercury contamination. Therefore, the ASGM partnership area will continue its collaboration with the mercury waste partnership area. In addition, ASGM will continue to collaborate with the fate and transport partnership area to better understand how ASGM emissions and releases impact the local, regional and global environment.

For More Information

Visit our web site:

<http://www.unep.org/chemicalsandwaste/Mercury/GlobalMercuryPartnership>

Or contact the partnership area lead:

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UNEP Global Mercury Partnership

Cement Industry Area

Partnership Area Lead:

Philippe Fonta (Managing Director Cement Sustainability Initiative under the World Business Council for Sustainable Development)

Issue

Mercury is present in the raw materials (e.g., limestone) and/or in the fuel (e.g., coal) released in the combustion process. The major pathway for mercury releases from the cement industry is via emissions to the atmosphere.

Objective

The objective of the cement industry 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. The partnership area aims to support such efforts principally by:

- developing information that will allow the industry to be better informed about potential methods for reducing mercury emissions
- providing information to help guide companies in choosing a mercury reduction strategy
- providing information to assist companies in implementing their chosen mercury reduction strategy

Strategy

The cement industry area also seeks to update mercury inventory information by providing guidance on methods for cement plants to assess their emissions more accurately.

The partnership area endeavors to facilitate implementation of the Minamata Convention on Mercury, and specifically address:

Article 8: Emissions

8.2b,c,d & e: Cement clinker manufacturing facilities are relevant sources for which emissions should be controlled

8.3: Implementation of strategies that contribute to control of emissions

8.4, 8.5, 8.6: How to implement BAT/BEP for control of mercury emissions from clinker production facilities

8.7: Contribute to developing mercury inventory for the cement industry

Article 14: Capacity building and technical assistance

Contribution to Implementation of the Minamata Convention

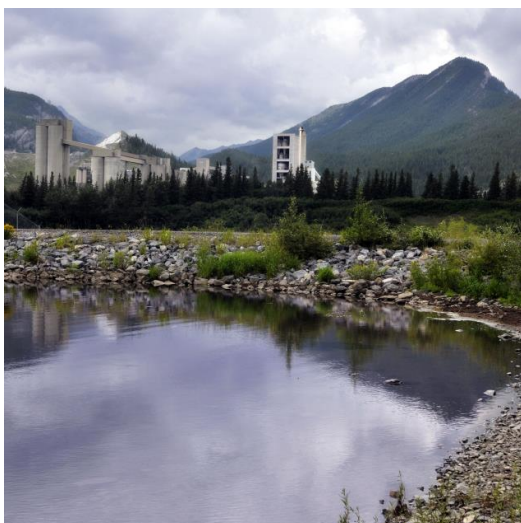
The major efforts to date have been in developing an information document to be used by cement plant operators. The document, which is being developed by a consensus-based process in the partnership area, seeks to help operators to understand how to choose among the various technologies outlined by the BAT/BEP Expert Group as well as some key issues that must be addressed in implementing these technologies. Information on industry experience in using the various technologies is documented. This document is meant to serve as a “how to” guide to assist operators in the

implementation of mercury emission reduction strategies.

As part of the document, mass-balance techniques to understand the source of mercury emissions as well as estimate the quantity of emissions are given. This will assist some companies in better understanding their emissions and making a more accurate assessment of mercury inventories.

Outreach Activities

A representative of the partnership participated in the PAG6 event on 31 October – 1 November 2014 in Bangkok. A presentation was delivered outlining principle activities to date and future work items for the partnership.



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

Development of database for emissions inventory: Because of the wide variation in mercury emissions worldwide, this work would:

- help disseminate information on monitoring techniques
- support evaluation of emissions and the effectiveness of emission reduction approaches

- establish an accurate plant information database
- encourage inclusion of cement manufacturing in country mercury inventories

Capacity building: This initiative will develop outreach materials and collaborate with complementary programs to disseminate information about mercury emissions by the sector. Information will be shared to promote understanding of techniques for mercury management and control. Other aspects would be the support of the development of partnership-related policies and regulatory frameworks and the facilitation of exchange of knowledge on new and emerging technologies.

Collaboration with other partnership areas and relevant stakeholders

The CSI Co-hosted the launch meeting of the partnership area in Geneva in June of 2013. Several countries were represented at the event, including Egypt, Italy, India, Japan, Chile, Korea, Indonesia and Pakistan, as were national and regional cement associations including FICEM, CEMBUREAU, CIF and the JCA. A range of cement companies and environmental NGOs also participated in the event. Currently, two representatives of the partnership area participate in the UNEP Expert Panel working on the development BAT/BEP for the sector.

For More Information

Visit our web site:

<http://www.unep.org/chemicalsandwaste/Mercury/GlobalMercuryPartnership>

Or contact the partnership area lead:

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UNEP Global Mercury Partnership

Chlor-Alkali Area

Partnership Area Lead:

Rodges Ankras (U.S. Environmental Protection Agency)

Issue

The mercury-cell process is one of three manufacturing processes used by the chlor-alkali sector to produce chlorine and caustic soda. Mercury-cell chlor-alkali production remains a significant use of mercury globally, and can be a significant source of mercury releases to the environment. Mercury-cell facilities which close or convert to non-mercury technologies require careful site management as well as management of any excess mercury.



Mercury-cell chlor-alkali plant

Objective

The partnership area works to significantly minimize and where feasible eliminate global mercury releases to air, water, and land that may occur from chlor-alkali production facilities.

Strategy

The partnership area provides economic, technical, and educational information to

chlor-alkali production facility partners, governments, and other stakeholders. It promotes commercially competitive and environmentally responsible solutions for eliminating mercury use in chlor-alkali production.

Minamata Convention on Mercury

Article 5 and Annex B, Manufacturing processes in which mercury or mercury compounds are used

Phase out date of 2025 for mercury use in chlor-alkali production.

Article 3, Mercury Supply Sources and Trade

Paragraph 5(b): Take measures to ensure that, where the Party determines that excess mercury from the decommissioning of chlor-alkali facilities is available, such mercury is disposed of in accordance with the guidelines for environmentally sound management referred to in paragraph 3(a) of Article 11, using operations that do not lead to recovery, recycling, reclamation, direct re-use, or alternative uses.

Contribution to Implementation of the Minamata Convention

The partnership area has dramatically improved the information base on this issue and will continue to contribute to the reduction in mercury use in this sector on a

global, regional and national basis in accordance with the Minamata Convention.

Outreach Activities

The chlor-alkali partnership area shares information on:

- appropriate procedures and methods to convert to non-mercury processes
- best practices to minimize releases of mercury during the conversion or closure process
- financing options to assist industry in addressing capital costs associated with conversion
- management of excess mercury generated by conversion, phase-out, and closure of mercury-cell facilities
- best practices for management of mercury-containing waste generated by chlor-alkali production facilities.

Featured Project

The World Chlorine Council reports annually to UNEP on mercury emissions and consumption in the chlor-alkali industry. This data covers about 85% of the world chlorine production capacity based on mercury.

The partnership also maintains a global inventory of mercury-cell chlor-alkali facilities in 2010 with assistance from the World Chlorine Council. This inventory provides information on chlorine capacity, locations, and any plans for conversion or closure for mercury-cell facilities around the world.

Future Work to be Carried out to Support Implementation of the Minamata Convention

The partnership area hopes to work with partner governments to establish effective approaches to meet Minamata Convention requirements for closure or conversion of

existing mercury-cell chlor-alkali facilities by 2025.

The partnership area hopes to expand the inventory to include information regarding excess mercury and mercury waste for facilities that close or convert, and obtain better information on and communications with those industries that are not World Chlorine Council members.

In addition, the chlor-alkali partnership area seeks to encourage the deployment of projects to address needs for retirement of large quantities of mercury from chlor-alkali facilities.

And, consistent with the partnership area's interest in ensuring environmentally sound management of existing, closing, or converting facilities, the partnership area will advance country-specific projects.

Collaboration with Other Partnership Areas and Relevant Stakeholders

The chlor-alkali partnership area will explore joint initiatives to leverage expertise in the Supply & Storage, Transport & Fate, and Waste partnership areas towards our objectives. This will include exploring additional inventory information that would assist in identifying needs for the sound management of excess mercury and mercury waste from mercury-cell chlor-alkali facilities that have closed or converted or plan to close or convert; and information exchange on technologies and management practices for waste and excess management.

For More Information

Visit our web site:

<http://www.unep.org/chemicalsandwaste/Mercury/GlobalMercuryPartnership>

Or contact the partnership area lead:

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UNEP Global Mercury Partnership

Coal Area

Partnership Area Lead: **Dr Lesley Sloss** (International Energy Agency – Clean Coal Centre)

Issue

Burning of coal is the second largest single anthropogenic source of mercury air emissions. Up to 95%, of the mercury in coal can be captured within the power plant by improving coal and plant performance, and optimizing control systems for other pollutants.

Objective

The Coal partnership aims to support globally significant emissions reduction through existing multi-pollutant control approaches. It also aims to provide technically sound information on cost effective approaches for enhancing reductions of mercury emissions, particularly for developing nations and economies in transition.

Strategy

The partnership provides easy to access documentation and online tools to allow parties to the Minamata Convention to determine appropriate measures for mercury reduction from coal-fired utilities in a site and source specific manner, taking economic, geographic and technological limitations into account.

Contribution to Implementation of the Minamata Convention

The Coal partnership is currently assisting in the preparation of the guidance document on

BAT/BEP in support of implementation of the Minamata Convention.

Expert members within the partnership provide training and technical guidance on the measurement and monitoring of emissions from the coal sector and the determination of accurate emission inventories.

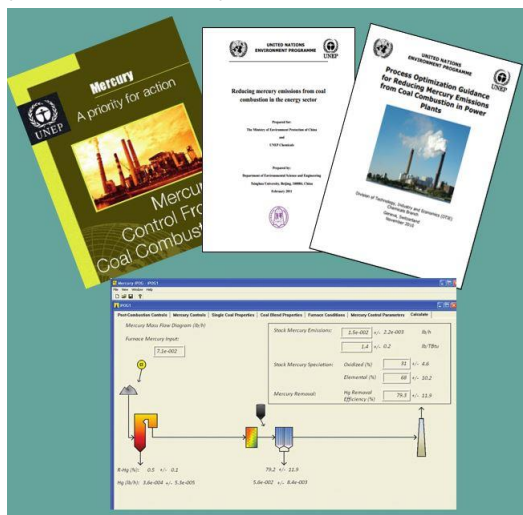
Article 8 of the Minamata Convention requires the control and, where feasible, reduction of emissions of mercury from point sources. New coal-fired utilities must install best available control technologies (BAT) and apply best environmental practice (BEP) to all new plants. For older units, countries must determine their own national plan on emissions, be it BAT/BEP, emission limits, reduction targets or any other appropriate strategy.

Outreach Activities

The partnership has facilitated desk and field projects in China, Russia, India, South Africa and Vietnam. These include studies to produce accurate emission inventories for the coal sector as well as demonstration projects for mercury reduction at full-scale utilities.

The partnership website hosts a wealth of documentation on mercury control options in several languages and provides access to a free downloadable tool which allows users to estimate mercury emissions from a coal plant

as well as estimate the effectiveness of potential control options.



Materials available on the Partnership website

Free reports are available on the application of mercury control technologies as well as the economics of these systems and the emerging international market. A separate report highlights the challenges faced in selected countries in South East Asia and discusses the specific control strategies which may be most appropriate in each region.

Featured Project

The Coal partnership works closely with the International Energy Agency Clean Coal Centre and has been an integral part of their annual MEC – Mercury Emissions from Coal – meeting. MEC has travelled the world over the last decade, taking international experts to locations such as Japan, South Africa, Russia, Slovenia and Poland. The 11th MEC meeting will take place in Chennai, India, on 16-20th November 2015.



For more information, please visit:
Mec11.conferences.org/ibis/MEC11/home

Future Work to be Carried out to Support Implementation of the Minamata Convention

The Coal partnership continues to spread the word on economic options for mercury control. Representatives of the partnership regularly attend international meetings and conferences and publish papers and journal articles which demonstrate the potential of the partnership and encourage new partners to join. The Partnership is keen to expand and to leverage funding to provide information and guidance to any party or prospective party to the Convention in order to facilitate the prompt implementation of mercury reduction approaches in the coal sector internationally.

Collaboration with Other Partnership Areas and Relevant Stakeholders



The Coal partnership and Fate and Transport partnership work closely to share information on emissions and inventories. Joint meetings between these partnerships are held frequently.

For More Information

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

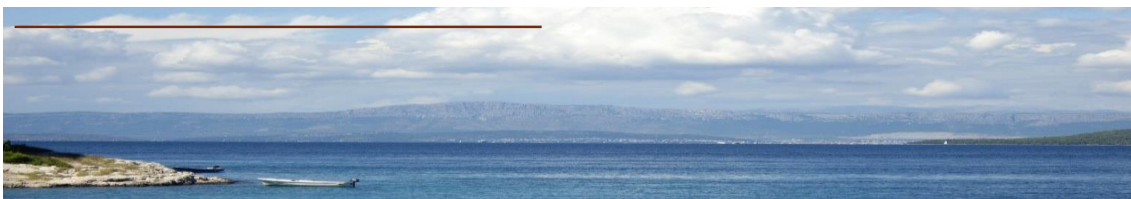
Or contact the partnership area lead:
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UNEP Global Mercury Partnership

Mercury Air Transport and Fate Research Area

Partnership Area Leads:

Nicola Pirrone (National Research Council of Italy, CNR-IIA)
David Evers (Biodiversity Research Institute, BRI)



Issue

A global understanding of major processes and mechanisms affecting the dynamics of mercury in the atmosphere and interfaces with other ecosystem compartments, particularly biotic, is crucial for setting management and monitoring strategies for mercury at local and global levels. Integrated and updated assessments, based on reliable and comparable monitoring data in abiotic and biotic media, from governments, international networks, and other sources, are essential for improving the global understanding of the movement of mercury through ecosystems and for predicting spatial and temporal trends.

Objective

The partnership aims to assist UNEP, future parties to the Minamata Convention and any other stakeholders to better understand the transport and fate of mercury in global ecosystems, geographic patterns, temporal trends, and risks to human and ecological health.

Strategy

The partnership will emphasize the following actions to further strengthen information flow and assist the future implementation of the Minamata Convention:

- accelerate the development of sound scientific information on global mercury monitoring, cycling and its patterns
- enhance generation and synthesis of scientific information on ecosystem transport and fate of methylmercury to fish, wildlife, and people
- facilitate compilation and sharing of such information among stakeholders
- develop an information document for assisting the Secretariat and all interested parties to evaluate the effectiveness of the Convention
- translate scientific information to better inform policy decisions with relevant international organizations, groups and programs.

Contribution to Implementation of the Minamata Convention

The partnership provides comprehensive technical expertise on multiple Articles within the Convention, particularly Articles 19 and 22. The partnership is developing projects that contribute to evaluate the effectiveness of the Convention, including materials on science-based monitoring of mercury across all global ecosystems.

Mercury Air Transport and Fate is addressed in **Article 8, 9, 12, 14, 17, 18, 19, 21 and 22** of the Convention

Outreach Activities

The partnership has contributed to the preparation of the “Global Mercury Assessment 2013: Sources, Emissions, Releases and Environmental Transport” and the Technical Background Report for consideration by Governing Council/Global Ministerial Environment Forum at its twenty-seventh session” in 2013. The partnership has also contributed to the 2010 United Nations Report on Mercury of the UNECE Task Force on Hemispheric Transport of Air Pollution, and to many other publications.

Featured Projects

The partnership, with UNEP and WHO collaborators, will develop standardized approaches for monitoring mercury both in the environment and humans to accurately determine their concentrations globally. A second project in partnership with UNEP, BRI and IPEN will conduct similar work with an emphasis in southeast Asia.

Future Work to be Carried out to Support Implementation of the Minamata Convention

All projects currently proposed to UNEP or GEF contribute toward the partnership’s objectives and strategy, with particular emphasis on Articles 19 and 22.

The Global Mercury Observation System (GMOS, www.gmos.eu) is a first attempt to conduct worldwide measurements of mercury from both natural and anthropogenic sources. The GMOS is a five year project (2010-2015), funded by the European Commission, led by the CNR-IIA. The Project aims to establish a worldwide observation system for the measurement of atmospheric mercury in ambient air and precipitation, as well as in biota. More than 24

partners with on-going programs in USA, Canada, China, and Japan are involved.

Mercury Connections – Global is based on a proven approach in North America by BRI that gathers key scientists and their data to develop peer-reviewed summary papers that can serve as the basis for synthetic policy-oriented documents. Proposed is an information document on monitoring that can be used by UNEP and member countries.

The Society of Environmental Toxicology and Chemistry is partnering with BRI to propose the development of a Centralized Mercury Platform, which is hoped to be linked with UNEP Live or a similar internal portal, through funding from UNEP-STAP.

In collaboration with UNIDO and key ministries in Mexico, BRI is developing a proposal for Hg monitoring in the major Mexican watersheds draining into the Gulf of Mexico. The project will help identify biological mercury hotspots and also use Hg stable isotopes to identify different sources of Hg entering the Gulf.

Collaboration with Other Partnership Areas and Relevant Stakeholders

As a partnership co-lead, BRI is coordinating with the ASGM partnership to develop a manuscript to connect control measures and evaluation approaches over three different time periods for key Articles in the Convention. The partnership is also collaborating with many research institutions, organizations, programs and partnerships, including the Group on Earth Observations (GEO) working at global level.

For More Information

Visit our web site:

<http://www.unep.org/chemicalsandwaste/Mercury/GlobalMercuryPartnership>

Or contact the partnership area leads:

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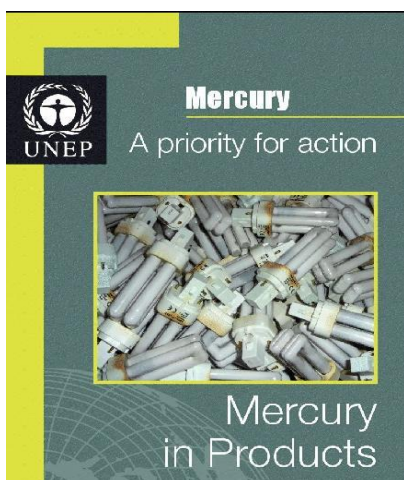
UNEP Global Mercury Partnership

Mercury in Products Area

Partnership Area Lead: **Tanya Hodge Mottley** (U.S. Environmental Protection Agency)

Issue

Large amounts of mercury are used globally in numerous products and manufacturing processes. Yet, for most products, there are effective alternatives to mercury available.



- promoting environmentally sound production, transportation, storage, and disposal procedures
- providing a partner-driven forum for exchanging information and discussing strategies for achieving goals and objectives

Contribution to Implementation of the Minamata Convention

The partnership intends to provide technical assistance, reporting, and outreach in support of Article 4 of the Minamata Convention, including:

- exchanging and disseminating technical information
- engaging scientific and business communities

Objective

The objective of the partnership is to foster the reduction and eventual elimination of the use of mercury in products, as well as releases of mercury during manufacturing and other industrial processes.

Strategy

The partnership seeks to achieve its goals through:

- identifying and implementing successful approaches for reducing or eliminating mercury in products where there are effective alternatives

Key Text from Article 4: Mercury-Added Products

“implement measures or strategies to reduce the use of mercury in any products”

“take measures to prevent the incorporation into assembled products of mercury-added products”

“collect and maintain information on mercury-added products and their alternatives”

Outreach Activities

Additionally, the partnership convenes and participates in meetings and teleconferences to bring partners together, as well as reach out to various stakeholders interested in issues related to mercury in products

Featured Project

The partnership has completed numerous global projects dedicated to improving and monitoring data baselines, as well as demonstrating availability and efficacy of mercury-free alternatives. An example of this work is the development of a brochure to provide a concise list of effective alternatives to mercury-containing products.



Typical products containing mercury

Future Work to be Carried Out to Support Implementation of the Minamata Convention

The future work of the partnership will build on existing strategies, including:

- encouraging development and substitution of mercury-free products
- incorporating a lifecycle management approach to manufacturing, use, and

disposal/storage of mercury-containing products

- promoting and implementing environmentally sound management of mercury waste
- improving global awareness on mercury exposure, use, production, trade, disposal, and release through exchange and dissemination of information
- increasing engagement of scientific and business communities to gather and disseminate information
- supporting the promulgation of laws, standards, and regulations that would prohibit or restrict importation of mercury-containing products

Collaboration with Other Partnership Areas and Relevant Stakeholders

The partnership focuses on a lifecycle management approach to mercury in products. This includes reflecting the costs, benefits, and potential emissions associated with mercury use in all phases of the product lifecycle. As a result, the partnership looks for ways to collaborate with each member of the UNEP Global Mercury Partnership, but especially partnerships that address supply, storage, and waste management issues.

For More Information

Visit our web site:

<http://www.unep.org/chemicalsandwaste/Mercury/GlobalMercuryPartnership>

Contact the partnership area coordinator:

Thomas Groeneveld (U.S. Environmental Protection Agency):

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UNEP Global Mercury Partnership

Supply and Storage Area

Partnership Area Leads:

Ana García (Ministerio de Agricultura, Alimentación y Medio Ambiente, Spain)

Judith Torres (Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente, Uruguay)

Issue

Mercury is a natural element, thus can not be destroyed nor converted into another substance. Strategies to decrease the production, use, import, and export of mercury must be accompanied by the environmentally sound and secure short and long term storage or disposal of mercury.

Objective

Minimization and where feasible, elimination of mercury supply considering a hierarchy of sources, and the retirement of mercury from the market to environmentally sound management.

Strategy

In order to reduce the amount of mercury available in the environment, there is a need to minimise the global mercury supply, and to develop technologies for the environmentally sound storage and disposal of surplus mercury.

Contribution to the implementation of the Minamata Convention on Mercury

The partnership aims at supporting countries' ratification and early implementation of the Minamata Convention, assists with the development of a common and cohesive framework to effectively reduce the circulating quantities of mercury. In this view, stabilization/ solidification can be an effective tool to reduce the availability of mercury.

The reduction of the global supply of mercury is an important way to encourage reductions in mercury demand. This is particularly important for uses, such as the artisanal and small-scale gold mining, which have limited regulatory strategies and effectiveness to reduce the demand.

Activities under this partnership area can be relevant to different articles of the Minamata Convention:

Art. 3: Mercury supply sources and trade

Art. 10: Environmentally sound interim storage of mercury, other than waste mercury

Art. 14: Capacity-building, technical assistance and technology transfer

Art. 17: Information exchange

Art. 18: Public information, awareness and education

Art. 19: Research, development and monitoring



Container for the safe storage of mercury for long periods of time, result of the EU Project MERSADE (LIFE06 ENV/ES/PREP/03).

Outreach activities

The Supply and Storage Partnership Area maintains the communication with the Basel and Stockholm conventions Regional Centers to inform them about objectives, priorities and activities of the Area. The aim is to share

knowledge and expertise, identify regional priorities, possible collaborations and, eventually, to actively involve the Regional Centers in the mercury issue.

Featured projects

The Government of Uruguay held a National Workshop on "Stabilization Technologies of Mercury Containing Waste" in Montevideo, on 21-22 October 2014, and a Pilot Project for the treatment of two types of mercury wastes from a chlor-alkali plant was presented, using two different technologies:

- small volume of wastes with high mercury content: stabilization/ solidification in a sulphur polymeric matrix (National Technological Centre for Mercury Decontamination, CTNDM, Spain)
- large volume of wastes with low mercury content: stabilization with sulphur microcements (Cement International Technologies, Spain).

The Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) within the Mediterranean Action Plan of the Barcelona Convention (UNEP, MAP) prepared the "Guidelines on BEPs for the environmentally sound management of Mercury contaminated sites". This document, elaborated with the technical direction of the Spanish CTNDM, will be presented for approval at the 2015 Meeting of the Contracting Parties of this Convention.

Future work to support implementation of the Minamata Convention

- Identification and characterization of possible new primary mercury mining that have started their activity after 2010, beginning of the negotiations of the Minamata Convention.
- Collaboration with industry plans for the ESM and storage of mercury; sectors: chlor-alkali, non-ferrous, gas production.

- Assess options and availability of infrastructures and techniques for the management, storage and final disposal of surplus mercury.
- Review regulations, and strengthen interagency collaboration in order to facilitate the implementation of export bans in additional countries or regions.
- Promote the replication of the 2014 project "Stabilization Technologies of Mercury Containing Waste", held in Uruguay.
- Promote transparency and traceability throughout the whole lifecycle of mercury, including trade and export, to address potential illegal sources of mercury supply.

Collaboration with other Partnership Areas/relevant stakeholders

- Chlor-alkali Partnership Area and the World Chlorine Council: phasing out of mercury cell chlor-alkali facilities.
- ASGM Partnership Area: reduction of mercury demand.
- Waste Management Partnership Area: techniques for the management of surplus mercury.
- Products Partnership Area: projects to reduce the use of mercury containing equipment and products.

For More Information

visit our website:

<http://www.unep.org/chemicalsandwaste/Metals/GlobalMercuryPartnership/>

or contact the Partnership Area leads:

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UNEP Global Mercury Partnership

Waste Management Area

Partnership Area Lead: **Professor Masaru Tanaka** (Research Institute of Solid Waste Management Engineering, Japan), **Ministry of the Environment, Japan**

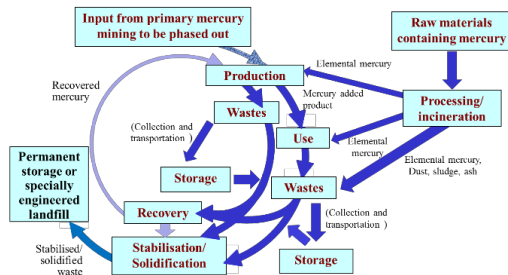
Issue

The management of mercury and mercury-containing waste is the last step in the product life-cycle. While mercury is being phased down from products and processes, there is still a need to manage mercury from this end of the product life-cycle.

Objective

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.

"Prevent and minimize mercury release to the environment at each stage"



Basic concept of mercury management

Strategy

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

- 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
- assess environmental impacts of current waste management practices and

processes, including providing support to countries to assess their national situation and needs

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

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.

Outreach Activities

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

Featured Projects

- **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).

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

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:

- 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 Convention, and in applying technologies
- support the development of UNEP's Practical Sourcebook on Mercury Waste Storage and Disposal
- increase public awareness on mercury and mercury-added products and wastes and their impact on human health and the environment.

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 and 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 Partnership Area lead:

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