



**United Nations Environment Programme**



# **Consultation Meeting on Mercury Waste and Storage**

**23 September 2010, Geneva**



**UNEP/DTIE  
Chemicals Branch  
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Photo title page: One-way mercury-containing thermometers.

Courtesy: Heidelore Fiedler, UNEP/DTIE, Chemicals Branch

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# Consultation Meeting on Mercury Waste and Storage

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### 1 OPENING AND INTRODUCTION

The consultation meeting was opened by Mr. Per Bakken, Head of UNEP Chemicals, who welcomed the participants and reminded them on the objectives of this consultation workshop. He mentioned that presently, there are several activities underway on storage of elemental mercury and on the environmentally sound management (ESM) of mercury waste. These include two projects coordinated by UNEP Chemicals, and funded by the Norwegian government and one programme coordinated by the Secretariat of the Basel Convention. The Basel Convention programme is currently being funded by the USEPA.

The UNEP Chemicals project on mercury waste management resulted in waste management plans in five countries. The plans constitute an initial step for national action identified as priorities through stakeholder consultations and underlined through analysis of relevant samples for total mercury content. Most plans include components that a country can resolve at national level, while others need international support.

The work of UNEP Chemicals on mercury storage draws on the 2009 Assessment/Trade Reports which project excess elemental mercury coming from decommissioned chlor-alkali plants, byproduct mercury from non-ferrous metals mining and natural gas, among others. There is need to store excess elemental mercury in order to prevent its reentry to the global marketplace as a commodity

The consultation meeting was part of a Norway funded Mercury Waste and Storage project that would result in identifying the gaps and overlaps, as well as developing handy guidance through practical case studies addressing specific but commonly perceived problems on mercury waste and storage. It was expected that user-friendly guidance reflecting especially developing country situations and specific for three scenarios: industry, household and healthcare, would be developed and made available for use.

At the meeting, priority areas/issues on waste and storage were to be identified and agreements would be reached on the design of the pilots in three developing countries. Participants noted the limited funding and timeframe for implementation for the pilots.

Mr. Bakken closed by inviting countries or institutions to be one of the volunteers where the guidance material would be pilot tested.

After the opening remarks, the participants introduced themselves by stating their names and relation to mercury waste/storage issues (for complete address details, see Annex 1). The consultation meeting proceeded according to the agenda (see Annex 2).

In preparation for the consultation meeting, (Annex 3)

## **2 PRESENT STATUS OF BASEL ESM GUIDELINES (TABLE OF CONTENT)**

Francesca Cenni, Programme Officer, Secretariat of the Basel Convention, introduced the ongoing work on mercury under the Basel Convention. The Secretariat of the Basel Convention developed draft technical guidelines on the environmentally sound management of mercury wastes (Basel TG), with the Government of Japan as lead country. The Convention’s Open-ended Working Group considered the fifth draft of the technical guidelines at its seventh session in May 2010. These technical guidelines set out comprehensive information on mercury wastes, including on the chemistry and toxicology of mercury, sources of mercury and mercury wastes, existing expertise on the environmentally sound management of mercury wastes and provisions on mercury wastes under international legal instruments. These guidelines are being tested at the pilot projects implemented by the SBC as well as UNEP Chemicals. It is expected that the guidelines will be considered for adoption at COP10 in October 2011. In addition, the SBC is now implementing pilot projects for mercury waste in three Latin American countries that are funded by the USEPA and under the execution by the Basel Coordinating Regional Center in Uruguay.

The Zero Mercury Working Group (ZMWG) expressed concerns about the coverage of liquid mercury storage issue in the Basel TG, since management of liquid mercury is different from management of solid hazardous waste. They further noted that the development of a glossary of terms would potentially help in clarifying issues such as waste and storage and related terms.

### **3 PRESENTATION OF ASSESSMENT REPORT ON EXISTING INFORMATION, GAPS ANALYSIS AMONG WASTE AND STORAGE PROJECTS**

Dr. Mario Yarto and Dr. Sven Hagemann undertook an analysis of the two UNEP projects. Their findings are summarized in a document that was made available to the participants in advance of the meeting.

#### **3.1 Analysis of the UNEP Waste Management Project**

Mr. Mario Yarto (Mexico) presented the summary and main outcomes of this project, which have been implemented in five developing countries, namely: Burkina Faso, Cambodia, Chile, Pakistan and The Philippines.

Key results included the review of the national inventory for mercury emissions, followed by a prioritization of main sectors and sources contributing to mercury releases and mercury waste. Additionally, each country organized stakeholders meetings to agree on an action plan for mercury and mercury waste. Such plans have now been developed and are currently in a planning phase for its implementation.

Some of the priority sectors identified after evaluating the mercury inventory and through technical workshops and discussions with stakeholders included the following: small-scale artisanal gold mining, chlor alkali production, mercury in products, solid and hazardous waste, and others.

An important highlight of the project considered the importance on the applicability of the Basel Technical Guidelines for Mercury Waste, regarding its use at the national level in a developing country context. In fact, the national action plans included relevant considerations as described in the guidelines.

Several gaps were identified during the national workshops, and emphasis was made on the need for enhanced capacities to carry out technical tasks as set in the national action plan for mercury waste. Some of these pending issues include temporary storage, enhanced analytical capacity for mercury analysis, and management/remediation of contaminated sites.

#### **3.2 Analysis of the UNEP Storage Project concerning surplus metallic mercury**

Mr. Sven Hagemann of GRS (Germany) presented the summary of the two studies on mercury storage (Asia-Pacific, Latin America and the Caribbean), and mentioned that the estimates of surplus mercury in each region were based on the reports by Peter Maxson. It appears that there would be a quite urgent need for storage of surplus metallic mercury in the regions.

The options analysis study for Asia concluded that:

- No permanent (underground) storage is possible in the regions due to lack of salt mine
- Options are temporary storage which could take place in a desert region, possibly an above ground storage facility or export to another region

The options analysis for Latin America and the Caribbean (LAC) revealed that:

- In principle, rock and clay formations are available and may present an option for underground

disposal

- Since licensing and site selection is time-consuming, there is a need for temporary storage
- There is need for a tracking system of mercury storage

Most aspects addressed in the Basel guidelines are covered in the two storage projects, but the LAC study contains more recent and comprehensive information on the issue of stabilization/solidification technologies than the Draft Basel TG. It also contains a better description of temporary and permanent storage approaches.

Mr. Sven Hagemann identified a number of gaps and needs that should be addressed in the future. Regarding permanent storage, the possible benefits of prior stabilization of mercury should be explored. The disposal of mercury containing waste has not been looked into sufficiently. There is a need for elaborating a site selection process and further investigation of possibly suitable geological formations for underground disposal. For both temporary and permanent storage of surplus metallic mercury, there is lack of adequate legislation in many countries. This was also mentioned in the discussion. The idea of developing a regulatory toolbox was appreciated by participants.

Moreover, Sven Hagemann found that technical terms are not consistently used in the Basel TG and in the storage reports. A comprehensive glossary of relevant terms is needed in order to prevent further confusion in using relevant terms. Such a glossary of terms related to mercury waste and storage is currently being prepared. Mercury-containing tailings are a consequence of mining and processing ores of gold and other metal ores. This issue was not addressed in any of the studies nor in the Basel TG. The management of stockpiles of commodity mercury and other mercury containing goods is not covered under any of the studies or the SBC TG.



## **4 COUNTRY PRESENTATIONS**

### **4.1 Pakistan**

Mr. Zaigham Abbas, from the Ministry of Environment presented the two UNEP projects on mercury implemented in Pakistan: 1. Development of Hg inventory, sponsored by USA in 2008 and 2. Development of waste management plan. The inventory was undertaken with the Mercury Toolkit, version 2005. The waste management project followed the agreed plan as endorsed at the inception workshop in Cambodia. Three priority areas were identified: chlor-alkali, health sector, and the light sector. Thirty tonnes of mercury have been phased out on voluntary basis but 90 tonnes still remain.

After a question by ZMWG, Mr. Abbas clarified that the 30 MT of mercury from the closed plant still remain on site and will be used for the rest of the cells.

### **4.2 Jordan**

Mr. Mohammed Khashashneh from the Ministry of Environment presented the national mercury situation in Jordan. He presented the legal framework and activities undertaken such as preliminary mercury inventory, conversion of chlor alkali plants to mercury free technology, and identification of potential waste from end of life mercury added products as well as sources of unintentional mercury releases. He expressed concrete needs for guidance on the ESM (collection, transport, disposal) of mercury containing waste at all levels (individual, community, national) and appropriate technologies. He defined the next steps of mercury intervention in Jordan, which includes active participation in the mercury INC process, in the Basel guideline development, and engaging in a multi-stakeholder process to reduce mercury use and release. In addition, Jordan also plans to conduct sector specific studies and assessments, as well as create an infrastructure for mercury that includes mercury waste management.

### **4.3 Brazil**

Ms. Sérgio Oliveira, from the Ministry of Environment gave a brief summary in relation to the UNEP mercury storage project in the LAC region. She said three options for storage (exports to a foreign facility, above ground warehouse facility, and underground salt rock formation) were analyzed. The overall conclusion is that for the adoption of the appropriate storage option, the region needs technology support and better knowledge related to the regional geological structure, among others. She presented a brief profile related to the mercury waste in Brazil. She commented that gold production is increasing due to the high price of the metal on the market. In the case of coal, Brazil uses coal with low sulfur content (and oil) and equipment with particle retention. She said that the information presented is the first approach and not the final data on potential excess mercury supply in Brazil.

### **4.4 Peru**

Ms. Vilma Morales from the Ministry of Health presented the mercury trade situation in Peru. Peru imports mercury for artisanal small-scale gold mining, chlor-alkali production, and dental amalgam. Mercury is also imported as a component of batteries, electronics, fluorescent lamps, medical equipment, and thermometers. In 2009, 180 tonnes of mercury were imported; previous years had the following imports: 119 tonnes in 2008 and 86 tonnes in 2007. Peru is also the largest exporter of

mercury as a byproduct from its non-ferrous metals mining. Peru has hazardous waste landfills; however, they are not considered as an option for storage of elemental mercury, because it is a liquid and it is difficult to stabilize.

#### **4.5 Indonesia**

Mr. Rasio Sani from the Ministry of Environment presented the management of mercury from oil and gas operations in Indonesia. It was important to note the number of oil and gas operations in Indonesia gave an indicative figure of mercury content (about 85 kilograms per month per gas field) that could lead to big quantities of mercury. Other sources of mercury are from spent catalyst, sludge, and carbon use. Indonesia currently does not have a mercury recovery facility. Currently, elemental mercury extracted from gas operations is sent to a laboratory, stored temporarily; and one part ends up in a hazardous waste landfill. There is only one hazardous waste landfill in the country, and for mercury, there is a max acceptable leaching limit of 2 ppm according to TCLP. The spent catalyst goes to a company in Switzerland for recovery of mercury. Mr. Sani further mentioned that they would be making an inventory of all operations with own sources in 2011, to better estimate the mercury from the gas and oil industry in the country.

In the discussion that followed, it was acknowledged that mercury from gas and oil sector would need to be further examined, estimate the available liquid mercury that may need to be stored, and could possibly re-enter the global market. Such study is being contemplated in Indonesia over the next year.

## 5 PRESENTATION AND DISCUSSION OF DESIGN AND ELEMENTS OF PILOTS IN THREE DIFFERENT SCENARIOS

After the working group discussions and after presentation of three possible scenarios for pilot studies by the two consultants, participants gathered in working groups and detailed the terms of reference for these pilots. The following proposals were adopted for consideration of funding and implementation.

### 5.1 Health care sector – Rapporteur: Erik Winchester

#### Background

Mercury added products like thermometers, sphygmomanometers and dental amalgams are still in widespread use in most hospitals around the world. Their use, breakage and replacement cause significant amounts of toxic waste that have to be managed and stored in a safe manner. For hospitals well written guidance on mercury waste management is now available (UNDP, 2010). However, as it was pointed out in the Final Report on the Mercury Wastes Management Project in Cambodia (Cambodian Ministry of Environment 2010) application of (English) guidance material at the national or local level is often hampered by the language barrier, limited awareness and capacity among concerned staff members. Translation of compressive guidelines into numerous local languages is often expensive and often not fully covered by projects.

#### Objectives

It is necessary to present core information in a way that it is comprehensible for affected personal with limited background knowledge and no foreign language skills. The typical approach used to convey information is through written materials, but many messages can be clearly and more easily conveyed through illustrations, pictures and videos.

#### Process -Plan

One potential approach to more effectively help people to understand the main features of temporary (‘interim’) storage of mercury containing waste it is proposed to develop a video guidance that visually explains it. Based on an example of good practice in a developing country basic features and requirements of management of mercury containing products at health care institutions could be explained in a comprehensible and illustrative manner in a video. This may include:

- Types of mercury added products in a hospital, types of mercury containing waste.
- Effective response in the case of spillage
- Occupational safety/ protective gear/ minimum training
- Why a storage facility is needed and how to establish a storage room for mercury containing waste
- Proper packaging of mercury containing waste
- Destination of stored mercury containing waste
- Contingency planning (response to emergency situations)

The content should be based, as far possible, on already existing material, e.g. the mentioned UNDP (2010) report, thus avoiding duplication of work.

The video may be produced by skilled employees of health care facilities using available devices or by local media agencies with the aid of experienced experts in the field of mercury waste management. Localization may be done by introducing subtitles in local languages. The video should be in a compatible format so it could be played and shown under all major personal computer operating systems with typically installed free media players. Alternatively, if resources are too limited, a slide show could be produced.

#### Tentative Workflow

- UNEP: With the support of international experts, identify a country and one or more health care institutions that have already implemented measures to address mercury containing waste,
- Health care personal and external experts: develop a script for a series of stories that could illustrate several aspects of mercury waste management health care institutions, taking into account existing guidelines and national regulations,
- Health care personal and external experts: identify a team to make the film (internal or external),
- Team: make the film,
- Health care personal and external experts: check the film for compliance with guidelines and national regulations, and then test its applicability to local health care workers.

The video should be made accessible via internet, but their contents should also be available in hard copies (CD-ROM, DVD, USB-Sticks) for stakeholders that have no or no fast internet access. The video should be accompanied by already available material such as the above mentioned UNDP report.

#### Potential benefits:

Drawn from existing work could be accomplished in a relatively short amount of time

- Increased awareness on mercury waste management in the health care sector
- Increased capacity of health care workers to manage mercury containing waste
- Existing guidance made available in a comprehensive way
- Improved exchange of knowledge and experiences between developing countries

## **5.2 Industrial sector – Rapporteur: Elena Lymberidi-Settimo**

Implementation of guidance document in the chlor-alkali sector (related to mercury handling, storage and waste)

- The World Chlorine Council has developed guidance documents on how to handle metallic mercury (*e.g.*, when emptying cells and how /where to store temporarily on site safely)

#### Objectives

- Considering time/budget constraints, the objective would be to implement and check applicability and improve if relevant these existing guidelines.

#### Process – Plan

- Country to be selected (potentially with many plants, so experiences can be shared – or depending on availability of volunteers)

- Consultant/expert to be found
- Company/plant to be chosen
- Check if company is aware of the WCC guidelines, what they use and if the WCC Guidelines would need to be translated.
- Check flow of mercury – where would metallic mercury come from within the plant (pipes, cells etc) and would need to be handled safely through the process (to eventually end up in temporary on site storage)
- Check interim/temporary storage on site facilities / spills handling?
- Inform/involve industry, NGOs, different departments/ministries, UNEP regional offices, Basel Regional centers/ other agencies/ other companies in country/region
- Implementation on site with the expert of the guidelines
  - o Is the company implementing some guidelines already? Are they the same? If not what are the differences?
  - o Are things missing from guidelines? how can these be improved?
  - o Are they useful to the company?
  - o What are the gaps in storage?/handling?
- Meeting with relevant authorities and industry
- Later open meeting potentially with other stakeholders for wider awareness raising.
- -filming possible? Check with WCC

#### Potential benefits

- Applicability of guidelines validated and improved
- Plant assisted to apply safe handling
- Transparency provided for government, public etc
- Potential reduction on mercury emissions from handling/storage
- Increased awareness

#### Potential countries for project implementation and their respective tonnes of annual chlorine capacity are:

- Argentina – 122
- Azerbaijan – 145
- Brazil - 217
- India – 188
- Mexico – 120
- Uruguay – 14
- Pakistan (no WCC member) - 33

### 5.3 Awareness raising toolbox – Rapporteur: Maryann Lloyd Smith

The project will focus on managing mercury waste in the home setting. This is a small project with short time frame and little funds available.

End of life mercury added products to be covered are: batteries, thermometers, sphygmomanometers, electronics, dental amalgam, light bulbs, cosmetics, others.

#### Project considerations:

1. Awareness raising to minimise the impacts of Hg waste by providing simple, practical and useful guidance
2. Addressing some of gaps in awareness and knowledge – address challenges of language & cultures – benefits of cross cutting –with other partnerships
3. What sectors should lead - NGOs leader - multistakeholder - workers, local govt, NGOs, industry, health centres to get buy in - product partnerships, Basel focal points, Basel regional centres
4. Protecting human health by keeping mercury out of the environment, pressure on governments to collect it and industry to implement EPR.

#### Objective

- protecting human health by keeping Hg out of environment,
- very easy to understand information to help householders to manage mercury waste in the home
- develop replicable toolkit
- empower local communities to be skilled in hg management

#### Audience

- Target households or communities
- Media

#### Activities

- establish focus group to assess current understanding & assess households' information needs
- source and consolidate available information
- review most cost effective way to provide information; for example, pictures with small text boxes for distribution via posters, internet website and TV media
- design material – images and texts including brand
- dissemination activities – booklets, posters, other materials
- decide language for development - accommodate translation

Information would encompass :

1. What is mercury ?
2. What are the harmful effects?
3. Which consumer products include mercury?

4. What to do with them? Specific to developing countries, eg separation, not include in domestic waste
5. What not to do? - expose them to elements, to children
6. Include responses to spills, breakage
7. Develop radio scripts
8. Write to governments to encourage collection

#### Outcomes

- Friendly and more visual materials
- Increased number of people who know about mercury
- Strategies to distribute including producers to help to distribute to households, schools, other settings, etc

#### Benefits

- Awareness raised
- Alternatives promoted
- Environmental sound management of mercury waste from household/domestic sources fostered
- Synergy with other waste programs

Need more funds for translation, scaling up and distribution

During the discussion, Uruguay and Peru expressed concerns on the message to consumers if they were asked to collect separately end of life mercury added products at home, if no process/infrastructure is available in the country for environmentally safe management. This raised the question on the viability of conducting such a project in a country where there is no existing infrastructure and designated facility for managing the mercury waste.

## **6 WORKPLAN AND DELIVERABLES**

On procedural issues, participants were invited to submit their interest in any of the three projects to the UNEP Secretariat for consideration of funding. Being aware of the time and budget constraints, it was underlined that the projects’ main activities would be finalized by 31 December 2010.

The need to further elucidate the mercury issue in the oil and natural gas industry was flagged several times during the meeting. However, it was also recognized that considering the limited budget and the short period for this funding, option would not be adequate to address the occurrence and release of mercury from this industry. This issue could be addressed in another venue.

## **7 CLOSING**

After exchanging the usual courtesies, the Consultation Meeting was closed on Thursday at 17:15 hours.



**8 ANNEX 1 – AGENDA**

<b>Time</b>	<b>Activity</b>	<b>Person Responsible</b>
9:00	Opening and Introduction	Per Bakken, UNEP Chemicals
9:15	Present status of Basel ESM guidelines (Table of content)	SBC
9:30	Presentation of assessment report on existing information, gaps analysis among waste and storage projects	M. Yarto, S. Hagemann
10:00	Country presentations	Presentations by countries
10:30	Coffee break	
11:00	Country presentations	Presentations by countries
12:30	Lunch break	
14:00	Presentation and discussion of design and elements of pilots in 3 different scenarios	M. Yarto, S. Hagemann
15:30	Coffee break	
16:30	Workplan and deliverables	UNEP Chemicals, SBC
17:30	Closing	UNEP Chemicals, SBC

## 9 ANNEX 2: LIST OF PARTICIPANTS

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## 10 ANNEX 3: CONCEPT NOTE

### I. A. Background and Mandate:

- GC 25/5 mandated UNEP, concurrently with the work of the Intergovernmental Negotiating Committee (INC) to develop a legally-binding instrument, to continue and enhance as part of international action on mercury the existing work, including enhancing capacity for storage of elemental mercury as well as to provide information on the environmentally sound management (ESM) of mercury containing waste.
- Presently, there are several activities underway on storage of elemental mercury and on the ESM of mercury waste. These include two projects coordinated by UNEP Chemicals with support provided by the Zero Mercury Working Group, and funded by the Norwegian government and one programme coordinated by the Secretariat of the Basel Convention. The Basel Convention programme is currently funded by the USEPA.
- The UNEP Chemicals project on mercury waste management resulted in waste management plans in five countries. The plans constitute an initial step for national action identified as priorities through stakeholder consultations and underlined through analysis of relevant samples for total mercury content. Typically, countries have identified three priorities for mercury waste management that warrant further action. Most plans include components that a country can resolve at national level, others need international support. In general, governments are faced with the assessment of all steps in the mercury life-cycle from source identification and quantification to final disposal and storage whereby the options and criteria for the long-term safe management for waste consisting of elemental mercury, waste containing or contaminated with mercury need to be defined. Further information is available at <http://www.unep.org/hazardoussubstances/Mercury/InterimActivities/Partnerships/WasteManagement/WasteManagementProject/tabid/3538/language/en-US/Default.aspx>
- The work of UNEP Chemicals on mercury storage draws on the 2009 Assessment/Trade Reports which project excess elemental mercury coming from decommissioned chlor alkali plants, byproduct mercury from non ferrous metals mining and natural gas. This excess mercury will by far exceed mercury demand after equilibrium will have been reached in 2017 for Asia, and 2013 for Latin America. There is need to store excess elemental mercury in order to prevent its reentry to the global marketplace as a commodity. Governments will be faced with the technological, legal, regulatory and economic challenges of storing elemental mercury.
- To assist governments find environmentally sound storage solutions , UNEP Chemicals with support from the Zero Mercury Working Group coordinated 2 regional mercury storage projects, one in Asia and one in Latin America in 2009-2010. More information on the storage projects, the assessment reports and options analysis studies are available at <http://www.unep.org/hazardoussubstances/Mercury/InterimActivities/Partnerships/SupplyandStorage/AsiaPacificMercuryStorageProject/tabid/3552/language/en-US/Default.aspx> <http://www.unep.org/hazardoussubstances/Mercury/InterimActivities/Partnerships/SupplyandStorage/LACMercuryStorageProject/tabid/3554/language/en-US/Default.aspx>
- Based on requests from parties, the Secretariat of the Basel Convention (SBC) has a set of

draft (5<sup>th</sup> version) technical guidelines on the environmentally sound management (ESM) of waste consisting of elemental mercury and wastes containing or contaminated with mercury (technical guidelines on the ESM of mercury waste). The set of technical guidelines are based on the principles of ESM of hazardous waste. This includes principles of waste prevention and minimization, identification and inventory, handling, collection, interim storage, transportation, treatment, recycling, and recovery, long term storage, land filling, and remediation of contaminated sites. An intersessional working group led by the Government of Japan has been created to work on the draft technical guidelines. Output of the group will be presented at the next Basel COP in October 2011. The draft Basel guidelines are available at <http://www.basel.int/techmatters/mercury/guidelines/5th-13May2010.doc>

- The SBC received a mandate by the Parties to develop a capacity building programme on mercury containing wastes (COP IX/31) on the basis of the draft technical guidelines on the ESM of mercury waste. According to this mandate, a capacity building programme is being implemented in the Latin American and Caribbean Region currently involving Costa Rica, Argentina and Uruguay.

#### **B. Status of Projects:**

- For the mercury waste projects coordinated by UNEP Chemicals, a results workshop took place in June 2010 where national mercury waste management plans were presented. Participating countries included Burkina Faso, Cambodia, Chile, Pakistan and the Philippines. These countries identified and prioritized mercury-waste related issues at national level by using the Draft ESM Guidelines and the Mercury Toolkit.
- The Basel Convention Technical Guidelines on the ESM of mercury waste and the UNEP Mercury Toolkit for developing mercury inventories are the two major guidance documents that are applied in the project. In addition, the project delivered enhanced capacities for countries in laboratory testing of human hair and environmental waste samples.
- In the framework of the SBC coordinated programme, a national inception workshop took place in each of the three participating countries. Uruguay and Argentina initiated the development of inventories of mercury containing wastes in both the health and the industrial sectors. Costa Rica will develop the inventory in the health sector. Project activities also include awareness raising workshops, drafting of national waste ESM management plans in the three participating countries, and the purchasing of an in-situ interim storage facility in at least one country. The programme, that is scheduled to be completed during the course of year 2011, is implemented by the Basel Convention Coordinating Centre in Uruguay in cooperation with the Basel Convention Regional Centre in Argentina.
- For the mercury storage projects, an options analysis study for the safe long term storage of elemental mercury has been completed for Asia. Noting deficiencies in the study, revision of the study will be undertaken and will be available in January 2011. For Latin America, the options analysis study is currently being circulated to governments in the region who will have the opportunity to comment. An improved study will be available in November 2010. The studies will be basis for a recommended storage option for governments in the region.



- Most recently, the UNDP GEF Global Healthcare Waste programme developed “**Guidance on the Cleanup, Temporary or Intermediate Storage, and Transport of Mercury Waste From Healthcare Facilities**”. The document is useful in many developing countries where healthcare facilities are moving towards mercury-free health care. It is available at <http://content.undp.org/go/cms-service/download/publication/?version=live&id=2681158>

### **C. Needs:**

It is recognized that there are gaps and potential overlaps between these projects, other related guidance and other outputs from Mercury Partnership areas such as on products. These include: Mercury device collection work does not currently include provision for the waste management of the devices; the waste guidelines do not provide guidance on the long term financial responsibility or liability issues related to the short term or interim storage of mercury nor the on elements of emergency response in the event of spillages and breakages; the storage projects currently only consider options for the safe long term storage of elemental mercury but does not address the need for interim storage of both elemental mercury and end of life mercury containing products. Further, the outcomes and experiences have not been assessed horizontally.

### **D. Mercury Waste and Storage Project**

In response to the identified needs, Norway is funding a Mercury Waste and Storage project that will address these currently perceived and identified gaps or overlaps. A consultant will be subcontracted who will compile and assess the presently available information from the projects and cross-reference the existing guidance. Together with identified key waste and storage partners, the project will produce a synthesis report and develop handy guidance through practical cases studies addressing specific but commonly perceived problems. It is expected that a user-friendly guidance reflecting especially developing country situations be developed and be made available for use. The guidance will be specific for three scenarios: industry, household, and healthcare.

## **II. Objective of the Meeting:**

This meeting will bring together key country representatives and stakeholders of the completed and ongoing projects on waste and storage, and other interested stakeholders. Based on the subcontractor’s compilation and assessment of existing information of results, gaps, experiences, guidelines on waste and storage, the participants will:

1. Identify priority areas/issues and propose practical output and agree on the design of the pilots in three developing countries.
2. Agree on the next steps of the project: selection of 3 pilot developing countries facing mercury problem; identifying the typical scenarios (industry, household, health care) in three developing countries; preparation of a user-friendly and integrative guidance document (three different scenarios)

**III. Expected Output:**

1. Identification and selection of three pilot scenarios (preferentially in three different countries)
2. Terms of reference/design for pilot studies and user-friendly specific guidance in three scenarios