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Concept Note 2013

Development of a 'Practical Sourcebook on Mercury Storage and Disposal'

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A) Background:

The goal of the Global Mercury Partnership is to protect human health and the environment from mercury exposure through immediate actions that minimize and, where feasible, ultimately eliminate global, anthropogenic mercury releases to air, water and land. The Governing Council at its 27th session has again affirmed the role of the UNEP Global Mercury Partnership as a vehicle for immediate action and urges all partners to continue their efforts, and urges Governments and other stakeholders to continue to support, participate in, and contribute to the Global Mercury Partnership.

An important potential source of mercury emissions and releases is the unsound management of mercury and mercury wastes, for instance during interim storage, treatment or disposal. The Governing Council, in its Decision 25/5, therefore further requested UNEP to continue and enhance the existing work on enhancing capacity for mercury storage and providing information on the sound management of mercury.

The Partnership area on supply and storage aims to retire mercury from the market to environmentally sound management by assessing and facilitating the availability of options and technologies for interim storage and disposal of excess mercury. A complementary approach to reduce mercury exposure is being undertaken by the Partnership area on waste management. By following a life-cycle management approach, it aims to identify and disseminate environmentally sound handling, separation, collection, packaging, labeling, transport, treatment, storage and disposal techniques and practices. The Partnership area on products deals among others with environmentally sound transportation, storage and disposal procedures.

By adopting the 'Minamata Convention on Mercury', the international community has recently taken decisive action to address the adverse effects of mercury on human health and the environment. The treaty will enter into force 90 days after it is ratified by fifty States or regional economic integration organization. In two of its core provisions, the treaty envisions the environmentally sound interim storage of mercury other than waste mercury (Article 10) and the environmentally sound management of mercury wastes (Article 11). Both articles call upon Parties to cooperate with each other and with relevant intergovernmental organizations and other entities for the purpose of building necessary capacities. Moreover, waste incineration facilities are listed as one of the point sources of emissions (Art. 8 and Annex D).

Interim storage and waste management (i.e. separation and collection, labeling and packaging, transport, recycling, recovery and disposal) issues are complex in nature. Countries' capacities vary considerably and may depend on the level of development. Many countries - in particular developing countries and countries with economies in transition - may therefore profit from the gathering and subsequent sharing of experiences, expertise, and technical knowledge in the fields of interim storage and waste management.

The initiative will draw amongst others on the existing work that has been done by the UNEP Global Mercury Partnership. Analyses of regional storage options and feasibility studies have been conducted in addition to analyses of more general technical documents on storage and disposal. The Partnership has also facilitated the development of national inventories of mercury use/releases and regional assessment of excess mercury supply, notably in Latin America and the Caribbean, in Eastern Europe and Central Asia as well as in the Asia-Pacific region. These regional assessments helped in

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understanding the specific storage and management needs of the various countries and regions. It is now clear that many countries and almost all regions are likely to face a situation where national and/or regional mercury supply may exceed the national and/or regional mercury demand, resulting in surplus, or excess mercury.

A large part of this surplus mercury will classify as waste and will have to be managed and eventually disposed. Appropriate interim storage facilities are also necessary prior to the existence of a surplus, as mercury intended for uses allowed under the Convention will need to be stored on an interim basis. In any of these situations, the Convention would request the environmentally sound management of such mercury. This requires the availability of relevant information and technical expertise. Governments need to have access to management options that are suitable given their specific national circumstances. They also need to be aware of the technologies that are now available, as well as those that can offer them.

The Norway ODA-supported National Mercury Storage and Disposal Projects, which have been implemented in Argentina and Uruguay in 2012 and are currently underway in Panama and Mexico, reveal that the capacities of countries to develop national action plans for the environmentally sound storage and disposal of their "excess mercury" could be enhanced. The compilation of inventories, reviews of existing national regulatory frameworks, assessments of options for mercury treatment, storage and disposal, and the establishment of decision-making processes led to the development of National Action Plans (NAPs) on mercury storage and disposal. The Sourcebook will use the experience gained from these country projects and other national initiatives as case studies.

With the adoption of the Minamata Convention, it is now timely to consolidate the knowledge gained under the Partnership so as to develop a practice-oriented sourcebook that will enhance the capacity of governments to develop environmentally sound strategies for the interim storage of mercury and the management of mercury wastes. The 'Suggested framework for decision making for the safe management of surplus mercury', which was developed by the 'Integrating Knowledge to Inform Mercury Policy Initiative' and has now been refined and updated to reflect recent progress, will serve as a further resource to be drawn upon. Moreover, the 'Basel Technical Guidelines ' referred to in Article 11 of the Minamata Convention and the draft 'Good Practices for Management of Mercury Releases from Waste' are among the key references for this initiative. The Sourcebook will build on these documents and operationalize the Basel Technical Guidelines.

The initiative will engage participants from all relevant sectors, i.e. independent experts as well as representatives from governments, industry, academia, and international organizations. This will ensure the availability of the most recent information and that the newest technological developments are taken into account. It is not only necessary to involve those countries with advanced management capacities, but also relevant companies with the technical know-how, such as companies specialized in the recycling and storage of mercury. Since it is equally important to understand the specific needs of developing countries and those with economies in transition, their representatives will also be consulted. This initiative will result in an informational and practical Sourcebook that is easy to use, short, graphical and illustrative with decision trees covering all relevant scenarios. It will be a living document, allowing for relevant changes in the future. It will be clearly written with minimum text to facilitate translation to other UN languages.

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B) Objective:

The overall objective of this initiative is to provide information in order to enhance the capacity of governments to develop environmentally sound strategies for the interim storage of mercury other than waste mercury and the management of mercury wastes.

C) Project Outline

Inputs	1.) Preparation a. Consultation and coordination with the Basel, Rotterdam and Stockholm (BRS) Conventions Secretariat b. Creation of an expert group (EG) comprised of independent technical experts, representatives from governments and industry, academia, as well as other relevant stakeholders in the fields of mercury interim storage and waste management c. Gathering and updating relevant materials and documents, such as the 'Technical Options for Mercury Storage and Disposal' and the 'Suggested framework for decision making for the safe management of surplus mercury'. d. Collection of documented Good Practices in mercury interim storage and waste management from country projects and other sources, including from the members of the expert group. e. Desk study on recent technological developments f. Drafting of a working document 2.) Implementation a. Circulation of the preliminary draft for comments by the EG b. Development of a consolidated draft version c. Consultation with the expert group, information exchange among the various stakeholders and feedback on the draft Sourcebook d. Finalization of Sourcebook via an electronic consultative process e. Graphic design and layout f. Printing and launch of the Sourcebook g. Creation of a dedicated webpage and interactive tools 3.) Follow-up a. Informing governments and other stakeholders about the sourcebook b. Maintaining information exchange between the participants of the EG c. Possible future meetings and/or ongoing consultations d. Periodic updating of the Sourcebook

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Outputs	• A sourcebook with decision trees describing Good Practices and technological options and assisting in the development of environmentally sound strategies for the interim storage of mercury other than waste mercury and the management of mercury wastes • A dedicated webpage and interactive tools • Active dissemination back to back with other mercury partnerships/SAICM workshops/meetings
Outcomes	Increased capacity of relevant national and/or regional decision-makers, especially in developing countries and countries with economies in transition, to: • Assess the national situation in terms of sources and volumes of mercury and mercury wastes, review the relevant regulatory framework and make a survey of existing hazardous waste treatment facilities. • Choose from the technological options available for interim storage, treatment and disposal given a specific set of national circumstances. • Develop and implement environmentally sound strategies for the interim storage of mercury and the management of mercury wastes.
Impact	A reduction in the adverse effects on human health and the environment from mercury exposure via minimized releases to the environment from the unsound management of mercury and mercury wastes.

D) Key components of the sourcebook

Mercury and mercury waste may occur in a number of different settings. The Sourcebook will assist countries as much as possible, in **identifying the sources** and quantifying the **volumes and types of mercury and mercury waste streams** at the national level. Countries will also be guided in **reviewing regulatory frameworks** and conducting **surveys of existing hazardous waste treatment facilities** for interim storage.

A complex set of knowledge, much of which is of technical nature, is needed to make informed decisions and to implement any of the options available. An outline of the **various options for the interim storage of mercury other than waste mercury and the management of mercury wastes** (i.e. separation and collection, labeling and packaging, transport, recycling, recovery and disposal) will

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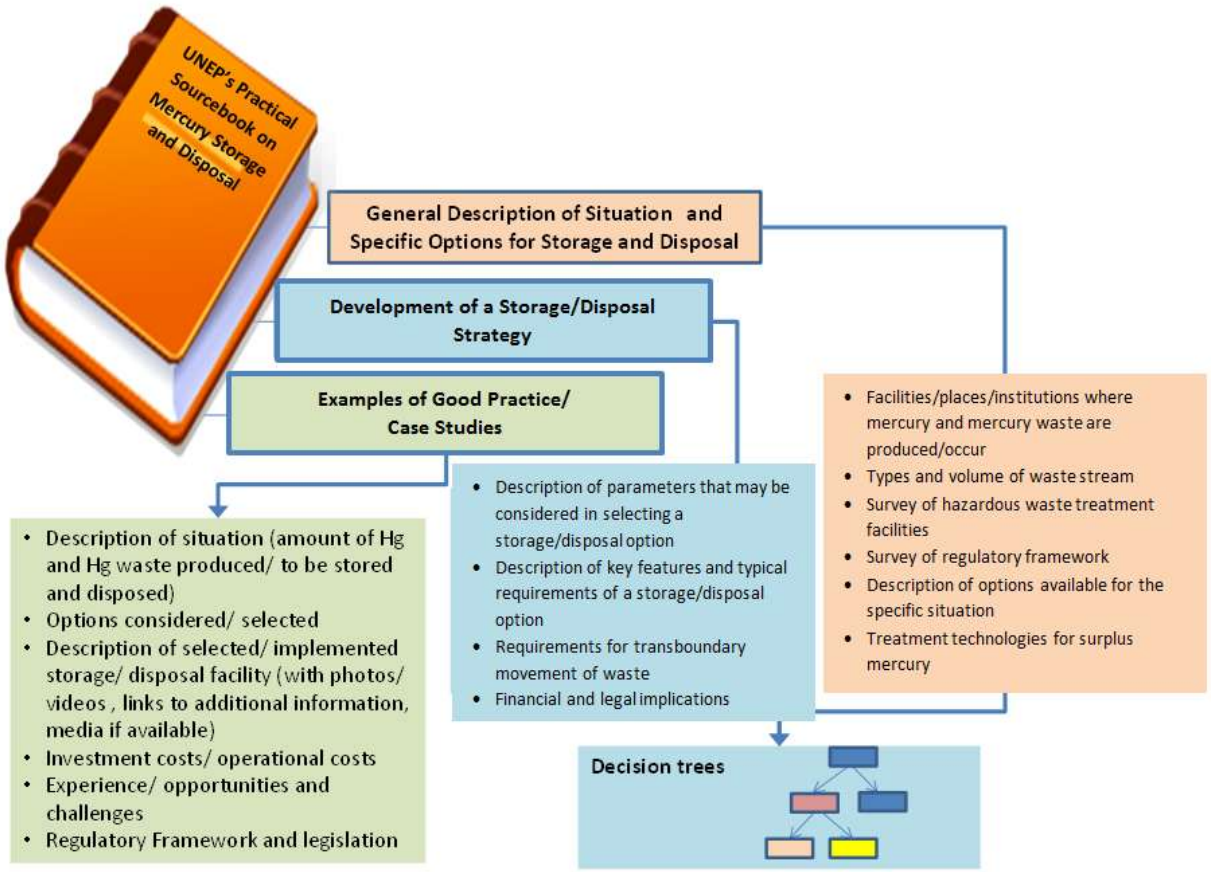
thus be a key component of the sourcebook. The Sourcebook will also make governments aware of the various **technologies available** for the treatment of surplus mercury.

In order to facilitate the development of environmentally sound strategies, the document describes **parameters** and **key features -** such as **technical requirements or financial implications** - that may be considered in selecting an appropriate and feasible option. In every area, the document will seek to provide **practical advice for governments** on how to manage mercury and mercury waste in an environmentally sound manner given a set of specific national circumstances. **Decision trees** with cross-references to relevant documents (such as the Basel Technical Guidelines) will be provided to illustrate the various options available to governments and guide them through the decision-making process.

The illustration of Good Practices will be another important component of the Sourcebook. This will include a description of the specific situation/challenge, the options that were considered and the strategy that was implemented. In order to allow decision-makers to make informed decisions, the legislative framework, relevant technical features, costs and lessons learnt will also be outlined.



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E. Organization of Work

E.1. Draft Schedule of Activities

The International Solid Waste Association (ISWA) has been engaged to do the work. It shall be organized in three phases.

1. The Mercury Storage and Disposal Expert Group that includes the technical working group of ISWA is established and the work program is communicated to them. Relevant material from existing guidance documents and additional material is collected by the coordinator and the consultant.

a) The members of the EG as well as selected other stakeholders are requested to provide information on Good Practices and specific aspects related to the interim storage of mercury and the management of mercury wastes (such as options available, costs, documented examples, key requirements, experiences and challenges etc.).

b) A desk study on recent technological developments and existing practices is conducted by the coordinator.

c) Based on the information above ((a) and (b)), a draft working document featuring decision trees and examples of Good Practices is prepared by the coordinator and the consultant.

2. The draft sourcebook is distributed among the EG members who are given one month to make suggestions for improvement. A second draft is prepared that is sent to the EG members in advance of an electronic consultative process, where all parts of the document are discussed with the view of improving the information provided, learning from the Good Practices section and further elaborating the decision trees.

3. On the basis of the results from this this activity, a sourcebook is prepared by the coordinator and the consultant. The content of the sourcebook, including the decision trees and examples Good Practices, will be made available in printed form as well as on a dedicated webpage, including interactive tools, by the Secretariat. The webpage shall have a living character as additional examples of Good Practices and new information (e.g. technological developments) may be added later.

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E.2. Workplan

Activity	Month						Person /institution responsible
	1	2	3	4	5	6	
1a) Administrative and logistical preparation 1b) Establishment of the EG	■						Coordinator, consultant, UNEP Secretariat
2a) Collection of relevant materials and technical documents, preparation of a brief guideline on how to document Good Practices 2b) Request for information from the expert group and other relevant stakeholders	■	■					Coordinator, consultant
3) Drafting of a working document		■	■				Coordinator, consultant
4) Feedback by the EG members on the working document				■			EG members
5a) Drafting of a consolidated version of the working document 5b) Distribution of the draft sourcebook and request for feedback from the EG				■	■		Coordinator, consultant
7. Electronic consultative process with the EG					■		All
8) Finalization of the sourcebook					■	■	Coordinator, consultant, EG members
9) Layout and graphic design of the sourcebook						■	Coordinator
10a) Creation of a dedicated webpage and interactive tools 10b) Printing, launch and dissemination of the sourcebook						■	Coordinator UNEP Secretariat