



**Latin America and Caribbean (LAC) Mercury Storage Project
Regional Consultation (RC)
Panama City, Panama 14-15 April 2010**

LAC Mercury Storage Project RC INF 1

LAC Mercury Storage Project Brief

Note by the secretariat

1. Governing Council decision 25/5 on Chemicals Management including Mercury requests the Executive Director of UNEP, coordinating as appropriate with Governments, intergovernmental organizations, stakeholders and the Global Mercury Partnership, and concurrently with the work of the Intergovernmental Negotiating Committee to develop a legally-binding instrument on mercury, to continue and enhance as part of international action on mercury the existing work, including enhancing capacity for mercury storage.
2. Recognizing that mercury is toxic but cannot be destroyed nor degraded, one aspect of the work of the UNEP Mercury Programme is to consider how best to place excess mercury in secure storage to prevent it from re-entering the global marketplace. UNEP Chemicals Branch DTIE initiated two regionally-based project, one in Asia Pacific, and another in Latin America and the Caribbean, funded by the government of Norway, to provide regional estimates of excess mercury supply during the period 2010-50, to consider options and criteria for storage, and to initiate regional processes to address excess mercury supply through safe long term management solutions and storage. The full project document is available at http://www.chem.unep.ch/MERCURY/storage/mercury_storage_proj_Jan09.pdf
3. The present note describes a brief summary the UNEP mercury storage projects for the information of participants in the current meeting.

Summary of UNEP Mercury Storage Projects

Reduction of mercury supply and investigation of mercury storage solutions

Project builds on GC 24/3 IV priority: To reduce global mercury supply and to find environmentally sound storage solutions for mercury.

GC 25/5 III requested UNEP ED working through the Global Mercury Partnership and concurrently with the work of the Intergovernmental Negotiating Committee to develop a legally-binding instrument on mercury, to continue and enhance as part of international action on mercury the existing work, including enhancing capacity for mercury storage. The Chemicals Branch of UNEP Division of Technology, Industry and Economics has initiated mercury storage projects in Asia and the Pacific and Latin America and the Caribbean, supported by the Government of Norway. The objective of these projects is to develop a policy and plan for the safe long term storage of mercury that will deal with anticipated excess supply of elemental mercury, in order to prevent its reentry to the global marketplace. Potential sources of excess mercury supply are from decommissioned chlor alkali facilities, by product from non ferrous metal mining such as from zinc smelting, by product of natural gas, from artisanal mining, end of life mercury containing products, among others. More information about the projects can be found at the http://www.chem.unep.ch/mercury/storage/main_page.htm

Project activities and expected output

During the project **inception workshops**, options for safe, long-term storage solutions were presented to Governments and interested stakeholders. Options included above-ground storage facilities (such as warehouses), underground storage facilities or salt mines and export to foreign facilities. Governments in both regions agreed to proceed with an **options analysis and feasibility study** that would investigate the three options with due consideration of a broad range of criteria (technological, social, political, environmental and health impacts, economic and financial viability, among others). Experience gained in the United States with an above-ground warehouse facility and in the European Union with an underground geological formation facility was considered valuable in assessing the available options. In addition, the study by the European Commission on mercury stabilization and waste acceptance criteria in relation to current legislation will provide useful information on the need to pre-treat elemental mercury before eventual storage.

Executive committees for both regions have been established. Forming a regional support structure, these have an advisory role for the project, and will catalyse policy development consistent with the development of a long-term safe terminal storage facility or facilities. The need for additional legislation and regulatory measures at the national level such as those related to mercury trade and demand was recognized as one of the committees' urgent tasks. For Asia and the Pacific, the Project Executive Committee is composed of representatives from the governments of Japan, India, Nepal, Papua New Guinea, Pakistan, and the non-government organization, Zero Mercury Working Group. For the Latin America and the Caribbean, the Project Executive committee is composed of representatives from the governments of Brazil, Chile, Peru, Mexico, Panama, Barbados, Dominican Republic, respectively representing the South and Central Americas, and the Caribbean, as well as from non-governmental organizations, namely, ACPO-Zero Mercury Working Group, Asociacion Argentina de Medicos Por el Medio Ambiente and the World Chlorine Council.

The “**Assessment Report for Excess Mercury Supply in Asia 2010–50**” presented two scenarios for Asia. The first indicated approximate supply-demand equilibrium in 2017, with a need to store 5,500 tons of mercury. The second indicated that excess Asian mercury appeared from around 2027, with a need to store 7,500 tons of mercury. In Asia, estimates included Southeast Asia (Brunei Darussalam, Cambodia, China, Indonesia, Japan, Laos, Malaysia, Mongolia, Myanmar, Philippines, Republic of Korea, Democratic People's Republic of Korea, Singapore, Thailand, Vietnam) and East Asia (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka). The full report is available at http://www.chem.unep.ch/mercury/storage/Asian%20Hg%20storage_ZMWG%20Final_26May2009.pdf

The “**Assessment Report for Excess Mercury Supply in Latin America and the Caribbean 2010-50**” also presented two scenarios, with the first resulting in supply-demand equilibrium in 2013 with an accumulated excess of over 8,000 tons of mercury from 2013 to 2050. The second resulted in supply-demand equilibrium in around 2019 with an accumulated excess of more than 2,000 tonnes of mercury from 2019 to 2050, in addition to possibly 5,000 tonnes produced as a by-product of industrial gold mining. In Latin America and the Caribbean, estimates included South

America (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela) and some countries in Central America and the Caribbean (Mexico, Panama, Costa Rica, Jamaica, and the Dominican Republic). The complete report is available at http://www.chem.unep.ch/mercury/storage/LAC%20Mercury%20Storage%20Assessment_Final_1July09.pdf

Issues raised in regional consultations

Most Asian and Pacific Governments confirmed that initiating storage activities in the region could contribute to demand reduction and that they were willing to consider the option of storage. Of the criteria to be considered in the selection of management options, participants were most concerned with the social and political acceptability of the infrastructure and the need to elevate the issue to a high ministerial body such as the Association of Southeast Asian Nations. Of equal priority were the issues of public health and safety and environmental impacts. Concerns were also raised as to ownership of the mercury surplus, the need for pre-treatment or stabilization before storage and the preference for a centralized regional facility rather than smaller national facilities. Operating and maintenance costs for the facility were also a major consideration. Moreover, site-specific requirements such as the regional geology, hydrology and susceptibility to natural disasters were major concerns. The polluter pays principle was invoked as the guiding principle in storage activities. There was agreement that a global treaty embodying specific policies for terminal storage would ensure consistent and sustained national government policy.

One major concern that Latin American and Caribbean Governments expressed was the need to deal with end-of-life mercury-containing products. Interim national storage facilities were needed, such as in health facilities for those products in the health-care sector. The need to have public hearings to obtain community support during an environmental impact assessment of a facility was considered essential. There would be a need to develop extraction technologies for elemental mercury and technologies to convert mercury compounds into their elemental forms. The region must also manage mercury from decommissioned chlor-alkali plants and by-products of mining. With limited funds in developing countries to deal with mercury storage, there was a proposal to tackle elemental mercury as part of an overall hazardous waste management programme.

Identifying the next steps

Results from the options analysis for the safe long-term storage of mercury in Asia and the Pacific region pointed to political, legal, technical, economic, social, health and environmental issues that must be dealt with in a coherent manner before a site or sites could be selected. Potential sites are being put forward based on the analysis. There is a need for legislative and regulatory measures at both the national and regional levels that would facilitate and be consistent with the establishment of safe, long-term storage facilities. For Latin America and the Caribbean, the options analysis is underway and will be the basis for the choice of preferred option by Governments.

Feasibility studies on the preferred storage option will be undertaken for both Asia and Latin America.

Parameters/technical specifications to include requirements for site selection, site specific assessments, and possible funding source will be developed. Results of feasibility studies will include recommendations and basis for countries to proceed with the most feasible option on the safe long term storage of mercury.