Identification of Mercury Pilot Partnerships

Submission by the United States of America

At the twenty-third session of the United Nations Environment Program (UNEP) Governing Council in February 2005, Governments agreed to the development and implementation of partnerships as one approach to reducing the risks to human health and the environment from the release of mercury and its compounds to the environment. The Governing Council Decision invited the identification of pilot partnerships by September 1, 2005.

Building on the strong foundation established by the UNEP Mercury Program and the strong actions already taken in the United States, the United States is working with international collaborators to form a number of partnerships to address major sources of mercury to the global environment. Such collaboration is fundamental to building the necessary capacity to protect public health and the environment from mercury risks and to reduce global mercury releases. At this time, the United States is working with other stakeholders to develop and implement a range of pilot partnership and collaborative activities in five key sectors that can achieve important reductions: chlor-alkali facilities, products, artisanal gold mining, coal combustion, and fate and transport research. To date, three of the areas, products, chlor-alkali, and artisanal gold mining, have held open invitation meetings and have had discussion papers posted on the UNEP website. Additionally, the United States continues to contribute to global work on emissions and use inventories, data collection on mercury trade flows, and international efforts to improve risk assessment and communication.

The United States appreciates the efforts of UNEP Mercury Program to raise global awareness about the environmental and health issues associated with mercury releases and uses. We will continue to support UNEP's role of facilitating work on partnerships that may be initiated and implemented. In an effort to provide the impetus to these partnerships, the United States has currently pledged almost $2 million to support partnerships and the UNEP Mercury Program. Additionally, the United States is pleased to contribute technical assistance to these partnerships. We look forward to working with UNEP and other stakeholders around the globe to implement mercury efforts that take the partnership approach endorsed by governments at the Governing Council to an active and effective level of engagement.

Mercury Reduction in the Chlor-alkali Sector

A partnership of interested governments and the chlor-alkali industry is exploring the entire range of mercury management options – from implementing best practices for existing mercury cells to replacing mercury cells. The United States estimates that there are about 175 mercury cell plants in the world. Some facilities may elect to stop using mercury cell technology, and the partnership can facilitate such shifts; however, other plants will continue to rely on mercury cells for the foreseeable future. For those plants which are not converting to mercury-free technology in the near-term, significant mercury use and emissions reductions can be readily achieved. The United States and its partners will facilitate implementation of best environmental practices and best available technologies to achieve reduction of consumption and emissions at selected chlor-alkali facilities. Additionally, the United States anticipates a global launch of the partnership

with a workshop in late 2005, followed by subsequent workshops and industry-to-industry technical cooperation in select partner countries.

Mercury Reduction in Products

Work under this partnership will identify and implement successful approaches to reduce human exposure to mercury by looking at and prioritizing appropriate efforts to reduce or eliminate mercury in products through exchanging information and expertise, transferring and applying best management practices, developing and improving mercury use and emission inventories, providing technical assistance, raising public awareness, better characterizing the amount of mercury used in products nationally and globally, and developing pilot projects. The partnership anticipates an initial focus will include work to reduce or eliminate mercury in waste at health care facilities where such activities will reduce human exposures to mercury. Additionally, a mercury products workshop is being planned for early 2006, leveraging work already underway between the Governments of the United States, Canada, and Mexico, the North American Commission for Environmental Cooperation, and UNEP. As an important element, the United States plans to work with its partners to achieve appropriate reductions in mercury use to reduce human exposure to mercury.

Mercury Management in Artisanal and Small-Scale Gold Mining

Artisanal and small-scale gold mining is a globally significant source of mercury releases. UNIDO estimates that 1,000 tons of mercury are released into the environment each year from this source. Better practices for safe mercury capture and reuse can reduce occupational exposures and risk in mining communities while also achieving significant reduction in mercury on a global scale. Working closely with existing successful efforts to reduce mercury pollution from artisanal gold mining, in particular the UNIDO Global Mercury Project, the United States is coordinating with the World Bank's Communities and Small Scale Mining (CASM) program to identify areas for field work and to improve access to sector-related mercury information, including best-practice information targeted towards community-based organizations working in the sector, via mercury web pages, a list-serve function, and other media. The United States also plans to work in conjunction with established community-based organizations to facilitate the introduction of, training on, and adoption of best practices and appropriate technologies to achieve measurable reductions of mercury consumption and emissions at artisanal mining sites.

Mercury Control from Coal Combustion

Work under this partnership would allow for an increased understanding of the emission inventory and impact of mercury emissions from the power sector, an increased understanding of existing multi-pollutant approaches to reducing mercury emissions, their cost and effectiveness, and sharing of information on the applicability, effectiveness, and cost of newly emerging mercury specific and multi-pollutant control technologies. The United States, working with China, Japan and Canada, is planning to hold a workshop in Beijing, China from October 31 through November 2, 2005, to address the issue of mercury control from coal fired utilities in China. A number of countries that have expressed interest in this workshop will also be in attendance. While the workshop will focus on China's needs and circumstances in addressing the control of mercury from utilities, the information presented and issues addressed will have a broader applicability. It is anticipated that the goals, objectives and structure of a proposed partnership in this area will be discussed at a planned side-meeting involving countries and other interested stakeholders.

Mercury Air Transport and Fate Research

Work under this partnership would facilitate information sharing and a better understanding of the global cycling of mercury among scientists and policymakers helping to increase the effectiveness of global mercury control strategies. The current level of uncertainty in this area, together with a limited number of country-specific release inventories and a lack of standardization of measurement methods, limits the accuracy of modeling predictions and, therefore, the ability to describe the impacts of emission reductions as a function of various risk management actions including use reductions. The United States is currently working with China and Italy to develop collaborative activities that can lead to a project under this partnership. As a first step, a team of U.S. and Italian scientists are currently visiting China to initiate a dialogue and begin development of a draft plan for collaborative mercury monitoring and training.