

NATIONAL MERCURY WASTE MANAGEMENT PLAN - Cambodia



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2. National Context Overview

- National geographic consideration
- Legal framework
- Aspects for mercury waste management
- Management approach
- Programmatic items
 - ▣ Identity
 - ▣ Governmental institutions

3. Priority Goal and Objectives

□ Goal

- ▣ to achieve a reduction in the anthropogenic releases of mercury wastes to the Cambodian environment, through appropriate national and provincial initiatives, to amounts that can be attributed to naturally occurring levels and fluxes

3. Priority Goal and Objectives (cont.)

□ Objectives

- **General Mercury Release Objective:** Recognizing that mercury is a naturally occurring element that can never be eliminated from the environment, reduce, or, when warranted, target for reduction through a life cycle management approach, the sources of anthropogenic mercury pollution so as to achieve naturally occurring levels. This is also recognizes the requirement to prevent or minimize releases of mercury used in commerce within the Cambodian economy.

3. Priority Goal and Objectives (cont.)

□ Objectives (cont.)

- ▣ **General Mercury Use Objective:** Considering initiatives such as promotion and use of products and technologies that pose free and/or less mercury than those used at present. Facilitate product stewardship, product labeling, extended product responsibility, use limitations, economic incentives, recycling, and, where there is an unreasonable or otherwise unmanageable risk of release to the environment or risk to human health, phase-out or ban specific mercury uses.

3. Priority Goal and Objectives (cont.)

- **Key components of the action plan**
 - ▣ Component 1: Mercury management in processes, operations and products
 - ▣ Component 2: Mercury waste management approaches
 - ▣ Component 3: Research, monitoring, modeling, assessment and inventories
 - ▣ Component 4: Communication activities
 - ▣ Component 5: Implementation and compliance

4. Proposed Action Plan, 2011-2015

- **Component 1: Mercury management in processes and products**
 - **Objective 1.1: Life cycle management practices and substitution options for mercury.** Recognizing the need to promote the development and use of voluntary/non-regulatory and regulatory initiatives to minimize anthropogenic releases of mercury to the environment.
 - **Objective 1.2: Prevention measure for health and dental care sectors.** Recognizing that the provision of health and dental care should include adoption of pollution-prevention measures by the institutions and professionals that provide such care

4. Proposed Action Plan, (cont.)

- **Component 1: Mercury management in processes and products (cont.)**
 - ▣ **Objective 1.3: Analytical, testing, measurement, calibration and education sector.** Recognizing that various testing and calibration facilities and equipment, educational centers and laboratories may have stored of mercury or mercury-containing devices and reagents, which sound management of those materials, must be taking into account.

4. Proposed Action Plan, (cont.)

- **Component 2: Mercury waste management approaches**
 - **Objective 2.1: Wastewater treatment.** Recognizing that wastewater treatment facilities, by the nature of their operation, accumulate mercury in both wastewater and biosolids that may become bioavailable or be emitted when discharged applied to land or incinerated.
 - **Objective 2.2: Mercury waste collection and handling.** Recognizing that the collection of mercury is essential to controlling its release, and that proper handling of mercury-containing wastes is needed to prevent accidental releases of mercury.

4. Proposed Action Plan, (cont.)

- **Component 2: Mercury waste management approaches (cont.)**

- **Objective 2.3: Mercury retirement program.**

Recognizing that anthropogenic activities contribute to the increasing global burden of mercury and that there is a need to consider options for removal and permanent disposal of mercury from contributing sources and stockpiles so that it is no longer available to the global pool.

4. Proposed Action Plan, (cont.)

- **Component 3: Research, monitoring, modeling, assessment and inventories**
 - ▣ **Objective 3.1: Development of consistent/comparable data.** Recognizing the importance of having and sharing comparable data and information on mercury and recognizing the critical importance of developing the institutional capacity to generate, share and use such data and information.
 - ▣ **Objective 3.2: Mercury Monitoring Network.** Aware that adequate long-term monitoring is important for the development of scientifically sound information to guide policies and programs aimed at reducing levels and fluxes of mercury in the environment.

4. Proposed Action Plan, (cont.)

- **Component 3: Research, monitoring, modeling, assessment and inventories (cont.)**
 - ▣ **Objective 3.3: Mercury Research Program.** Recognizing that well planned and coordinated research can contribute substantially to improved understanding of the impacts of mercury on human health and the environment and to the collective capacity of governmental institutions to develop and implement policies and programs to prevent and minimize the exposure of Cambodian ecosystems, fish and wildlife, and humans to mercury.
 - ▣ **Objective 3.4: Inventories, reporting standards and criteria.** Recognizing that standardized and comparable reporting of mercury release and waste management is critical to the development of comprehensive and effective mercury action plan.

4. Proposed Action Plan, (cont.)

- **Component 4: Communication and awareness raising**
 - **Objective 4.1: National educational awareness strategy.** Recognizing that the diverse societies of Cambodia need to be made fully aware of the human and environmental risks related to mercury and its risks.
 - **Objective 4.2: Communication of best practices.** Recognizing that communication of successes and problems is an effective and efficient mechanism to share technological advances.
 - **Objective 4.3: Recycling directory.** Recognizing the need to establish permanent disposal/retirement options for mercury in Cambodia, the government acknowledges that there may be a need to maintain an inventory of those facilities that are capable of recycling mercury.

4. Proposed Action Plan, (cont.)

- **Component 5: Implementation and compliance**
 - ▣ **Objective 5.1:** Country implementation. Recognizing that the NMWMP provides a framework for action agreed to by the competent ministries, and that each respected ministries has unique regulatory frameworks and capacities to implement the actions described herein.
 - ▣ **Objective 5.2:** Verification of success. Recognizing that detailed implementation plans will be initiated, procedures are required to verify compliance with voluntary/non-regulatory commitments, guidelines, and regulations. Accordingly, the Lead Agency directs the Working Group on the Sound Management of Chemicals to:

5. Requirement to achieve goal and objectives of the action plan

- **Requirement resources**
 - USD2925000.
- **Cooperative partners**
 - **MOE, MAFF, MIME, MoC, MoH, NGOs, Private Companies, etc.**
- **Development partners**
 - UN Agencies, i.e. UNEP, UNITAR, UNIDO, GEF
 - Governments and countries' Trust Fund
 - Banks: WB, ADB, and others
- **Time frames for implementing the action plan**
 - 2011-2015

THANKS YOU!

