



a toxics-free future

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International SAICM Implementation Project (ISIP)

In 2010, in an effort to demonstrate SAICM implementation via IPEN Participating Organizations, IPEN launched an International SAICM Implementation Project, also known as ISIP. ISIP aims to mobilize resources for initial enabling activities pertaining to national priorities, in keeping with the work areas set out in the strategic objectives of section IV of the SAICM Overarching Policy Strategy.

In particular, the ISIP supports the Governance objective of SAICM's Overarching Policy Strategy paragraph 26, which calls for enhanced "cooperation on the sound management of chemicals between Governments, the private sector and civil society at the national, regional and global levels."

In addition, ISIP builds on the 2008-2009 Global SAICM Outreach Campaign to raise awareness about SAICM and strengthen collaboration among the public interest, health and labor sectors.

ISIP Objectives

ISIP's four objectives include:

- Promoting the need for sound chemicals management
- Advancing National SAICM Implementation
- Promoting global SAICM implementation by global civil society
- Building capacity among NGOs developing countries and countries with economies in transition

Title of activity: Awareness Campaign to Educate Community about the Hazards of Mercury to Health & Environment

NGO: Arab Network for Environment and Development (RAED) / Arab Office for Youth and Environment (AOYE)

Country: Egypt

Date: February, 2011

Elements of SAICM Covered:

Promote reduction of the risks posed to human health and the environment (57); Help develop comprehensive national profiles or country situation reports about mercury (1, 166); Programs to monitor mercury to assess exposure (66, 82); Promote the development and use of products and processes that pose lesser risks (44); Take immediate action to reduce the risk to human health and the environment posed on a global scale by mercury in products and production processes (59); Participation in activities related to the negotiation of a legally binding instrument on mercury

Description of mercury that is available in the market:

Mercury is used in many fields in Egypt as listed below:

- Electrical switches
- Thermostats and Blood Pressure Measures. Although many liquids could be used in pressure measuring devices, mercury is used because its high density requires less space.
- Mercury dissolves numerous metals to form amalgams and is thus used to extract gold dust from rocks by dissolving the gold and then boiling off the mercury.
- Dental fillings contain tin and silver (and sometimes gold) dissolved in mercury.
- Mercury vapor lamps are widely used because they are powerful and economical sources of ultraviolet and visible light.

Description of the most common forms of mercury exposure:

- Medical wastes
- Agricultural Fertilizers
- Electrical and Medical Devices

Description of human sources of mercury:

The main activities that release mercury into the environment, according to the Egyptian Records, are:

- Industrial Activities, especially those that result in severe chemical pollution such as metal galvanizing and paints.
- Agricultural Activities, with an excess amount of usage of banned fertilizers that contain mercury with some other heavy metals.
- The industrial and agricultural sewage that might reach the underground water and affect the soil.

Description of the damage caused by mercury:

Mercury can enter water bodies through direct discharge or from atmospheric deposition with the most significant courses.

Hazards of exposure to mercury include its effect on the human nervous system, heart, kidneys, lungs and immune system.

Mercuric sulfide occurs in a red form and an amorphous black form. The red form (vermilion) is used as a coloring material. Cinnabar is sometimes used to color tattoos red, but it causes significant skin irritations and obstructions of the lymphatic system. Mercuric fulminate is an explosive that is sensitive to impact and is used in percussion caps for munitions.

Mercurochrome is an organic mercury compound that is used on wounds as an antibacterial agent.

There are two types of mercury poisoning, acute and chronic. Acute mercury poisoning results from the ingestion of soluble mercury salts, which violently corrode skin and mucous membranes. Although cases have occurred in which persons have ingested elemental mercury without suffering permanent damage, mercury vapor aspirated into the lungs can cause severe pneumonia and death.

Chronic mercury poisoning occurs through the regular absorption of small amounts of mercury. This condition is often a disease of workers in mercury mines, laboratories, and industries that use mercury.

The most toxic mercury compounds are those that are fat soluble, because this property assists in their distribution throughout the body. Methyl mercury compounds, such as dimethyl mercury,

are among the most dangerous. Mercury salts released into the environment may frequently be converted by anaerobic bacteria into such compounds, which can then be carried through the food chain to humans. Other micro-organisms can convert methyl mercury compounds into the insoluble, and therefore harmless, mercury sulfide.

Description of the efforts to deal with mercury:

The Ministry of State for Environmental Affairs (MSEA) exerted many efforts to reduce adverse impacts resulting from handling hazardous substances control of Hazardous Substances including Mercury.

A. Developing an integrated regional database for «Environmental Pollutants» in coordination with Hazardous Substances Department. This database is used to record all data collected via inventory to identify types and amounts of pollutants, their physical and chemical properties, health & environmental impacts, previous associated studies, and methods of safe disposal.

B. Issuing Egyptian Standard Specifications, in cooperation with Egyptian General Authority for Standards and Quality and concerned authorities (Ministry of Manpower, Industrial Development Authority, Center for Nuclear Safety, Atomic Energy Authority, Bavaria Company as a representative from private sector company, Chemistry Agency, National Research Center, and representatives from Military Factories), concerning the following:

- Hazardous substances control, composed of three parts: Guidelines, General Requirements for Mechanical Ventilation System, and Safety Precautions for some Industrial Processes.
- Symbols' Chart composed of safety's symbols and colors, which includes design of safety signs and symbols in workplace and public areas.

C. Forming a high-level national committee from Ministry of Industry Egyptian Federation of Industries, Ministry of State for Environmental Affairs, in addition to concerned research centers. This committee shall be responsible for rehabilitation of Egyptian industrial companies that export its chemical products to the European Union according to the REACH system (Registration, Evaluation, Authorization and Restriction of Chemical substances), which is applied to all chemical products that enter European markets. All Egyptian factories that export to the European Union have been provided with REACH system requirements to promote Egyptian exports to the European Union.

D. In the field of national implementation of the strategic approach for the international chemicals management (SAICM), a national implementation plan has been prepared and launched with important activities including "inventory of PCBs" in Shubra al-Khaimah region and implementing environmental awareness programs for all categories of society. On the national and regional level, a proposal was prepared reflecting Egyptian & Arab point of view towards urgent issues to reach safe management of chemicals in addition to providing technical and financial support required to implement the Arab Action Plan needed for the execution of SAICM approach, which was presented on behalf of the Arab Countries during the second International Conference for Chemicals Management (Geneva / 11-15 May, 2009).

E. All customs releases of imported chemicals to be used as raw materials in industrial, commercial or agricultural sectors with total amount of 9957.563 tons in 2008 have been reviewed; as well as an inventory for custom releases and quantities of hazardous substances was made from 2004 until 2008.

Description of what forces support and oppose the Mercury Treaty, the public participation consultation process, and the level of public awareness of the treaty process:

MSEA, as the acting national focal point under Basel Convention, is responsible for controlling and monitoring transboundary movement of hazardous wastes through the Egyptian territories in cooperation with Suez Canal Authority and other related authorities. Hazardous Wastes Department at MSEA receives notifications related to transboundary movement from competent

authorities of the exporting countries to permit hazardous wastes shipments passing from Far East to Europe through Suez Canal for the purpose of their recycling or final disposal under Basel Convention provisions.

In the last two years records registered 562.348 tons of hazardous wastes passed Suez Canal through 26 exporting and 13 importing countries, without recording any deviation of transit conditions stipulated in national legislations or Basel Convention.

Minister of State for Environmental Affairs Maged George declared on August 19th 2010 Egypt's access to "the certificate bronze" for its influential role in negotiations to develop a binding international legal instrument to reduce mercury use and preparation of some of the proposals, which received considerable support, and serve the national and regional interest, through the Intergovernmental Negotiating Committee (INC). This Committee was formed by a decision of the Governing Council of the United Nations Environment Program (UNEP) to negotiate about the technical aspects of a new international legal instrument on mercury and waste, which is scheduled for five rounds, beginning in 2010 and ending in 2013.

Egypt is considered one of the influential countries in the negotiations for the mercury treaty, and actively participated in the preliminary consultations that preceded the formation of the INC, on the regional and international level. Egypt was selected to negotiate on behalf of the African Group, especially in the areas of technical support and capacity building.

There is a global movement to stop the gradual mercury uses that aims to reduce the risks posed to the environment (water, air, soil), as well as to living organisms (human, plant, animal).

Project Outcome:

Description of the activity conducted:

The Arab Network for Environment and Development (RAED), through its secretariat Arab Office for Youth and Environment (AOYE), and with the full cooperation with the International POPs Elimination Network (IPEN) and the League of Arab States (LAS), conducted a regional workshop for 40 participants representing NGOs, Media, Experts and Parliamentarians from eight MENA countries (Morocco – Algeria – Tunisia – Egypt – Occupied Palestinian Territories "OPT" – Syria – Jordan – Lebanon) to enhance the international efforts towards reducing mercury usage to pave the way towards its eventual complete elimination.

AOYE seized the opportunity of the presence of such experts from many countries (some of them members of the IPEN network), and in the presence of the Focal Point of the MENA region, to widen the scope of discussion to cover regional efforts towards elimination of mercury and share experiences with the Egyptian Experts, NGOs and Media representatives to reach certain type of consensus that could lead the CSOs for integrated action plan.

Impact on target groups:

The workshop was a great opportunity to unify the efforts that are being exerted in the national and regional levels to meet the aims of IPEN in particular and SAICM in general. The presence of the heads of the LAS, which is totally involved in the process, helped to consolidate the activities and find common paths for mercury banning and how to meet the concepts of SAICM.

Impact on target policies:

Each one of the participants carried forward the major points of the workshop to promote and sensitize his/her community on them. They all decided to hold specific similar activities in their target areas to present the ideas that were initiated through the workshop. They promised to go further to include mercury banning in their regular seminars to communities, as well as to their respective governmental decision makers so that they can insert these suggestions and action plans into the national environmental status and reports.

Outreach to stakeholders:

Dr. Abdel El-Salam El-Banna, SAICM Regional Focal Point, presented a brief report about Day Hospital and their role in the management of chemical pollutants and health and environment in form of micro-finance activities such as:

- Raising Awareness towards mercury as a hazardous material.
- The proposed legally binding instrument on mercury.
- Managing the disposal of mercury containing items and mercuric wastes.

He invited all environmental organizations that are concerned with mercury issues to join the project.

The workshop had a lot of feedback and interventions, such as:

- The main role of NGOs in the global legally binding treaty to control mercury is to raise environmental awareness about mercury and its effects on human health, and also to make sure that the terms of the treaty are fair.
- There has been an introduction of new technology in the water treatment in Egypt to prevent the direct discharge of mercury into seawater and also to fish. The main cause of tremors in people who eat fish is a large concentration of mercury.
- For the first time in Jordan, in a meeting held at the Ministry of State for Environmental Affairs with environmental organizations, mercury was discussed as a hazardous substance.
- Global society should be aware about NGOs' engagement in the treaty process.
- A fund must be allocated to help developing countries in the elimination of mercury.
- There should be cooperation between government and NGOs.
- RAED should update us with needed information. All the information should be included in a report and all the participants should be provided with this report.

Other relevant issues were discussed, like the lead issue, and electronic wastes, and their effects on health, especially on the developing fetus.

Deliverables, outputs and/or products:

The workshop had the following outputs:

1. Exchange of experiences between the participants.
2. Documents and reports from the local and international experts.
3. Preparing the data and information on mercury in countries, especially Egypt, to be uploaded on the RAED web site, which is currently under renovation and development.
4. Producing the final national report about the situation of mercury in Egypt.

Communication efforts:

Media was represented in the workshop by TV, Radio and Newspapers representatives, and they contributed in discussions. They promised to publish their own gained information as well as the outputs of the workshop in their entities afterwards.

Recommendations, from a public interest, NGO perspective, on reducing and eliminating human sources of mercury:

- To negotiate the terms of an agreement that controls mercury usage & to allocate a fund to support the developing countries to protect health & environment from hazards caused by exposure to mercury.
- Environmental awareness about hazardous effect of mercury
- Control of medical wastes disposal
- Prevention of direct discharge of mercury in water