

Minamata Convention on Mercury

DATE SIGNED BY THE PHILIPPINES

10 October 2013



A miner uses mercury to extract gold in the Naboc River in Compostela Valley. [EMB]

The Minamata Convention (MC) is an international treaty that aims to protect human health and the environment from the adverse effects of anthropogenic emissions and releases of mercury (Hg) and mercury compounds. The convention is named after Minamata Bay in Japan, which was contaminated by industrial wastewater containing methylmercury (MeHg) discharged from a local chemical factory from 1932 to 1968. People who ate fish and shellfish contaminated by MeHg acquired the Minamata disease. Its symptoms were neurological, sensory, auditory, and visual disturbances, lack of muscle coordination,

speech disorder, among others, leading to paralysis and death. The disaster was the first large-scale mercury poisoning incident that affected thousands of human lives in Minamata City, Kumamoto Prefecture in Japan.

The Convention's provisions relate to the entire life cycle of mercury, including controls and reductions across a range of products, processes and industries where mercury is used, released or emitted. The treaty includes (a) a prohibition on the opening up of new mercury mines; (b) the phase-out of existing mercury mines; (c) the phase out and phase down of mercury use in several products and processes; (d) control measures on emissions to air and releases to land and water; (e) regulation of mercury use in informal artisanal and small-scale gold mining (ASGM); (f) the interim storage of mercury; (g) disposal of mercury waste; (g) mercury-contaminated sites and (e) health issues.

The text of the Minamata Convention on Mercury was adopted by the Conference of Plenipotentiaries on 10 October 2013 in Kumamoto, Japan. The Convention entered into force on 16 August 2017.

The Minamata Convention has synergy with the Basel Convention. The latter has technical guidelines for environmentally sound management (ESM) of specific hazardous wastes but does not specifically carry mandatory obligations for Basel Parties. On the other hand, the Minamata Convention has a stronger impact on local implementation of ESM, depending upon how the anticipated new annex of the Convention is drafted and then adopted. Hence, the COP of the Convention cooperates with the relevant bodies of the Basel Convention in the review and update of the Basel guidelines.

The ratification process of the Minamanta Convention by the Philippine Senate is ongoing.

COMMITMENTS

Article 3 of the Convention - Mercury Supply Sources and Trade

- Ban on the opening of new primary mercury mines in the country;
- Closure of existing primary mercury mines within 15 years—for the Philippines, there are no more operating mercury mines;
- Conduct of an inventory of individual stocks of mercury and mercury compounds greater than 50 metric tons per year;
- Environmentally sound disposal of excess mercury from decommissioning of chlor-alkali facilities; and

- Ban on the export of mercury unless the importing country provides written consent and that the mercury is for a legitimate use and has an environmentally sound interim storage.

Article 4 - Mercury-added Products.

- The use of mercury or mercury compounds in the manufacturing processes listed in Part I of Annex B of the Convention, following the Annex B phase out, date shall not be allowed after 2020 and the new uses of mercury in industrial processes shall be discouraged.
- The use of mercury shall be restricted in the processes listed in Part II of Annex B of the Convention.
- New facilities shall also not be allowed to use mercury in the regulated processes under Article 5, as specified in Annex B of the Convention. For facilities with processes listed in Annex B of the Convention, there is a need to identify and obtain information on mercury or mercury compound use; and control mercury emissions to air, and releases to land and water.

Article 5 - Manufacturing Processes.

The following shall be phased-out with their corresponding year timelines: (1) chlor-alkali production (2025) and (2) acetaldehyde production, using Hg as catalyst (2018). The use of the following shall be phased down: (1) vinyl chloride monomers production; (2) Na/K methylate/ethylate; (3) polyurethane production (using Hg as catalyst)

Article 7 - Artisanal and Small-scale Gold Mining (ASGM). Parties should develop an ASGM National Action Plan (NAP) and create institutional structures and mechanisms for its implementation. The NAP should include measures to:

- Eliminate whole ore amalgamation, open burning of amalgam or processed amalgam, burning of amalgam in residential areas, and cyanide leaching of mercury-laden sediment, ore or tailings;
- Set mercury use reduction goals or targets consistent with the timely elimination of the worst practices and other use reduction efforts;
- Reduce mercury emissions, releases, and exposures associated with ASGM, and prevent mercury exposures of vulnerable populations;
- Prevent the diversion of mercury and mercury compounds from other sectors to ASGM, and manage mercury trade consistent with the NAP; and
- Implement a public health strategy to address mercury exposures to ASGM miners and communities

Article 8 - Emissions. The Convention enjoins the Parties to require the best available techniques/best environmental practices (BAT/BEP) or associated emission limit values for new facilities as well as require measures identified in

Article 8.5 to control or reduce mercury emissions from existing sources listed in Annex D, which shall be operational at the source within 10 years. A monitoring/reporting system also needs to be devised for this purpose. Existing sources in the country cover five categories: (1) coal-fired power plants; (2) coal-fired industrial boilers; (3) smelting and roasting processes; (4) waste incineration facilities (none in the country); and (5) cement production facilities.

Article 9 - Releases. Under the Convention, the Parties should require facilities and significant mercury sources, to control/reduce mercury and mercury compound releases to land and water.

Article 10 - Environmentally-sound Interim Storage of Mercury Other than Mercury Wastes. Parties are called to ensure that interim mercury storage is conducted in an environmentally sound manner, taking into account guidelines to be developed by the Conference of the Parties (COP).

Article 11 - Mercury Wastes. The Philippines will also have to adopt the definition of mercury waste consistent with Article 11.2 of the Convention. Furthermore, the country will also need to restrict mercury derived from the treatment or re-use of mercury waste to allowed uses under the Convention.

Article 12 - Contaminated Sites. Parties will also have to develop strategies for identifying and assessing mercury/mercury-compound contaminated sites and ensure that if risk reduction activities are taken at contaminated sites, they are taken in an environmentally sound manner.

For the Philippines, the following items will be banned by 2020: (1) Batteries, except for "button cell" batteries used in implantable medical devices; (2) switches and relays; (3) some compact fluorescent lamps; (4) mercury in cold cathode fluorescent and external electrode fluorescent lamps; (5) soaps and cosmetics; (6) some Hg-containing medical items such as thermometers and blood pressure devices (UNIDO Roadmap, 2018).

POLICY ISSUANCES

Republic Act 9275 - Philippine Clean Water Act of 2004

Republic Act 8749 - Philippine Clean Air Act of 1999

Republic Act 7076 - People's Small-Scale Mining Act of 1991

DENR Administrative Order 1997-38 - Chemical Control Order for Mercury (revision is ongoing)

UPDATES AND RELATED PROJECTS

Steps undertaken leading to the ratification of the Minamata Convention by the Philippines include the preparation of a Ratification Dossier. This document, together with certificates of concurrence from the DENR, the Department of Health (DOH), Fertilizer and Pesticide Authority (FPA), Department of Science and Technology (DOST), Department of Trade and Industry (DTI), Occupational Safety and Health Center (OSHC), Department of Energy (DOE), and the Bureau of Customs (BOC), and other documents for ratification were forwarded by the Department of Foreign Affairs (DFA) to the Office of the President in April 2019 for his consideration.

To further facilitate the ratification of the Convention, the DENR-EMB implemented the project "Development of Minamata Initial Assessment (MIA) in the Philippines" from January 2016 to September 2019. Its purpose is to strengthen institutions and improve national capacities to regulate mercury with a life cycle approach. One national and four regional consultations were conducted in 2017. Three mercury contaminated sites were visited and assessed and an initial mercury inventory was made. Awareness raising activities were held in the DENR regional offices. Workshops for DENR-EMB technical field staff on the use of the UNEP Toolkit for Mercury Inventory were conducted. The MIA Final Report contains the latest mercury inventory of the country through the use of the UNEP Toolkit and an assessment of the country's preparedness to implement the provisions of the Minamata Convention (MC). It includes recommendations needed by the country to realize the goals of the MC. The MIA will be used in formulating the country's frameworks for the National Action and Implementation Plan for Mercury.

DENR Administrative Order 1997-38 or the Chemical Control Order for mercury and mercury compounds is being amended to incorporate provisions of the MC. The DENR Policy Working Group has prepared a final draft for endorsement to the DENR Secretary.

The GEF-UNIDO project with DENR, DOH and Ban Toxics, "Improve the Health and Environment of Artisanal Gold Mining Communities in the Philippines by Reducing Mercury Emissions" which was conducted from March 2013 to June 2016 aimed to reduce the impacts of mercury on the health and environment of artisanal gold mining communities in the Philippines. It introduced mercury-free technology in two small-scale mining areas, namely, Labo in Kalinga and Barangay Mt. Diwata or Diwalwal in Compostela Valley. It also provided health training to rural health care workers in the proper diagnosis of mercury poisoning.

NEXT STEPS

- Ratification of the Minamata Convention by the Philippine Senate
- Acquisition of funding, technical assistance and technology transfer by the Philippines in order to be able to implement the provisions of the MC
- Development of a National Implementation Plan to meet the country's obligations under the Minamata Convention.
- Implementation of the GEF Project, "Contribution Toward the Elimination of Mercury in the Artisanal and Small-scale Gold Mining Sector: From Miners To Refiners," by the Artisanal Gold Council and with the DENR-MGB as the focal office starting in mid-2019

FOCAL OFFICE

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MEETINGS ATTENDED

- 2nd Conference of Parties (COP2) of the Minamata Convention on Mercury, 19–23 November 2018; Geneva, Switzerland – Mr. Joe Amil Salino (EMB)
- High – Level of the Segment of the First Conference of Parties to the Minamata Convention, 28–29 September 2017; Geneva, Switzerland – DENR Usec. Jonas R. Leones and Usec. Rodolfo C. Garcia
- 8th Meeting of the United Nations Environment Global Mercury Partnership Advisory Group (PAG 8), 22–29 September 2017; Geneva, Switzerland – DENR Usec. Juan Miguel T. Cuna and Ms. Elvira Pausing (EMB)
- 1st Meeting of the Conference of the Parties to the Minamata Convention on Mercury and its Preparatory Meeting, 23–29 September 2017; Geneva, Switzerland – Asst. Director Jacqueline A. Caancan, Mr. Renato T. Cruz, and Mr. Geri-Geronimo R. Sañez (EMB)
- Asia and the Pacific Regional Consultation in Preparation for the 1st Meeting of the Conference of the Parties to the Minamata Convention on Mercury,

- 5–7 July 2017; Bangkok, Thailand – Mr. Renato T. Cruz and Mr. Geri-Geron-imo R. Sañez (EMB)
- Minamata Disease Seminar/Workshop, 16–20 January 2017; Minamata City, Japan – Ms. Michelle C. Dapit (EMB Reg. 9)
 - Regional Enforcement Network for Chemicals and Waste (REN) Fifth Annual Workshop and Regional Workshop on the Minamata Convention on Mercury, 8–10 November 2016; Bangkok, Thailand – Mr. Solon C. Rativo (EMB)
 - Minamata Disease Seminar/Workshop, 7–11 March 2016; Minamata City, Japan – Mr. Gilbert Q. Maximo (EMB)

SOURCES/RELEVANT LINKS

<http://www.mercuryconvention.org/Convention/tabid/3426/Default.aspx>

<https://www.unenvironment.org/explore-topics/chemicals-waste/what-we-do/mercury> <https://www.nrdc.org/sites/default/files/minamata-convention-on-mercury-manual.pdf>

<https://www.ncbi.nlm.nih.gov/pubmed/7734058>