

Interested: Interim Secretariat of the Minamata Convention of Mercury.

Subject

Reply to the call for information made by the Minamata Convention on Mercury Interim Secretariat in April, 2016.

Reply

The request for information sent by the Minamata Convention on Mercury Interim Secretariat was based on referrals originated from the discussions that took place during the 7th Meeting of the Intergovernmental Negotiating Committee of the Minamata Convention - INC 7 - held in Jordan from 10 to 15 March 2016.

Information was requested on the following articles:

- i) Article 7°: Artisanal and Small Scale Gold Mining.
- ii) Article 10°: Environmentally Sound Interim Storage of Mercury, other than Mercury Waste.
- iii) Article 11°: Mercury Waste.
- iv) Article 12°: Contaminates Sites.
- v) Article 22°: Effectiveness Evaluation.

Article 7°: Artisanal Scale Gold Mining - ASGM.

The Ministry of Environment has already provided the Secretariat with the position on the document "Draft Guidance on Developing a National Action Plan to Reduce and, where feasible, Eliminate Mercury Use in Artisanal Scale Gold Mining" in request for information sent by the Interim Secretariat in 2015.

In that occasion, the Ministry of Environment, with contributions from the Ministry of Mines and Energy, has identified that the document was aligned to the needs of countries in which there are ASGM activities, stating therefore the acceptance of the document, since the draft contains guidelines and procedures that assist in the preparation of the National Action Plan of ASGM.

Article 10°: Environmentally Sound Interim Storage of Mercury, other than Mercury Waste.

Countries were requested to share information that can contribute to the development of a guideline document for the interim storage of mercury, excluding the mercury waste. Brazil had already sent your contributions in this regard in 2015.

The Brazilian Technical Standard NBR N° 7.500 / 2013 deals with land transportation, handling and storage of chemicals in Brazil and contains guidelines to developed these activities in a proper way. In addition, the Standard addresses concepts and definitions, maximum storage quantities, kinds of chemicals that can be stored and transported together, maximum time storage limit, best practices, security protocols and other.

This Standard addresses chemicals in general, including mercury. Therefore, there is no specific Standard for mercury storage.

Article 11°: Mercury Waste

The Secretariat requested countries to submit information on the existence of instruments related to mercury thresholds in waste. Brazil had already sent its contribution in the 2015 – last request by the Secretariat -, pointing out that the Brazilian Technical Standard NBR N° 10.004/2004 establishes the procedures for classification of solid waste into "hazardous" and "non-hazardous".

For correct waste classification, the following aspects should be considered: identification of the process that originates waste; waste characteristics; and a comparison of the waste components.

Thus, the Technical Standard indicates that certain types of waste can be characterized as "hazardous" simply by the presence of mercury. For other types of waste, it is necessary to conduct laboratory tests in order to indicate it as a hazardous waste. According to these tests, a waste will be considered as hazardous if: i) the amount of mercury is over 0.1 mg/L in the leaching test; ii) the amount of mercury is over 0,001 mg/L in the solubilization test.

Article 13°: Contaminated Sites.

The Secretary requested information in order to support the development of guidelines on mercury contaminated sites management.

The national framework on the management of contaminated sites is the Resolution of the National Council for environment (CONAMA) N° 420/2009 - which provides guidelines for the management of contaminated sites by chemicals due to human activities.

The Resolution establishes procedures to ensure the full knowledge of the characteristics of the contaminated sites and the potential impacts that can be caused. The goal is to support, with adequate information, the decision-making process about the most appropriate forms of intervention on the sites.

The contaminated site identification process is developed in stages, ranging from preliminary assessment to confirmatory research, detailed investigation, risk assessment, actions for rehabilitation of the area and environmental monitoring.

In addition, the Resolution presents a table with maximum levels of chemicals allowed for soil and groundwater, which addresses mercury limits, as indicated below:

Chemical	Reference Value for Soil (mg/kg)	Prevention Value for Soil (mg/kg)	Investigation Value for soil (mg/kg ⁻¹)			Investigation Value for Groundwater (µg/L)
			Agricultural	Residential	Industrial	
Mercury	E	0,5	12	36	70	1

E = to be established by State Level Power.

Table 1: Values on Mercury existing in the Resolution CONAMA N° 420/2009.

Article 22°: Effectiveness Evaluation.

The Secretariat requests information that can contribute to the development and consolidation of an approach to carry out the evaluation of the effectiveness of the Convention. According to the text of the Convention, this assessment will be carried out based on: i) the presence and movement of mercury and its compounds in the environment; ii) the monitoring of mercury levels in the biota; iii) the monitoring of mercury levels in vulnerable populations.

Currently, only CETESB (Environmental Agency of the state of São Paulo) carries out mercury monitoring in the manner indicated by the Convention, except for mercury monitoring in vulnerable populations. In this case, mercury levels are analyzed in aquatic environments, soil, sediment and fish, having as standard for evaluation the following instruments: Resolution CONAMA N° 357/2005 (water), Resolution CONAMA N° 420/2009 (soil), CETESB Board Decision N° 330/2014 (soil) and other Technical Standards regulations from Canada, France and the United States as well as technical standards from CETESB itself (biota and sediment).

Data from monitoring conducted by CETESB are published in annual reports and are available for download in the CETESB website.

Regarding the monitoring of mercury levels in vulnerable populations, the Ministry of Health has been performing activities to promote the development of strategies to identify and protect populations at risk of exposure to mercury, including the registration of areas where populations are exposed or potentially exposed to mercury.

Furthermore, the Ministry has intensified the debates on prevention forms, treatment and care of populations affected by the exposure to mercury and its compounds, such as the elaboration of Clinical Protocols and other activities.

The academy and public research institutions, such the Evandro Chagas Institute and the Oswaldo Cruz Foundation, have significant expertise regarding mercury monitoring in vulnerable communities in areas of ASGM.

In conclusion, the discussions on the forms of evaluating the effectiveness of the Minamata Convention should be conducted in the format of working groups, similarly to what

happened in the preparation of BAT/BEP Guidelines, in order to propose forms of assessment that are appropriate to the different realities and meet the main demands of each country.