



Group of Technical Experts on Mercury Waste Thresholds Intersessional Work between COP 3 and 4

Second Online Meeting
Thursday 18 June 2020, 14h00-16h00 CEST

Summary

Participants

Members

Mr. Rajiv Beedassy (Mauritius)
Ms. Oluwatoyin Olabanji (Nigeria)
Mr. Birane Niane (Senegal)
Mr. ZHENG Yang (China)
Ms. Ajeng Arum Sari (Indonesia)
Mr. Masaki Takaoka (Japan)
Ms. Virna Milinov (Croatia)
Mr. David Grimeaud (European Union)
Ms. Gabriela Denisia Vasiliu Isac (Romania)
Ms. Irina Talamoni (Argentina)
Mr. Cristián Enrique Brito Martínez (Chile)
Ms. Alejandra Fernandez Sánchez (Costa Rica)
Mr. Carlos Todd (Guyana)
Ms. Leslie Hoofung (Jamaica)
Mr. Pierre Hennebert (France)
Mr. Rafael Zubrzycki (Germany)
Mr. Erik Westin (Sweden)
Mr. Andreas Gössnitzer (Switzerland)

Observers and other experts

Mr. Nicolas Humez (Hazardous Waste Europe and ISWA)
Ms. Melissa Barbanell Barbanell (ICMM)
Mr. Juan Carlos Torres Peters (Chilean National Mining Association and Mining Council)
Mr. Lee Bell (IPEN)
Mr. David Lennett (Natural Resources Defense Council)
Mr. Shahriar Hossain (ESDO, ZMWG)
Ms. Budi Susilorini (Pure Earth/Blacksmith Institute)
Mr. Kenneth Davis (UNEP)
Ms. Sandra Averous-Monnery (UNEP)
Mr. Shunichi Honda (UNEP)
Ms. Melisa T.S. Lim (BRS Secretariat)
Ms. Paulina Riquelme (Chile)
Ms. Verónica Ruiz Solano (Colombia, Member for 2021)
Mr. Willy Cahya Nugraha (Indonesia)
Ms. Kaoru Oka (Japan)
Mr. Takashi Nishida (Japan)
Mr. Toru Terai (Japan)
Mr. Tadashi Teranishi (Japan)
Ms. Teeraporn Wiriwutikorn (Thailand)

Mr. Andrea Volpato (Chemists' Council of the Province of Treviso, Italy)
Mr. Julian Fisher (Independent consultant (dental sector))
Mr. Seung-Whee Rhee (Kyonggi University, Republic of Korea)
Mr. Raj Rathamano (Manitoba Sustainable Development)

1. Opening

Mr. Eisaku Toda of the Secretariat opened the meeting, and reminded the group that observers and other experts were invited to this meeting, as agreed at the first online meeting. He explained that Ms. Virna Milinovic (Croatia) had replaced Mr. Vojtech Pilnáček (Czechia).

Ms. Oluwatoyin Olabanji (Nigeria) chaired the rest of the meeting. The group adopted the agenda as circulated in advance.

2. Threshold options for category C waste

The co-chair reminded the group that it discussed three approaches in Osaka: (1) total mercury concentration, (2) release potential (leaching test) and (3) qualitative determination (listing), and recommended option (1) for Category C waste. However, COP requested the group to substantiate the recommendations by “conducting a technical analysis of threshold options, considering the impacts of applying the proposed options, and make recommendations”. The COP did not specify alternative options, but considering that COP agreed to take listing approach for type A and B waste and requested the group to develop thresholds for type C waste, the co-chair observed that the main focus would be total content approach or release potential approach.

Some experts also reminded the group about the reasoning for recommending total mercury concentration:

- Total concentration of mercury in a waste represents the most straightforward type of threshold. It allows the threshold to be based on the intrinsic property of the waste, irrespective of the waste management technology.
- Leaching test is inadequate for establishing mercury waste thresholds under the Convention. The leaching procedure is typically a measure of risk that landfilled mercury waste poses to nearby drinking water wells. Accordingly, this exposure pathway fails to take into account the principal mercury exposure pathways of concern, such as inhalation, dermal exposure and the atmospheric emissions which contribute to the global pollution pool, eventually resulting in contaminated aquatic food sources.

One expert further noted that since wastes are diverse, the first decision point should be simple, and testing total concentration of mercury can be done with widely available equipment with about 10 USD per sample, even cheaper in some countries. One expert also noted that the threshold is not meant to define hazardous waste.

The member nominated by China observed that one advantage of leaching tests is that it better reflects the risk under typical management scenarios. He understood that it does not cover all the scenarios such as incineration, but important types of mercury waste such as fly ash and bottom ash will not be incinerated. He agreed that total concentration may be a first step, but he still had concerns on relying on it for major types of category C waste. Another expert noted that even for fly ash and bottom ash, it cannot be assumed the wastes will be landfilled, since they are sometimes reused or managed in other ways.

Co-chair summarized that most of the experts are in support of total content approach, but still views were expressed to support leaching approach to reflect certain exposure scenarios. She invited the experts to submit their views on the impact of taking respective approaches in addition

to what is already discussed in Document 2-2, and specific proposals to describe a possible approach for consideration at the next meeting.

3. Specific thresholds for category C waste

The co-chair reminded the group about the mention to a proposal for 25 mg/kg in the COP document. She noted that specific thresholds can only be determined after the group agrees on approaches, but observed that it might be beneficial to spend some time to see what the members think about this proposal or any other possible proposal.

One expert reminded that a scientific literature explaining the rationale for the 25 mg/kg proposal based on GHS was submitted, and observed that this is in line with the existing thresholds including the 15 mg/kg mentioned in the submission from Japan. One expert observed that parties should be able to determine their own thresholds. One expert observed that the limit of 25 mg/kg is too high, noting that Switzerland has limits in the range of 1-5 mg/kg¹. He expressed IPEN's support to limits closer to the Swiss regulations to ensure we do not allow large volumes of Hg waste to avoid controls.

The co-chair reminded the group again that specific thresholds will be discussed based on an agreement on approaches, and encouraged to submit their views taking into account the discussion at this online meeting.

4. Relevance for thresholds for ASGM tailings

Experts from Latin American and Caribbean region expressed their views. They observed that ASGM tailings should be controlled under Article 7, and the guidance on ASGM national action plans should describe the management of ASGM tailings. One expert observed that ASGM tailings are category C waste, and that it is not practical to impose thresholds on them. The group was informed that the use of mercury in gold mining is banned in many countries including Colombia and Indonesia. One expert noted that ASGM tailings contain gold and other metals and therefore sometimes are not regarded as waste. One expert reminded the group that the Secretariat is currently calling for a consultant who supports the development of guidance on the management of ASGM tailings as a part of the ASGM NAP guidance.

The co-chair reminded that the COP requested the group to conduct analysis of whether tailings from ASGM should be subject to a threshold, taking into account the relationship between articles 11 and 7, and invited the Secretariat to clarify the relationship between these two articles. The Secretariat responded that although it is not in a position to interpret the Convention text, Article 11 requests parties to take appropriate measures so that mercury waste is managed in an environmentally sound manner, and that if ASGM tailings are included in mercury waste, the measures the parties take by developing and implementing a national action plan pursuant to Article 7 can be considered as such measures. It also explained that the current Basel guidelines and the draft revised text refer to ASGM tailings.

One expert proposed to consider the following two options:

- Differentiated thresholds in function of hazard. Each tailings have a particular characteristic (exposure time, environmental conditions, etc) and socio-economic and safety conditions. For this reason, establishing a global threshold would be complex to apply.

¹ He also commented on an 2mg/kg criteria used by EU, but another observer pointer out that In the EU, acceptance criteria on metals (and other parameters) are defined after a leaching test (EU 12457-2 standard) with L/S=10. Consequently, 2 mg/kg is not the total content of mercury of the waste but corresponds to the leachable mercury brought back to the waste.

- Not setting up thresholds: there is also the possibility to decide not establishing thresholds for ASGM waste, but managing waste from ASGM taking into account a risk-based approach.

The co-chair noted that this issue was mainly raised at COP-3 by parties in Latin American and Caribbean region. She then invited the experts to submit their views for discussion at the next online meeting.

5. Thresholds for tailings from industrial-scale non-ferrous metal mining

The co-chair reminded that the group had agreed on a two-tiered approach, first one being the same threshold for category C waste, and second tier using leaching tests. She further noted that the COP-3 document summarizes three issues for further consideration in footnote 13 of the COP document:

- Sampling challenges posed by some wastes early in the process of developing an approach to threshold setting.
- The liquid-to-solid ratio in the assay (how many grams of waste per litre of leaching medium) and chemical composition of the leaching medium (acid, what type of acid, pH, distilled water), and how they relate to likely disposal conditions.
- The exposure scenario considered to establish the thresholds; e.g., protection of drinking water from contamination of groundwater sources.

One expert presented the position of the European Union that the scope of Article 11 should not exclude important sources. He observed that sludges from non-ferrous metals production is important as the submission from Japan provides data on large amount of mercury recovered from them.² One expert reminded that the sludges from roasting processes are already listed in the indicative list of category C waste, and are different from tailings, which are primarily ground rocks. Some experts pointed to different kinds of leaching tests, and observed that a background paper compiling such information would be needed. One expert expressed her view that mining waste is not a category C waste.

The co-chair asked the Secretariat to work with the experts who have expertise in mining waste to collect information on the three issues mentioned in the COP report for the discussion at the next online meeting.

6. Any other business

Ms. Melisa Lim of the Basel, Rotterdam and Stockholm Convention Secretariat briefed the group on the progress of the work of the small intersessional working group on technical guidelines on the environmentally sound management of mercury waste. The draft revised guidelines were made available on the web as Basel Convention Open-Ended Working Group document UNEP/CHW/OEWG.12/INF/13. The original proposal was that OEWG would agree to invite comments on this draft by 31 July, but since OEWG was postponed, the OEWG bureau will discuss relevant schedules on 22 June. She recommended the experts who wish to submit comments to stay prepared, since the Bureau may agree on a short commenting period. This group will be kept updated on the progress.

At the invitation by the co-chair, the Secretariat clarified the policy for the participation of relevant experts in online meetings. Since the group agreed at its first online meeting to allow the participation of relevant experts other than the eight invited observers, the Secretariat will request

² Another expert commented after the meeting that in Europe, mercury from non-ferrous metals production is a waste and its recovery (with the meaning of recycling) is forbidden (Regulation 2017/852 on mercury, article 11).

information on the expertise of those who wish to participate, and check them against the recommended qualifications of the members and observers as described in the group's terms of reference (decision MC-2/2). Such information will be made available to members if requested.

The group agreed that the next online meeting should take place in September. The Secretariat will do a Doodle poll to set up a date in the weeks of 7 and 14 September.