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**Group of Technical Experts on Mercury Waste****Thresholds****Minamata Convention on Mercury**

Geneva, 16-18 February 2022

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**Options for establishing thresholds for mercury waste falling under subparagraph 2 (a) of article 11****I. Background**

1. Paragraph 2 of article 11 of the Minamata Convention defines mercury wastes as substances or objects:

- a) Consisting of mercury or mercury compounds;
- b) Containing mercury or mercury compounds; or
- c) Contaminated with mercury or mercury compounds,

in a quantity above the relevant thresholds defined by the COP, that are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law or the Convention.

2. Paragraph 3 of article 11 provides that the parties are to take appropriate measures so that mercury waste is:

- Managed in an environmentally sound manner;
- Only recovered, recycled, reclaimed or directly re-used for an allowed use or for environmentally sound disposal; and
- For parties to the Basel Convention, not transported across international boundaries except for the purpose of environmentally sound disposal.

3. COP decided in decision MC-3/5 that:

- No threshold needs to be established for mercury waste falling under subparagraph 2 (a) of article 11 (waste consisting of mercury or mercury compounds – Category A waste), and that waste listed in table 1 of the decision shall be regarded as such mercury waste; and
- No threshold needs to be established for mercury waste falling under subparagraph 2 (b) of article 11 (waste containing mercury or mercury compounds – Category B waste), and that mercury-added products that are disposed of, are intended to be disposed of or are required to be disposed of, will be regarded as such mercury waste.

4. COP decision MC-4/6 extended the mandate of the group of technical experts on mercury waste, established by COP decision MC-2/2, to develop and consider new information and opportunities to present in a report to the Conference of the Parties, with the goal of recommending and facilitating a decision on waste falling under sub-category 2 (c) of article 11 (waste contaminated with mercury or mercury compounds – Category C waste) at COP-5 or as soon as possible thereafter.

5. Decision MC-4/6 requested the group to continue its work primarily by electronic means and to hold one face-to-face meeting, subject to the availability of resources, and to report on its work to

COP-5. Thanks to the financial contribution from Japan, a face-to-face meeting is convened in Geneva from 16 to 18 February 2023.

6. In view of the clarifying the obligations of the parties under Article 11, the group is expected to develop proposed thresholds for category C waste, making the full use of the opportunity of the face-to-face meeting. Experts are expected to be fully prepared for the discussion, with insights into what thresholds proposals would be acceptable for parties.

## II. Approaches for thresholds

7. The group had identified the following three approaches for establishing thresholds:

- a) total concentration of mercury in a waste;
- b) measures of the release potential of mercury in a waste; and
- c) a qualitative determination (i.e. a listing approach).

8. The group's report to COP-4 presented a technical analysis of those approaches, concluding that a total concentration threshold was currently the most appropriate way to identify category C waste subject to the Minamata Convention. The listing approach was not feasible for establishing thresholds for the wide variety of category C wastes due to their variable composition and mercury content. When compared to the release potential approach, the total concentration approach had the following advantages:

- a) Category C wastes were managed in a large variety of ways, and not only disposed of on land. Leach testing procedures focused on evaluating mercury release to groundwater from land disposal.
- b) Even when category C wastes were placed on land, a range of release and exposure scenarios of concern exist, and were not limited to leaching into groundwater.
- c) Noting that paragraph 3 (c) of article 11 addresses transboundary movement of mercury waste, a threshold linked to a particular management assumption, such as a leaching threshold, might not ensure the prevention of environmental and health risks in a receiving country with different exposure conditions and management practices.
- d) There were internationally accepted protocols for measuring the level of mercury present in a waste sample based upon total concentrations. There was no comparable globally accepted leaching procedure for category C wastes potentially managed under diverse conditions.

9. COP-4 noted that some parties have expressed an interest in broadening the focus of the work of the group of technical experts to consider approaches other than the total mercury concentration approach, including risk-based considerations.

## III. Proposals and information submitted by parties

10. Pursuant to COP decision MC-4/6, the Secretariat invited parties to submit information on approaches other than the total mercury concentration approach, including risk-based considerations, to be considered by the group in discussing the thresholds for Category C waste.

11. Following submissions were received:

**Brazil**, in its submission in July 2022, suggested that the solution would be to determine the limits for different type of destinations intended for mercury-contaminated waste, between 1 and 50 ppm, with 25 ppm as a cire value. In its submission in December 2022, Brazil restated that limits must be determined for each type of destination intended for mercury-contaminated waste.

**Burkina Faso and Botswana** on behalf of the African region expressed their concern on the issue of setting the 25 mg/kg limits, recalling that the issue of mercury waste thresholds is of concern to the African region due to the weakness of the technical infrastructure for analysis and control.

**Canada** submitted information on the National Classification System for Contaminated Sites (NCSCS), a risk-based framework that has been used to assess the need for action in contaminated sites in Canada. The NCSCS is a tool that helps assess and classify the risk posed by substances by evaluating the hazard potential of the site. The system classifies sites into various levels of risk in using a scoring system on a number of factors addressing contaminant characteristics, migration

potential and exposure. Canada proposed that a similar framework could be used by the expert group to develop an approach that assesses the risk posed by mercury waste not only at its source, but where relevant, during transportation and at its final destination to provide a risk score value to help determine when environmentally sound management (ESM) is needed.

**European Union and its member states** recalled that they already put forward at COP4 a mercury threshold set at 25 ppm as a basis to start the discussions and that they are ready to engage and display flexibility on this figure. They believed that, during this first step, priority should be given to establishing a threshold and lengthy discussions on waste management should be avoided. As a second step, the group of technical experts could work on developing complementary guidance on the management of mercury wastes that would take into account the information regarding risk-based approaches.

**Japan** expressed the view that a total concentration approach is the most appropriate way to identify Category C wastes, and that a threshold with a risk-based approach is not realistic. If Parties cannot agree to a uniform total mercury content as a threshold and wish to explore a threshold with a risk-based approach, each Party should have flexibilities to set their thresholds to ensure the environmentally sound management of Category C wastes depending on their typical waste streams, disposal operations and associated exposure pathways. However, this would result in not being able to establish uniform “thresholds defined by the Conference of the Parties” required by the Convention.

**Kuwait** provided information on relationship between leachate concentration and total concentration.

## IV. Possible options

12. Considering the proposals and information above, the following three options, or their mixes, could be considered.

**Option 1:** COP establishes a universal threshold for category C waste. The only concrete proposal submitted by parties is 25 mg/kg total mercury content, although lowering the value has been mentioned as a compromise solution. During the intersessional period before the 4<sup>th</sup> Conference of the Parties, an observer of the group of technical experts submitted a proposal for 1 mg/kg total mercury content. The submitted proposals are reproduced in document UNEP/MC/WT.2/INF/1. A universal threshold using leach test has not been proposed.

**Option 2:** COP establishes different thresholds for different waste types. Setting different thresholds corresponding to different management/disposal methods was also suggested, but this will be difficult since the management/disposal methods may be unknown when a certain waste needs to be determined if it is mercury waste or not. The indicative list of category C waste may be used for establishing thresholds for each type of waste. No specific proposals have been made on types of waste or threshold values.

**Option 3:** COP does not establish thresholds for category C waste. In this case, parties are to establish their own thresholds or definitions of category C waste for which they have obligations under article 11 of the Convention. The group of technical experts could develop a guidance document to establish local thresholds, based on the information on existing thresholds provided by parties (see document UNEP/MC/WT.2/3). This solution could work for the first two obligations under article 11(3) (ESM and recovery), but the third obligation (transboundary movement) there may be cases where the exporting country does not consider the exported waste as mercury waste whereas the importing country considers it as mercury waste. For the latter, the group of expert could recommend the practice in Basel Convention where exporting countries are to follow the definitions of importing countries.

13. In relation to option 1 above, the group of technical experts noted concern from some parties about waste below the threshold being deposited or spread onto land without proper management measures, or otherwise mismanaged, affecting the human health and the environment. To address such concerns, the group could develop a guidance document on the management of those wastes, which would take account of risk-based approaches.

14. In addition, the group of technical experts noted concern from parties that already have measures in place so that waste contaminated with mercury or mercury compounds be managed in an environmentally sound manner based on their technical considerations. To address such concerns, the group could consider a note to be included in the COP decision on thresholds such as the following:

*COP decides that parties may choose not to make use of that threshold to determine whether a given waste is a mercury waste falling under subparagraph 2 (a) of article 11, as long as those parties have waste management measures in place to protect the human health and the environment from the associated emissions and releases of mercury or mercury compounds.*

## **V. Consideration of options at the meeting of the group of technical experts**

15. In order to make the best use of the opportunity of the face-to-face meeting, experts need to have all the proposals on the table, and prepare for reaching a compromise solution that is acceptable to all parties.

16. From the discussion at online meetings of the group of technical experts, it has been suggested that Option 2 would be difficult, considering that the group has not been able to agree on one threshold value and establishing multiple threshold values may require still more work.

17. Therefore, it is proposed that the group works in the following manner:

- Firstly, all the members present their views as to the options above. All the specific proposals must be presented at this first stage.
  - Secondly, the group will consider whether Option 2 or a combination including it is a feasible solution. If it is, it will be included in the meeting programme. If it is not considered feasible, the group will start with Option 1, Option 3 and their mix.
  - Thirdly, the group will consider Option 1, including addressing concerns described in paragraphs 13 and 14 above.
  - Fourthly, if the group could not agree on Option 1, the group will consider any mix with Option 3, including how such solution can be presented to COP.
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