Matters for consideration or action by the Conference of the Parties: mercury waste: consideration of the relevant thresholds

Establishment of mercury waste thresholds (article 11)

Note by the secretariat

I. Introduction

1. In paragraph 2 of article 11 of the Minamata Convention on Mercury, mercury wastes are defined 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 Conference of the Parties to the Minamata Convention, 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. It further provides that the definition excludes overburden, waste rock and tailings from mining, except from primary mercury mining, unless they contain mercury or mercury compounds above thresholds defined by the Conference of the Parties. Paragraph 3 of article 11 provides that the parties are to take appropriate measures for mercury waste.

2. The Conference of the Parties, in decision MC-3/5:

   (a) Decided that no threshold needed to be established for mercury waste falling under subparagraph 2 (a) of article 11 of the Convention, and that waste listed in table 1 of the decision should be regarded as such mercury waste;
   (b) Decided that no threshold needed to be established for mercury waste falling under subparagraph 2 (b) of article 11, and that mercury-added products that were disposed of, were intended to be disposed of or were required to be disposed of, would be regarded as such mercury waste;
   (c) Decided that, at the time, there was no need to develop thresholds for overburden and waste rock from mining other than primary mercury mining.

* UNEP/MC/COP.5/1.
3. Further, the Conference of the Parties, in decision MC-4/6:
   (a) Decided that no threshold needed to be established for tailings from artisanal and small-scale gold mining in which mercury amalgamation is used to extract gold from ore, and that all tailings from such mining should be managed in an environmentally sound manner pursuant to article 7 of the Convention;
   (b) Defined the following two-tier thresholds, above which tailings from mining other than primary mercury mining are not excluded from the definition of mercury waste pursuant to paragraph 2 of article 11:
      (i) Tier-1 threshold to be applied first: 25 mg/kg total mercury content;
      (ii) Tier-2 threshold to be applied to tailings above the tier-1 threshold: 0.15 mg/L in the leachate, using an appropriate test method simulating the leaching of mercury at the site where the tailings are deposited.

4. During the process to establish mercury waste thresholds, the Conference of the Parties considered the reports1 developed by a group of technical experts established by the Conference of the Parties in decision MC-2/2. The Conference of the Parties, in decision MC-4/6, extended the mandate of the group to develop and consider new information and opportunities to be presented in a report to the Conference of the Parties, with the goal of recommending and facilitating a decision on waste falling under subcategory 2 (c) of article 11 at the fifth meeting of the Conference of the Parties or as soon as possible thereafter.

5. The specific mandate for the group is set out in decision MC-4/6 as follows:
   (a) Seek to collaborate, as appropriate, with the small intersessional working group established under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal in decision BC-14/8, on technical guidelines on the environmentally sound management of wastes consisting of, containing or contaminated with mercury or mercury compounds, with a view to exchanging information and avoiding duplication of effort;
   (b) Utilize the indicative list of waste types contaminated with mercury or mercury compounds to identify relevant information or data that may inform the group’s discussion on mercury thresholds, acknowledging the potential for the group to recommend differing thresholds for different waste categories, as appropriate and noting that the group should prioritize wastes that are common among parties and likely to pose a risk to human health or the environment and should take into account that parties have varying waste management capacities;
   (c) Collect and incorporate additional information or conduct further analysis, as needed and available, to supplement the information provided by parties;
   (d) Consider the situation of parties that already manage mercury waste in an environmentally sound manner, including through the use of a risk-based approach that takes into account leaching potential;
   (e) Develop a guidance document on test methods to be used for the tier-2 threshold for tailings from mining other than primary mercury mining.

6. Furthermore, the Conference of the Parties, in the same decision:
   (a) Invited parties to share information and data on the waste categories listed in the indicative list contained in table 3 of the annex to decision MC-3/5, including with respect to any relevant national or local thresholds and their establishment, and requested the secretariat to compile such information and distribute it to the group of technical experts as soon as possible and make it available electronically;
   (b) Requested interested parties to submit information, when appropriate or at the request of the group of technical experts, on approaches other than the total mercury concentration approach to the secretariat for consideration by the group of technical experts;
   (c) Requested the secretariat to transmit the decision to the appropriate bodies of the Basel Convention and to invite them to take the present decision into account;
   (d) Requested the secretariat to continue to support the work of the group of technical experts.

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II. Intersessional work after the fourth meeting of the Conference of the Parties

7. The group of technical experts, co-chaired by Gabriela Denisia Vasiliu Isac (Romania) and Oluwatoyin Olabanji (Nigeria), held four online meetings, and met face-to-face in Geneva from 16 to 18 February 2023, with financial support from the Government of Japan.

8. The Executive Secretary, in a letter dated 13 April 2022, invited information as described in paragraph 6 (a) above by 15 July. In response, six parties submitted information, which has been posted on the Convention website.²

9. As advised by the group, the secretariat, in the Executive Secretary’s letter dated 28 October 2022, invited parties to submit information on approaches other than a total mercury concentration approach, including risk-based considerations, by 24 November 2022. Submissions received from eight parties have been posted on the Convention website.³

10. The secretariat cooperated with the small intersessional working group established under the Basel Convention in developing the technical guidelines on the environmentally sound management of wastes consisting of, containing or contaminated with mercury or mercury compounds,⁴ which was adopted by the Conference of the Parties to the Basel Convention at its fifteenth meeting, held from 6 to 17 June 2022.

11. The secretariat also cooperated with the secretariat of the Basel Convention and the Global Mercury Partnership to disseminate the technical guidelines adopted under the Basel Convention and to support parties in using the guidelines, through an online event⁵ held in October 2022 and side events at the meetings of the Conference of the Parties to the Basel Convention in June 2022 and May 2023.⁶ The Government of Switzerland provided financial support for this activity.

III. Thresholds for mercury waste falling under subcategory 2 (c) of article 11 of the Convention

12. The group of technical experts, at its in-person meeting, considered thresholds for waste falling under subcategory 2 (c) of article 11, taking into account the submissions from parties as described in paragraphs 8 and 9 above and other available information, including the following:

(a) One proposal submitted by a party to establish a threshold of 25 mg/kg total concentration of mercury, and another proposal submitted by a stakeholder to establish a threshold of 1 mg/kg total concentration of mercury, both with technical justification for the proposal;

(b) Submissions from parties on approaches other than the total concentration approach;

(c) The secretariat’s overview of existing thresholds related to mercury waste as submitted by parties and experts, which included thresholds for total concentration of mercury ranging from 0.3 to 10,000 mg/kg and thresholds for leachate ranging from 0.001 to 8 mg/L.

13. That technical information is compiled in document UNEP/MC/COP.5/INF/12.

14. The group also considered a document prepared by the secretariat in consultation with the co-chairs describing three possible options for establishing thresholds.⁷ The first option was to establish a single threshold value applicable for all waste categories listed in the indicative list contained in table 3 of the annex to decision MC-3/5. The second option was to establish different thresholds for different waste categories. The third option was not to establish thresholds and let

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² Submissions received from Brazil, Canada, the European Union, Japan, Uganda and the United States of America have been posted at https://mercuryconvention.org/en/intersessional-work-and-submissions-cop-5/sec1564.

³ Submissions received from Brazil, from Burkina Faso and Botswana on behalf of the Africa region, and from Canada, the Dominican Republic, the European Union, Japan and Kuwait have been posted at https://mercuryconvention.org/en/intersessional-work-and-submissions-cop-5/sec1564.

⁴ UNEP/CHW.15/6/Add.6/Rev.1, annex.


parties establish their own thresholds, noting that in that case the same waste might be regarded as mercury waste in one country and not in another in the context of transboundary movement addressed in subparagraph 3 (c) of article 11.

15. The group agreed on its report, as set out in annex I to the present note.

IV. **Guidance document on test methods to be used for the tier-2 thresholds for tailings from mining other than primary mercury mining**

16. The group of technical experts worked online to develop a guidance document on test methods to be used for the tier-2 threshold for tailings from mining other than primary mercury mining. Noting that the tier-2 threshold was to be applied using an appropriate test method simulating the leaching of mercury at the site where the tailings were deposited, the group identified factors that influenced leach test results, including the ratio of solid test sample and test liquid (liquid/solid ratio), test duration and pH (acidity/alkalinity) of the test liquid. The guidance document presents information on test conditions in available test methods, and recommends test conditions, including a liquid/solid ratio of 10:1, water at neutral pH (such as deionized water), and a test duration not exceeding 24 hours, to represent a realistic worst-case scenario for landfill conditions.


V. **Suggested action by the Conference of the Parties**

18. The Conference of the Parties may wish to agree on a threshold value for mercury wastes falling under subcategory 2 (c) of article 11, noting that the group of technical experts presented three possible values and proposed an arrangement for parties not choosing to use the proposed threshold.

19. The Conference of the Parties may consider a decision along the lines of the draft decision set out in annex II to the present note.
Annex I

Report of the group of technical experts on mercury waste thresholds

1. The group of technical experts, established pursuant to decision MC-2/2 and whose mandate was extended in decisions MC-3/5 and MC-4/6, discussed threshold(s) for mercury wastes falling under subcategory 2 (c) of article 11 of the Minamata Convention on Mercury.

2. The expert group recommends that the Conference of the Parties to the Convention:

   (a) Establish a threshold of [25] [15] [10] mg/kg total concentration of mercury for wastes contaminated with mercury or mercury compounds;  

   (b) Provide that parties may choose not to make use of the threshold referred to in the previous subparagraph to determine whether a given waste is a mercury waste falling under subcategory 2 (c) of article 11, as long as those parties have targeted waste management measures in place to protect human health and the environment, including measures provided for in paragraph 3 (a) of article 11, and also including, for example, the use of approaches based on hazardous characteristics or risk considerations, leachate and total concentration thresholds other than the threshold referred to in the previous subparagraph. Each party that chooses to make use of this subparagraph shall notify the secretariat. The secretariat will make available those notifications to the public.

3. The group of technical experts recommends to the Conference of the Parties that consideration be given to capacity-building, technical assistance and technology transfer so as to enable the identification, analysis and other elements of the environmentally sound management of mercury wastes falling under subcategory 2 (c) of article 11.

4. The group of technical experts recommends that the Conference of the Parties invite the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal to consider reviewing, as appropriate, the technical guidelines on environmentally sound management of wastes consisting of, containing or contaminated with mercury or mercury compounds, with additional guidance for mercury wastes falling under subcategory 2 (c) of article 11, consistent with the recommendations above.

5. The group of technical experts recommends that work be carried out, in collaboration with the relevant bodies of the Basel Convention, to provide legal clarity with respect to the mercury waste status under subcategory 2 (c) of article 11 during transboundary movements of waste as contemplated in paragraph 3 (c) of article 11.

6. The group of technical experts recommends that the Conference of the Parties assess the threshold identified under paragraph 2 (a) of the present annex and consider renewing the mandate of the group of technical experts. The group also recommends that the Conference of the Parties review the threshold after four years according to the results of such assessment.

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8 Although the group agreed that one threshold value should be established, the group did not agree on a specific threshold value. The group agreed to propose three threshold values in square brackets. Out of the 19 parties present at the meeting (excluding the co-chair), four parties supported proposing 10 mg/kg as one threshold value, four parties supported proposing 25 mg/kg as one threshold value, eight parties supported proposing 10 and 15 mg/kg in square brackets, and three parties did not express specific support.
Annex II

Draft decision MC-5/[-]: Establishment of mercury waste thresholds

The Conference of the Parties,

Having considered the report of the group of technical experts on mercury waste thresholds,

Taking note of decision BC-15/9 adopted by the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal at its fifteenth meeting, in which the Conference of the Parties to the Basel Convention adopted updated technical guidelines on the environmentally sound management of wastes consisting of, containing or contaminated with mercury or mercury compounds, at its fourteenth meeting,

1. **Decides** to establish [25] [15] [10] mg/kg total concentration of mercury as the threshold for wastes falling under subcategory 2 (c) of article 11 of the Minamata Convention on Mercury;

2. **Decides** that parties may decide not to apply the threshold referred to in the previous paragraph to determine whether a given waste is a mercury waste falling under subcategory 2 (c) of article 11 of the Convention, provided that those parties have targeted waste management measures in place to protect human health and the environment, including measures to ensure that mercury waste is managed pursuant to paragraph 3 (a) of article 11, and also including measures to identify mercury waste using approaches such as those based on hazardous characteristics or risk considerations, leachate thresholds or total concentration thresholds other than the threshold referred to in the previous paragraph;

3. **Also decides** that a party that decides not to apply the threshold referred to in paragraph 1 of the present decision is to submit to the secretariat information on targeted waste management measures as described in paragraph 2;

4. **Requests** the secretariat to maintain a public register of the submitted information;

5. **Decides** to extend the mandate of the group of technical experts established pursuant to decision MC-2/2 until the seventh meeting of the Conference of the Parties with the following mandate:

   (a) To collect and analyse information on the use of the threshold established in paragraph 1 and information submitted pursuant to paragraph 3;

   (b) To review the lists of mercury waste falling under subparagraphs 2 (a), 2 (b) and 2 (c) of article 11, set out in tables 1, 2 and 3 of the annex to decision MC-3/5;

   (c) To prepare a report on mercury waste thresholds for review by the Conference of the Parties at its seventh meeting;

6. **Decides** to review the threshold as established in paragraph 1 at the seventh meeting of the Conference of the Parties;

7. **Invites** parties to review the membership of the group of technical experts if necessary, within the limit of five members from each United Nations region as set out in decision MC-2/2, and to inform the secretariat of any change in the membership through the Bureau representatives of the five United Nations regional groups by 31 March 2024;

8. **Requests** the group of technical experts to work online, in collaboration with relevant bodies of the Basel Convention and involving additional experts in the roster as established pursuant to decision MC-4/6;

9. **Requests** the secretariat to support the work of the group of technical experts;

10. **Invites** parties to use the guidance document on the test methods for the tier-2 threshold for tailings from mining other than primary mercury mining as set out in UNEP/MC/COP.5/INF/13;

11. **Requests** the secretariat, in cooperation with the secretariat of the Basel Convention, to:

   (a) Collect information from parties on any need for further legal clarity with regard to the provisions governing the transport of mercury waste across international boundaries pursuant to subparagraph 3 (c) of article 11;
(b) To analyse the information to identify the need for further guidance on clarifying the application of the provisions governing the transport of mercury waste across international boundaries pursuant to subparagraph 3 (c) of article 11, including the scope of the mercury wastes falling within the scope of this provision;

(c) To prepare a report for the Conference of the Parties on this matter, for consideration at its sixth meeting;

12. Calls on parties in a position to do so to provide support to developing-country parties and parties with economies in transition in the identification, analysis and other elements of the environmentally sound management of mercury waste;

13. Invites the Conference of the Parties to the Basel Convention to consider taking note of the present decision and deciding to update the technical guidelines on environmentally sound management of wastes consisting of, containing or contaminated with mercury or mercury compounds, as appropriate.