

Expert Submission on Waste Thresholds under the Minamata Convention on Mercury

Please find below Our Submission regarding the three information requests.

- (a) Examples of wastes to be added to the annex to document UNEP/MC/COP.2/6, including, for wastes consisting of mercury compounds, specific names of compounds, and, for wastes containing mercury or mercury compounds (i.e., mercury-added products), the names and types of the mercury or mercury compounds, and pictures, if available;

With regard to mercury compounds, it is initially necessary to send examples of waste consisting of mercury compounds. In principle all commercial or technical produced compounds. However, the MC does not require a list of compounds to define type a) wastes, but initially speaks generally of mercury and mercury compounds and then later of the need to set thresholds. Hence, our suggestion that the term "mercury compound" should not be reduced to an arbitrary list, but that the general definition in Article 2 should be used. A simple and practical approach would then be to dispose of all waste that is min. 50wt.% (net, no packaging, or any other value) of one or a mixture of mercury compounds, to be declared as waste of category (a). Alternatively, if the nature of the mercury compound is not known, the mercury content of the waste could also be used as a benchmark (e.g., 50wt.%). This would be analytically very easy to determine and then allows a clear demarcation to c). This is important, because for one thing, there are technical mercury products that do not consist of 100wt.%, but perhaps only 90wt.% or 70wt.% of mercury compounds. On the other hand, there are mixtures of mercury compounds (for example, discarded mixed old stocks of laboratory chemicals), especially from the laboratory area. They should definitely be dealt with in a), which will later receive a high priority. 50wt.% is an arbitrary value. But > 50wt.% makes it clear that most of this waste is made up of mercury compounds. Because of the high molecular weight of mercury, at least in the case of inorganic compounds, the mercury content is generally more than 50wt.%.

- (b) Current practices of managing overburden, waste rock and tailings from mining other than primary mercury mining (e.g., laws, regulations and guidelines) and various approaches to thresholds for special care/handling, if any; and

The European legal framework for the management of waste from the extractive industries is the Directive 2006/21/EC:

https://eur-lex.europa.eu/resource.html?uri=cellar:c370006a-063e-4dc7-9b05-52c37720740c.0003.02/DOC_1&format=PDF.

The European Union has recently published a so called BREF (*Best Available Techniques Reference* oder *Best Available Techniques Reference Document*) on the management of mining waste:

http://eippcb.jrc.ec.europa.eu/reference/BREF/jrc109657_mwei_bref_-_for_pubsy_online.pdf

Hagemann et al. (2010) „Technical and economic criteria for processing mercury-containing tailings” Edited by UNEP:

<https://www.unenvironment.org/resources/report/technical-and-economic-criteria-processing-mercury-containing-tailings>

The Australian Government published in 2016 a useful document for tailings management “Leading Practice Sustainable Development Program for the Mining Industry”.

<https://www.industry.gov.au/sites/g/files/net3906/f/July%202018/document/pdf/tailings-management.pdf>

The Mining Association of Canada has elaborated "A Guide to the management of tailings facilities" (2017).

<http://mining.ca/sites/default/files/documents/MAC-Guide-to-the-Management-of-Tailings-Facilities-2017.pdf>

(c) Sampling and analysis methods that may be useful for verifying waste thresholds

In Germany the federal states are responsible for overseeing waste management. They collaborate in a working group, the LAGA, which among other things has recently published a comprehensive set of methods for solid state investigations including sampling, sample preparation methods, analysis methods, measurement assessment (Document is in German and parts of it could be translated if it is interesting for the group!):

https://www.laga-online.de/documents/methodensammlung-feststoffuntersuchung_v1_1542197341.1_04_07_2018_2.

In Germany we had the so called „Deponieverordnung“ (DepV). Annex 4 of the DepV includes the legal requirements for sampling, sample preparation and analysis methods of waste.

(Document is in German and parts of it could be translated if it is interesting for the group!):

DepV: https://www.gesetze-im-internet.de/depv_2009/BJNR090010009.html

Annex 4: https://www.gesetze-im-internet.de/depv_2009/anhang_4.html