

WELCOME TO THE UCT CHEMICALS NETWORK DISCUSSION



Division of Environmental Health
School of Public Health and Family Medicine
Isikolo Sempilo Yoluntu kunye Namayeza Osapho
Departement Openbare Gesondheid en Huisartskunde

UNIVERSITY OF CAPE TOWN
IFUNYISI TIYASEKAPA - UNIVERSITEIT VAN KAAPSTAD

Introduce yourself (name, job title, organization and country) in the **chat section**.

Only the presenter and facilitator will speak. Any comments or questions from attendees should be typed in the **chat section**.

Please kindly keep you microphone muted and cameras off during the discussion

NOTE: If you are having **technical difficulties**, please join the WhatsApp group for assistance:

<https://chat.whatsapp.com/CdEJNdPEva30263AB3KYBq>

Discussion xx Topic:

- Date: **15 February 2022**
- Time: **14:00pm – 15:30pm (GMT +2)**
- Presenter: **Irina Talamoni & Rico Euripidou**
- Facilitator: Andrea Rother, University of Cape Town
- Chair: Eunice Tshilengu, MPH student, University of Cape Town

CHEMICALS NETWORK DISCUSSION

SAFE HANDLING OF MERCURY AS HAZARDOUS SUBSTANCE AND WASTES SINCE MINAMATA CONVENTION ENTERED IN FORCE



Irina Talamoni
Technical Advisor
Ministry of Environment, Argentina



Rico Euripidou
Environmental health campaigner
groundWork, Friends of the Earth SA

INTRODUCTION

PRESENTED BY: Irina Talamoni (Ministry of Environment, Argentina)

- The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury.
- Major highlights of the Minamata Convention include a ban on new mercury mines, the phase-out of existing ones, the phase-out and phase-down of mercury use in a number of products and processes, control measures on emissions to air and on releases to land and water, and the regulation of the informal sector of artisanal and small-scale gold mining.
- The Convention also addresses interim storage of mercury other than waste, sites contaminated by mercury, sound management of mercury wastes, as well as other environmental and health issues.

INTRODUCTION

PRESENTED BY: Irina Talamoni (Ministry of Environment, Argentina)

- Since Minamata Convention was adopted, Parties have the obligation to environmental sound management of mercury and mercury wastes. But, depending on the regulations in every county, that could be an issue to solve.
- Elemental mercury could be considered a “product” or a “waste”, according to the intended destination (allowed use or disposal).
- For example, in the mining sector, where it’s obtained as a byproduct of gold extraction, mercury could be intended to an allowed use or disposed.
- Other example is the mercury recovered from decommissioning of Chlor-alkali facilities or stockpiles. Since the use was restricted by the Convention, could be also considered as a waste.

INTRODUCTION

PRESENTED BY: Irina Talamoni (Ministry of Environment, Argentina)



Mercury Containers from:

- Primary mercury mining (obtained as a product)
- Non ferrous mining (obtained as a by product)
- Recovered elemental mercury from Waste treatment; Chlor Alkaly decommissioning facilities, Stockpiles , Labs – research, centers etc.
- Etc.

BACKGROUND TO QUESTION I


PRESENTED BY: Rico Eurpidou (groundWork)

- Under Article II of the Minamata Convention mercury wastes can come in a variety of forms, depending upon the sources. Mercury-added products (batteries, lighting, medical equipment) become wastes when discarded, typically at the end of their useful life. Products can also become wastes if the product cannot be sold legally or lacks a market due to consumer preference e.g., the phase out of mercury added products as in Annex A of the Minamata Convention on mercury. Furthermore Article II of the Minamata Convention defines mercury wastes to mean substances or objects consisting, containing, or contaminated with mercury or mercury compounds in a quantity above the relevant thresholds that are:
 - Disposed of.
 - Intended to be disposed of; or
 - Required to be disposed of by the provisions of national law or this Convention.

BACKGROUND TO QUESTION 1

PRESENTED BY: Rico Euripidou (groundWork)

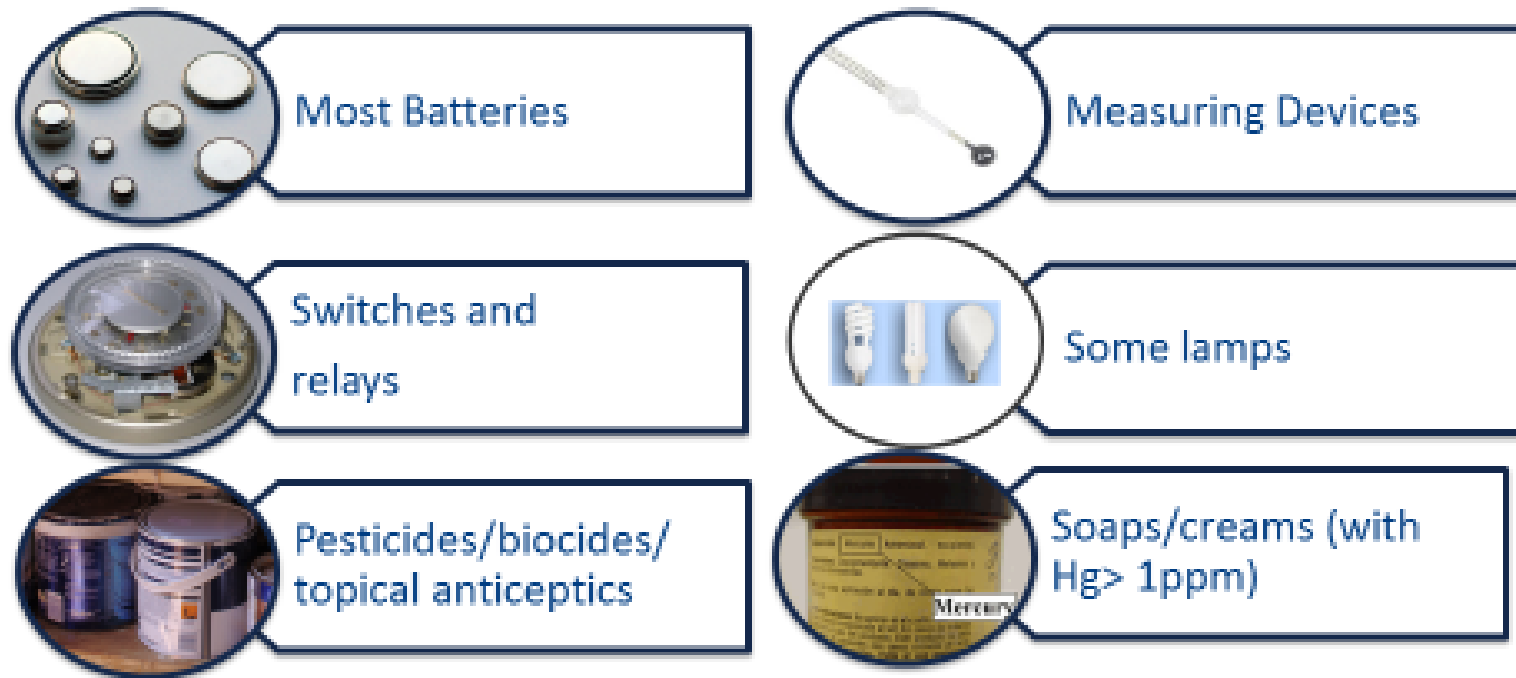

Parties Obligated to Phase Out Mercury-added Products after 2020



Phasing out Mercury in products

The Minamata Convention bans many mercury-added products by 2020

Government, manufacturers, traders and communities working together to develop a roadmap towards a zero mercury market place



QUESTION 1

PRESENTED BY: Rico Euripidou (groundWork)

What are the barriers or opportunities in your country to meet the requirements of Article 11 of the Minamata Convention on Mercury?

There will be 20 minutes to discuss this question in the chat section.

- Please keep your cameras off and microphones muted.
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BACKGROUND TO QUESTION 2

PRESENTED BY: Irina Talamoni (Ministry of Environment, Argentina)

MERCURY STORAGE

- Elemental mercury as a product or as a waste should be stored in a safe way, but the Convention apparently have different previsions for storage, since it has a specific article for storage Environmentally sound interim storage of mercury, other than waste mercury.
 - Article 10, apply to the interim storage of mercury and mercury compounds as defined in Article 3 (95%) that do not fall within the meaning of the definition of mercury wastes set out in Article 11.
 - On the other hand, COP 3 Decision MC3-5 stablish that no threshold needs to be established for mercury waste falling under subparagraph 2 (a) of article 11, and the waste listed in Table I of the annex to this decision shall be regarded as such mercury consisting of waste.
- Thinking crosswise, safe storage of elemental mercury occurs regardless the legal condition: waste or no-waste.
- While it's waiting for a destination (allowed use or dispose) elemental mercury must be stored in a safe way. This circumstance may create a dichotomy between regulations of product and regulations of wastes.

BACKGROUND TO QUESTION 2

PRESENTED BY: Irina Talamoni (Ministry of Environment, Argentina)

Conditioning factors of Storage Conditions

- To have the destination defined:
 - Expected storage time
 - Infrastructure
 - Special needs for transportation
- Total Volume of mercury
- Location
- Concentration
 - Mercury intended to use, in general is pure (>99% purity). Mercury covered by the provisions of Art. 3, from primary mining, at least 95%.
 - Mercury intended to dispose, covered under Art. 11, haven't a concentration limit (no threshold). So, variable or unpredictable concentration of mercury (i.e. could have impurities or intended as a mix) could condition the packaging material.



BACKGROUND TO QUESTION 2

PRESENTED BY: Irina Talamoni (Ministry of Environment, Argentina)

Resources:

- Minamata Convention
- MC-3/5 - Mercury waste thresholds: <https://www.mercuryconvention.org/en/documents/mercury-waste-thresholds>
- MC-2/6 - Environmentally sound interim storage of mercury other than waste mercury: <https://www.mercuryconvention.org/en/documents/environmentally-sound-interim-storage-mercury-other-waste-mercury>
- Basel Convention
- Technical guidelines on the environmentally sound management of wastes consisting of, containing or contaminated with mercury or mercury compounds: <http://www.basel.int/Implementation/TechnicalMatters/DevelopmentofTechnicalGuidelines/TechnicalGuidelines/tabid/8025/Default.aspx>

QUESTION 2

PRESENTED BY: Irina Talamoni (Ministry of Environment, Argentina)

Is a specific regulation needed for mercury storage regardless of if it is for use or disposal? Give examples, explain the pros and cons of different regulatory approaches.

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BACKGROUND TO QUESTION 3

PRESENTED BY: Rico Eurpidou (groundWork)

- The Minamata expert group on waste thresholds considered appropriate thresholds for Convention coverage of three different categories of waste: (1) ASGM tailings; (2) Category C wastes, or wastes contaminated with mercury, such as industrial waste and sewage sludge, and (3) industrial non-ferrous mine tailings.
- So-called Category C mercury wastes are wastes “contaminated with mercury or mercury compounds”. They include a broad array of industrial wastes, sewage sludge, and contaminated soil when it’s moved from the contaminated site for off-site management.
- There is wide variability both in mercury concentrations and how they are managed. The opportunities for human exposure also differ between the developed and developing world.
- While for the most part it is reasonable to anticipate management in licensed, well-engineered facilities in the developed world, this is not the case in LMIC.

BACKGROUND TO QUESTION 3

PRESENTED BY: Rico Euripidou (GroundWork)

- In LMIC, human exposure to Category C mercury wastes may occur under the following circumstances:
 - Open dumping or air dispersion of waste into residential areas.
 - Residential structures adjacent to or on disposal sites.
 - Informal pickers and/or children accessing disposal sites.
 - Landspreading near residential areas; and/or
 - Reuse as fill and other reuse scenarios allowing for direct exposure.
- Wastes below the thresholds will not be covered by the Convention and thus not subject to environmentally sound management (ESM) obligations!

BACKGROUND TO QUESTION 3

PRESENTED BY: Rico Euripidou (groundWork)

Resources:

- Minamata Convention
- MC-3/5 - Mercury waste thresholds:

<https://www.mercuryconvention.org/en/documents/mercury-waste-thresholds>

QUESTION 3

PRESENTED BY: Rico Euripidou (groundWork)

Given this variability, how should waste thresholds for Category C wastes under Article 11 be established?

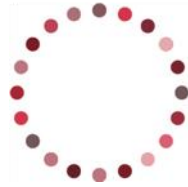
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THANK YOU FOR JOINING UCT'S CHEMICALS NETWORK DISCUSSION

**Save the date:
Chemicals Network
Discussion 2
5th April 2022
14h00 – 15h30
(GMT+2)**

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The views herein shall not be taken to reflect the official opinion of Sida or the Swedish Chemicals Agency.