The Dark World of Toxic Skin Lightening Products

Online event - Thursday, October 19, 2023
Housekeeping rules

• Thank you for joining this webinar. For attendees mics and cameras are turned off, that’s for your privacy.
• If you want to make comments, please use the chat box.
• If you want to ask a question to the panelists, you can use the Q&A button. Please, be clear and concise. The moderator will share the question with the panellists and audience as relevant.
• This webinar will be recorded and will be made available upon request.
• The slides will be made available on-line.
Agenda

• Moderation
  Elena Lymberidi-Settimo, European Environmental Bureau/ Zero Mercury Working Group

• Video teaser

• Online Marketing of Toxic Skin Lighteners: Mercury Cosmetics marketed as a ‘solution’ to dark skin
  Michael Bender, ZMWG International Co-coordinator

• Mercury Retrograding: The Dark World of Toxic Skin Lightening Products
  Avipsa Mahapatra, EIA US Campaign Director and Christopher Douglas, EIA Policy Analyst

• Feasibility study: Global inventory of mercury compound supply, use and trade
  Peter Maxson, Director, Concorde East/West Srl

• Q and A
Mercury in Retrograde - Video

WELL OVER 1PPM
Online Marketing of Toxic Skin Lighteners: Mercury cosmetics marketed as ‘solution’ to dark skin

Webinar: The Dark World of Toxic Skin Lightening Products

Michael Bender
Executive Director of the Mercury Policy Project
International Coordinator of the Zero Mercury Working Group
An international coalition of more than 110 public interest, environmental and health non-governmental organizations from over 55 countries from around the world.

Aim: Reduce/eliminate mercury supply, use, emissions, exposure, implementing the Minamata Convention
• Mercury is a bleaching agent inhibiting the formation of melanin, produces whitening, anti-freckles effect.

• Mercury can be easily absorbed through the skin and lungs leading to skin rashes and damage to kidneys.

• Contaminate homes, exposes residents

• World Health Organization warns of the health risks of mercury SLPs—and recommends phase out

• Minamata Convention bans manufacture, trade of cosmetics w/over 1 ppm mercury

• Once sold primarily in local markets and beauty stores, the availability of SLPs has exploded online
Pakistan, SDPI, September 2023

- 86% of patients not aware of toxic substances, health risks of SWCs
- 63% of surveyed dermatologists are presented with facial skin problems
  -- 43% of dermatologists see >10 patients per week due to SLPs
  -- 40% dermatologists see >20 patients per week
- 83% agreed with advertisement ban
- Almost 100% agree on ban of Hg SWCs

Bangladesh, ESDO, 2022

- 60-70% patients’ skin problems due to toxic SLPs use
- 80% of SLP patients are women
- 21-40 y old, average age groups using SLPs
Global samplings in 2017-2018, 2019 and 2022:

- Focused on local markets and then online sales
- 775 products tested, engaging multiple NGO partners from around the globe.
- 33% (256) with mercury over 1 ppm

Fourth global sampling in 2022-2023:

- Focus on online platforms
- In total, 213 products were purchased from over 23 e-commerce sites, and tested.
- 90% (191) of the products (60 different brands) had mercury above 1 ppm.

NEW!
ZMWG online database
Results (2022-2023 Sampling)

HIGH-MERCURY VS. TOTAL SLPS PURCHASED ON E-COMMERCE

# of samples purchased  # of samples tested with mercury levels above 1 ppm
Ensure a zero tolerance: all “mercury-added” cosmetics to be prohibited

Curtailing the (on-line) sales, advertising, marketing and merchandising of mercury SLPs

Spur interagency collaboration as well as regional and global coordination

Enhance awareness of the hazards of toxic SLPs
Steps to address illegal toxic SLP trade

**Legal framework, mandates and division of responsibilities**
Legal gap analysis, Licensing/registration requirements, Restrictions/bans, Labelling of ingredients and full disclosure of ingredients

**Supporting tools and measures**
Detention lists, Alert systems or Advisories (EU Safety Gate, ASEAN cosmetics Post Marketing Alert System), Capacity-building, Detection and measurement capabilities

**Inspections and sanctions**
Severe fine and penalties, screening, tools, informing consumers for better market surveillance

**Inter-agency and international Collaboration**
Mandates, national interagency/regional/international cooperation (e.g. East African Community, ASEAN, EU) collaboration with NGOs
• RAPEX established in 2001 under the General Product Safety Directive (2001/95/EC)

• Objective: Ensure that information about dangerous consumer products identified in one EU State is quickly circulated to other Member States & EU Commission

• Aim of preventing their further supply to consumers

• RAPEX utilized by EC product safety pledge to engage online platforms in unsafe product removal

• http://ec.europa.eu/rapex
Principles for online legal reforms

- Clear liability rules to be established and enforced, with significant penalties
- E-commerce platforms must ensure that the sellers comply with domestic health and safety law (correct labelling, disclosure of ingredients etc)
- Online platforms should verify foreign third-party sellers and appoint a home-country legal representative
- Online platforms made responsible for ensuring compliance with third party seller verification, and information/ingredient disclosure requirements
- EC IT application detects RAPEX-listed products that are still sold or reappear in online markets.

https://esurveillance.ec.europa.eu/product_safety/home
Backlash against ‘fairness creams’ ads

Trend Of Obsession With Skin Colour in Pakistan
https://www.youtube.com/watch?v=SyeOE8mgnig

Why Do Indians Love 'Fair' Skin?
https://www.youtube.com/watch?v=hDDJabnirTM
One of the students said:

“The research was motivated by the suffering of women in my village who were using whitening creams containing toxic heavy metals like mercury. These creams were leading to deterioration of their skin over the long term. My aim is to raise awareness about the toxicity and the harm associated with these products and I recommend that the government should ban such whitening creams”
Conclusions and Recommendations

➢ Mercury SLPs are a global crisis warranting concerted international action
➢ Enforcement is key to stopping manufacturing
➢ All mercury compounds determined for potential use in SLPs should be banned
➢ Online platform liability reform is needed
➢ Collaboration between government agencies, domestically and internationally is key
➢ African Region’s proposed COP5 amendment seeks to address challenges
➢ Sales and advertising ban on Hg SLPs would complement existing Convention provisions
ZMWG Skin Lightening Campaign Partners

• AFRICA- Bio Vision Africa, **Uganda**; Center for Environment Justice and Development, **Kenya**; Centre Africain pour la Santé Environnementale, **Cote d’Ivoire**; groundWork, **South Africa**; Sustainable Research and Action for Environmental Development, **Nigeria**

• AMERICAS- Casa Cem, **Mexico**; Mercury Policy Project & WE-ACT United States; Integrated Health Outreach (IHO), **Antigua and Barbuda**; Toxisphera Environmental Health Association, **Brazil**

• ASIA- BAN Toxics, **the Philippines**; Center for Public Health and Environment, **Nepal**; Earth, **Thailand**; Environmental and Social Development Organization, **Bangladesh**; NEXUS3Foundation, **Indonesia**; Toxics Link, **India**

• MIDDLE EAST- Environment Friends Society, **Bahrain**

• EUROPE- European Environmental Bureau, **Belgium**
https://www.zeromercurey.org/mercury-added-skin-lightening-cream-campaign
Any questions?
MERCURY IN RETROGRADE
The Dark World of Toxic Skin Lightening Products

Avipsa Mahapatra
Campaign Director

Christopher Douglass
Policy Analyst
Legal Landscape

- Addition of mercury compounds into cosmetics over 1 ppm of mercury is a violation of the Minamata Convention under Article 4
  - National legislation implementing this requirement has not been adopted in all countries
- Of the SLP production countries covered in this report (Jamaica, Pakistan, and Thailand)
  - Thailand and Pakistan have enacted national laws in compliance with the 1 ppm restriction
  - Enforcement remains a key issue
Trade Data

Note, the scale of mercury compound production is not limited to the compound trading companies mentioned in this report.
## Undercover Investigation

### Summary Table of Key EIA Investigation Findings (Non-exhaustive):  

<table>
<thead>
<tr>
<th>Company</th>
<th>Key Findings</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thailand</strong></td>
<td></td>
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</tr>
<tr>
<td>BioNature</td>
<td>Company owner confirmed intentional addition of mercury compounds into their creams.</td>
<td>Cosmetics Producer</td>
</tr>
<tr>
<td>Inter Coslab Co.</td>
<td>High level representatives at the company confirmed intentional addition of mercury compounds into their creams.</td>
<td>Cosmetics Producer</td>
</tr>
<tr>
<td>Viorabio</td>
<td>Company owner confirmed intentional addition of mercury compounds into their creams.</td>
<td>Cosmetics Producer</td>
</tr>
<tr>
<td>Jenisa</td>
<td>Company owner confirmed intentional addition of mercury compounds into their creams.</td>
<td>Cosmetics Producer</td>
</tr>
<tr>
<td><strong>Pakistan</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poonia Brothers (Faiza)</td>
<td>A high-level representative at the company confirmed intentional addition of mercury compounds into their creams; however, claimed it is at or below “acceptable” standards. The representative also confirmed they currently produce creams that contain mercury compounds for private brands.</td>
<td>Cosmetics Producer</td>
</tr>
<tr>
<td>Biocos</td>
<td>High-level representatives at the company confirmed intentional addition of mercury compounds into their creams at concentrations ranging from 2.5-4%, however claimed it is at or below legal standards.</td>
<td>Cosmetics Producer</td>
</tr>
<tr>
<td><strong>India</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macsen Labs</td>
<td>High-level representative confirmed selling ammoniated mercury for use in skin whitening creams and frequently ships the compound under another name, amido (Hg) chloride or amido (Hg II) chloride.</td>
<td>Chemical and Pharmaceutical Ingredients Manufacturer</td>
</tr>
<tr>
<td>Champa Purie Chem Industries</td>
<td>High-level executive confirmed that Pakistani companies producing mercury-added SLPs were sourcing mercury compounds from India, but he denied that his company was their source.</td>
<td>Chemical and Pharmaceutical Ingredients Manufacturer</td>
</tr>
<tr>
<td>Gurjar Chemicals</td>
<td>High-level executive confirmed they produce and sell ammoniated mercury for use in skin whitening creams.</td>
<td>Mercury Products Manufacturer</td>
</tr>
<tr>
<td><strong>Jamaica</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.W Abrahams &amp; Sons Ltd</td>
<td>Owner confirmed ammoniated mercury-added to their creams and that the ammoniated mercury is imported from the United States.</td>
<td>Cosmetics Producer</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noah Chemicals</td>
<td>Company representative confirmed they are currently exporting the mercury compounds for use in SLPs. Executives at other companies confirmed Noah Chemicals as a mercury compound supplier.</td>
<td>Chemical and Compound Supplier</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quimicalited</td>
<td>Company owner confirmed they currently supply ammoniated mercury for use in the production of skin whitening products. Confirmation of export of elemental mercury in the past.</td>
<td>Chemical and Compound Supplier</td>
</tr>
</tbody>
</table>
Pakistan

- **Poonia Brothers (Faiza):** confirmed manufacture of SLPs that contain mercury compounds, claimed to be under “acceptable limit”
  - Also confirmed Poonia currently produces creams that contain higher amounts of mercury compounds for private brands
- **Biocos:** Claimed water-based cream, such as Goldish, requires less mercury compound than an oil-based cream to achieve the same result
  - 2.5-3% mercury compound in water-based creams
  - up to 4-4.5% in oil-based creams
- **UAE:** Serves as an intermediary for compound and SLP distribution
  - Faiza has manufacturing facilities in both Pakistan and Dubai to facilitate faster shipping
Jamaica

- For 60 years, the company E.W. Abrahams & Sons Ltd has openly sold a popular mercury-containing cosmetic cream in Jamaica.
- The product packaging states that the product contains 3% ammoniated mercury.
- Owner claimed he imports the ammoniated mercury from the United States.
Thailand

- Jenisa: a small-scale local manufacturer and storefront, confirmed SLPs contained ammoniated mercury, referred to as “AM”

- Inter Coslabs: discussed a typical mercury compound percentage of 3-3.5%, said it would be possible to have concentrations up to 4%

- BioNature: owner did not worry about the police visit during EIA interview;
  - Place the mercury-added creams away from the front of the shop
  - Stated if the police were to check the products, they would pay the officers to go away

- Viorabio: showed EIA investigators a cream his company makes that contains 4% of a mercury compound
Mercury Compound Distributors

USA

- Noah Chemicals, a Texas-based company, is currently exporting mercury compounds for SLPs to E.W. Abrahams. (Silken Deluxe, Jamaica)
- An also Indian compound supplier claimed Quimicalited sold ammoniated mercury to Noah Chemicals

Spain

- Quimicalited: supplies ammoniated mercury for use in the production of skin whitening products and confirmation of export of elemental mercury in the past.

India

- Macsen: sell ammoniated mercury for use in skin whitening creams and frequently ships the compound under another name, amido (hg) chloride or amido (hg ii) chloride
- Gurjar: produces and sells ammoniated mercury for use in skin whitening creams

SPECIFICATIONS

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Fine White Powder, Odorless</td>
</tr>
<tr>
<td>Identification</td>
<td>Must Comply A, B &amp; C Tests As Given In USp</td>
</tr>
<tr>
<td>Residue On Ignition</td>
<td>Not More Than 0.2%</td>
</tr>
<tr>
<td>Mercurous Compounds</td>
<td>Not More Than 0.2%</td>
</tr>
<tr>
<td>Moisture Content</td>
<td>Not More Than 1.0%</td>
</tr>
<tr>
<td>Residual Solvents</td>
<td>Must Meet The Usp Requirement</td>
</tr>
<tr>
<td>Assay</td>
<td>Min 98.0% &amp; Max 100.5%</td>
</tr>
</tbody>
</table>

Buy the best quality Ammoniated Mercury USP used in skin whitening creams from Macsen Laboratories.
Key Findings

- Companies intentionally add mercury compounds, often at concentrations greater than 1 ppm.
- Ammoniated mercury is the primary mercury compound added to these creams.
- The sources of mercury compounds that are being sold for use in SLPs include companies based in Spain, India, Japan, and the United States.
Key Findings (cont.)

- It is standard practice for SLP producers across the globe to manufacture products consisting of 3-4% of a mercury compound.

- The production of these products is enabled by the unregulated trade of most mercury compounds.

- The investigation also identified two companies based in India, one in Spain, and one in the United States, all currently supplying mercury compounds, specifically ammoniated mercury, for use in SLPs.
Recommendations

- Update national laws to be consistent with the Convention

- Strengthen and ensure enforcement of the manufacturing and trade ban of mercury-added SLPs in the manufacturing countries

- Take measures to control online sales

- Control the production and trade of mercury-added compounds
Questions?

Thanks to ZMWG for reviewing our report.

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Feasibility study: Global inventory of mercury compound supply, use and trade

Peter Maxson

October 19, 2023
Presentation content

- Objective of the feasibility study
- Methodology
- General conclusions regarding feasibility
- Suggested approach for a global inventory
- Significance for the Minamata Convention
Objective

Assess the feasibility of developing a global inventory of key mercury compounds:

- Compounds of interest
- Components of a global inventory
- Sources of information
Methodology for this feasibility study

- Key mercury compounds
- Types of data sought
- Potential sources of information
- Spot-check information sources
- Any barriers or challenges
- Draw conclusions about feasibility
- Implications for the Minamata Convention
Initial compounds of interest

- Mercury(II) ammonium chloride
- Mercury(II) acetate
- Mercury(I) chloride, also known as calomel
- Mercury(II) chloride
- Mercury(II) iodide
- Mercury(II) nitrate
- Mercury(II) oxide
- Mercury(II) sulfate
- Mercury(II) sulfide (cinnabar, in its natural form)
- Mercury(II) thiocyanate
- Phenylmercury(II) acetate
## Trade names for mercury(II) ammonium chloride (CAS No. 10124-48-8)

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aminomercuric chloride</td>
</tr>
<tr>
<td>Aminomercury chloride</td>
</tr>
<tr>
<td>Ammoniated mercuric chloride</td>
</tr>
<tr>
<td>Ammoniated mercury</td>
</tr>
<tr>
<td>Hydrargyrum ammoniatum</td>
</tr>
<tr>
<td>Hydrargyrum precipitatum album</td>
</tr>
<tr>
<td>Mercuric amidochloride</td>
</tr>
<tr>
<td>Mercuric ammonium chloride</td>
</tr>
<tr>
<td>Mercuric chloride, ammoniated</td>
</tr>
<tr>
<td>Mercury amide chloride</td>
</tr>
<tr>
<td>Mercury ammoniated</td>
</tr>
<tr>
<td>Mercury ammonium chloride</td>
</tr>
<tr>
<td>Mercury(II) chloride ammonobasic</td>
</tr>
<tr>
<td>Mercury, ammoniated</td>
</tr>
<tr>
<td>Quecksilber(II)-amid-chlorid</td>
</tr>
<tr>
<td>White mercuric precipitate</td>
</tr>
<tr>
<td>and more...</td>
</tr>
<tr>
<td>Mercury-added products (with some exceptions)</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Batteries (2020)</td>
</tr>
<tr>
<td>Switches and relays (2020)</td>
</tr>
<tr>
<td>Fluorescent lamps (2020, except 2025 for CFL.i and CCFL)</td>
</tr>
<tr>
<td>High pressure mercury vapour lamps (2020)</td>
</tr>
<tr>
<td>Cosmetics including skin lightening soaps and creams (2020)</td>
</tr>
<tr>
<td>Pesticides, biocides and topical antiseptics (2020)</td>
</tr>
<tr>
<td>Non-electronic measuring devices, including barometers; hygrometers; manometers; thermometers; sphygmo. (2020)</td>
</tr>
<tr>
<td>Strain gauges used in plethysmographs (2025)</td>
</tr>
<tr>
<td>Electrical and electronic measuring devices, incl. melt pressure transducers, melt press. transmitters, melt press. sensors (2025)</td>
</tr>
<tr>
<td>Mercury vacuum pumps (2025)</td>
</tr>
<tr>
<td>Tyre balancers and wheel weights (2025)</td>
</tr>
<tr>
<td>Photographic film and paper (2025)</td>
</tr>
<tr>
<td>Propellant for satellites and spacecraft (2025)</td>
</tr>
<tr>
<td>Dental amalgam (measures to be taken and restrictions)</td>
</tr>
</tbody>
</table>
Manufacturing processes restricted under Annex B of the Convention

<table>
<thead>
<tr>
<th>Manufacturing processes using mercury (with some exceptions)</th>
<th>Using mercury</th>
<th>Using mercury compounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlor-alkali (2025)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Acetaldehyde (2018)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Polyurethane systems (phase-out date to be considered at COP-5)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Vinyl chloride monomer (measures to be taken)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sodium or potassium methylate or ethylate (measures to be taken)</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
General conclusions

 Reasonably detailed global inventory of supply, uses and trade of mercury compounds can be developed

 Such an inventory should be developed to inform the provisions of Articles 4 and 5 of the Minamata Convention
Suggested approach

- Confirm and focus on key mercury compounds
- Best information sources identified
- Minimize uncertainties, though some are inevitable
Significance for the Minamata Convention

- Significant production and trade of certain mercury compounds
- Not currently subject to the supply and trade control measures of the Convention
- Article 3, paragraph 13 requires the COP to consider action on compounds
- Inventory can provide factual basis for required COP decision-making
- Important for this process to begin given EIA findings
Feasibility study

- The feasibility study has been distributed to COP focal points and the list of COP-3 attendees
- It may be requested directly from dlennett@nrdc.org
- It will also be available at COP-5
THANK YOU!

Contact info:

Peter Maxson
Director, Concorde East/West Srl
International consultant
concorde.max@gmail.com
Any questions?
Thank you for your attention!


https://www.zeromercury.org/mercury-added-skin-lightening-creams-campaign/

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