Overview of the Practical Sourcebook on Mercury Waste Storage and Disposal

Inception Workshop

Norway ODA Mercury Storage and Disposal Project in the Caribbean

Jamaica, Suriname, Trinidad and Tobago

12-13 August 2015, Port of Spain

What is the Sourcebook

- The UNEP Governing Council (GC), in decision 25/5, requested the United Nations Environment Programme (UNEP) to enhance capacity for mercury storage and provide information on the sound management of mercury and mercury wastes.
- The project is a joint initiative of UNEP Chemicals Branch, Division of Technology Industry and Economics (DTIE), UNEP International Environmental Technology Centre (IETC), and the International Solid Waste Association (ISWA) under the UNEP Global Mercury Partnership
- The overall objective is to enhance the capacity of governments, industry, and the public to store and dispose mercury wastes in an environmentally sound manner.
- The Sourcebook should not be used as guidance. Other sources, such as the Basel Convention's 'Technical Guidelines on the Environmentally Sound Management of Wastes Consisting of, Containing, or Contaminated with Mercury or Mercury Compounds

- <u>Wastes consisting of mercury or mercury compounds</u>: Include elemental mercury and mercury compounds recovered from waste containing (from mercury added products)or contaminated with mercury as well as excess mercury and *mercury* compounds designated as waste.
- <u>Wastes containing mercury or mercury compounds</u>: Include wastes of mercury-added products that easily release mercury into the environment when they are broken, wastes of other mercury-added products and stabilized or solidified wastes containing mercury.
- <u>Wastes contaminated with mercury or mercury compounds</u>: Include residues generated from mining processes, industrial processes, or waste treatment processes. Examples are debris and contaminated soil, mercury loaded activated carbon, sludges, tailings, and waste rock.

- Excess mercury is the amount of mercury supply that exceeds demand for uses allowed under national law and the Minamata Convention.
- As mercury is a naturally occurring element, it cannot be destroyed.
- Excess mercury needs to be stored in an environmentally sound manner or transformed to a form having minimal mobility, and reliably sequestered from the environment.

- <u>Wastes consisting of mercury or mercury compounds</u>: for example chloralkali production with mercury, VCM production, recovery of mercury from natural gas or petroleum refining, recovery of mercury from gold mining.
- <u>Wastes Containing Mercury or Mercury Compounds</u>: mainly come in the form of end-of-life mercury-added products and applications, but also include stabilized/solidified mercury: for example thermometers, dental amalgam, electrical switches, light bulbs
- <u>Sources of Wastes Contaminated with Mercury or Mercury Compounds</u>: are mainly generated via industrial processes using materials with mercury impurities. For example bauxite production, oil and gas refining, primary/secondary smelting, artisanal gold mining, combustion of fuels for electric generation

 <u>The Basel Convention</u> on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal defines ESM as

"taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes" (Art. 2 para. 8)

• ESM of mercury wastes under the Minamata Convention: Art. 11, para. 3

- Managed in an environmentally sound manner, taking into account the guidelines developed under the Basel Convention
- Only recovered, recycled, reclaimed or directly re-used for a use allowed to a Party under this Convention or for environmentally sound disposal pursuant to para. 3 (a)
- For Parties to the Basel Convention, not transported across international boundaries except for the purpose of environmentally sound disposal in conformity with this Art
- where the Basel Convention does not apply to transport across international boundaries, a Party shall allow such transport only after taking into account relevant international rules, standards, and guidelines

Elements of ESM for Mercury Wastes

- not mixed with other wastes
- not discarded in uncontrolled landfills
- not (co-)incinerated without dedicated flue gas cleaning and controls
- treated to extract the mercury or to immobilize it in an environmentally sound manner
- development and implementation of: 1) public health and safety activities and 2) worker and public health and safety activities which prevent and minimize exposure to mercury wastes
- Development and implementation of regulation of mercury waste collection, transport, Storage, treatment and disposal facilities.

Basel Technical Guidelines: Classification of Recovery Operations

• **'R- operations':** "operations which may lead to resource recovery, recycling, reclamation, direct reuse, or alternative uses".

R4	Recycling/reclamation of metals and metal compounds
K5	Recycling/reclamation of other inorganic materials
R8	Recovery of components from catalysts
R12	Exchange of wastes for submission to operations R4, R5, R8 or R13
R13	Accumulation of material intended for operations R4, R5, R8 or R12

预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5_15679

