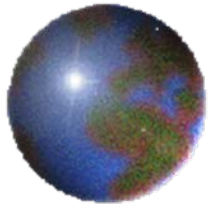
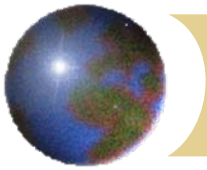


S3_01



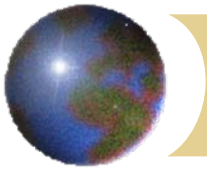
Review of the current Good Practice Document (Good Practices for Management of Mercury Releases from Wastes)

UNEP Global Mercury Partnership
Waste Management Partnership Area Meeting
Manila, The Philippines
11 December 2013



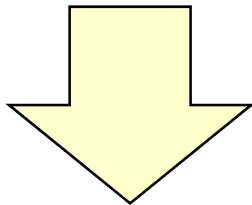
Outline of Presentation

- ⊕ Background
- ⊕ Objective
- ⊕ Scope
- ⊕ Contents of Good Practice Document
- ⊕ Current Status of Relevant Documents
- ⊕ Discussion Points



Background

- One of the projects in the Waste Management Partnership Area
 - To develop a BAT/BEP guidance for implementation of an important part of the Basel Convention Technical Guidelines on Environmentally Sound Management of Mercury Waste

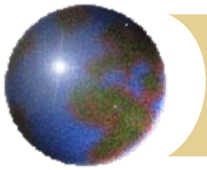


focused on reduction of mercury releases from waste combustion because the concern expressed in the UNEP GC Decision 24/7

The 1st draft BAT/BEP Guidance

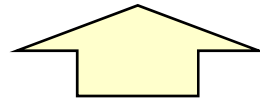
discussed at

the 1st Waste Management Partnership Area Meeting in March 2009



Background

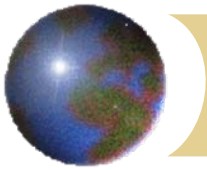
The 1st draft BAT/BEP Guidance revised



based on the comments at the 1st Waste Management Partnership Area Meeting in March 2009

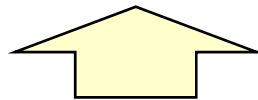
Major Comments for improvement

- Expand the scope to include waste management activities
- Respond to needs of developing countries
- Include information on techniques, costs and benefits
- Include information about awareness raising activities



Background

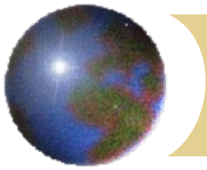
The revised 1st draft BAT/BEP Guidance revised



based on comments at the 2nd Waste Management Partnership Area Meeting in March 2010

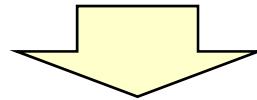
Major Comments for improvement

- For establishing a take-back programme, involvement of a whole chain (not only manufactures but also importers, retailers, and municipalities) was considered to be important.
- The usage of terms such as landfills and long-term storage should be clarified.
- The needs for BAT/BEP for measuring equipment at health care facilities were identified.



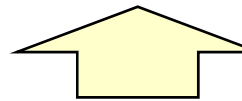
Background

The re-revised 1st draft BAT/BEP Guidance



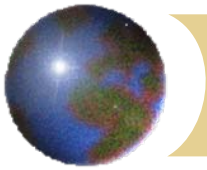
Title changed

Good Practices for Management of Mercury Releases from Waste (First Draft) shared at INC2



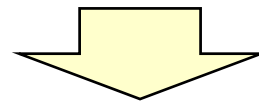
Further development stopped

- ✚ The Basel Convention Technical Guidelines on ESM of mercury wastes under preparation
- ✚ Ongoing INC on mercury instruments



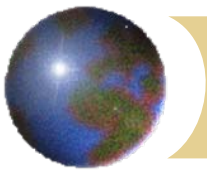
Background

- ⊕ The Basel Convention Technical Guidelines on ESM of mercury wastes adopted at COP10 in October 2011
- ⊕ Minamata Convention on Mercury adopted at the Diplomatic Conference in October 2013



Now time to consider

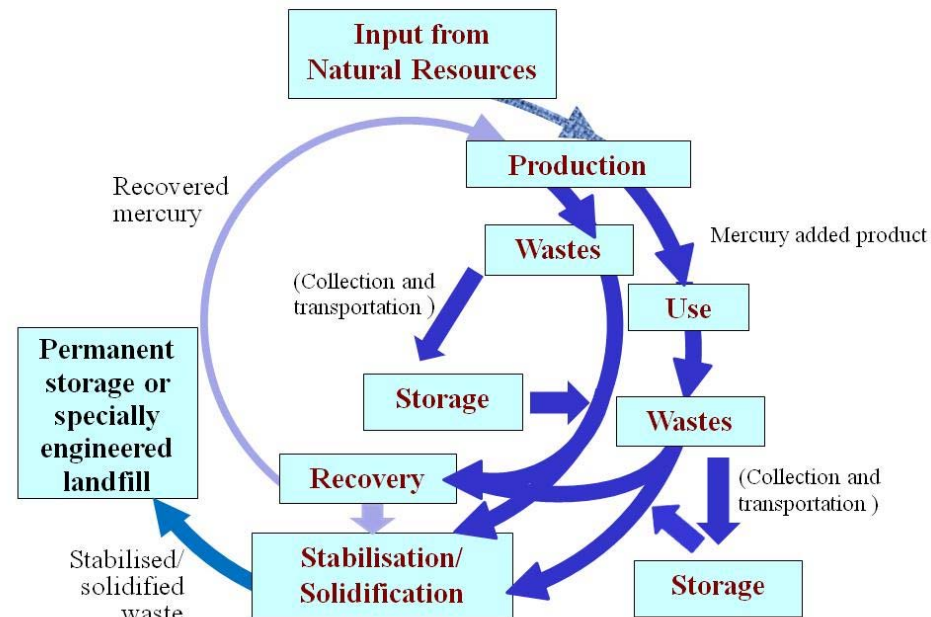
Good Practices for Management of Mercury Releases from Waste (First Draft)



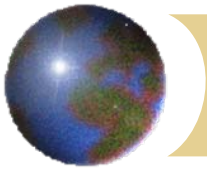
Objective of the Good Practices for Management of Mercury Releases from Waste (Good Practice Document)

- to provide information that supports the implementation of good practices contributing to the reduction of mercury releases from waste following a life cycle management approach

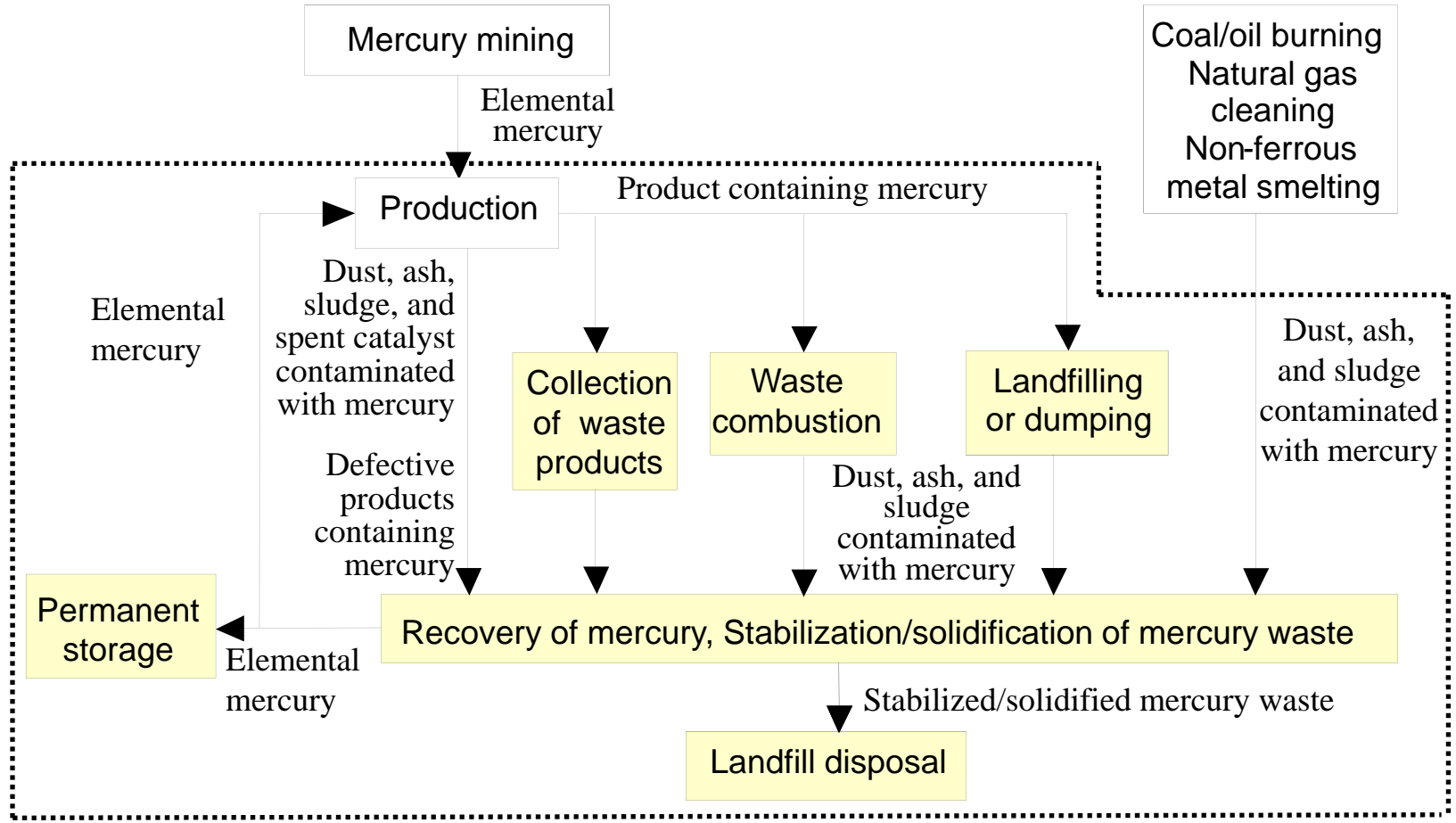
“Minimize mercury release to the environment at each stage”



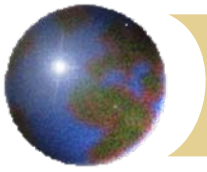
*This figure does not cover the flow of waste contaminated with mercury.



Scope: life cycle of products from production to disposal

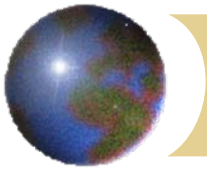


*Dotted line indicates scope of Good Practice Document.



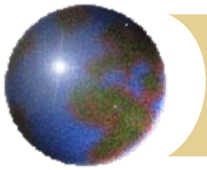
Contents of Good Practice Document

- ⊕ Chapter 1: Introduction
- ⊕ Chapter 2: Identification of Mercury Waste
- ⊕ Chapter 3: Reduction of Mercury Demands in Industrial Processes and Products
- ⊕ Chapter 4: Collection of and Mercury Recovery from Waste Containing Mercury
- ⊕ Chapter 5: Management of Mercury during Waste Combustion
- ⊕ Chapter 6: Disposal of Mercury Waste
- ⊕ Chapter 7: Remediation of Sites Contaminated with Mercury Waste



Contents of Good Practice Document

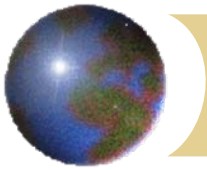
- ❁ Chapter 2: Identification of Mercury Waste
 - ❁ 2.1 Criteria for Identifying Hazardous Waste based on Mercury Concentration Level
 - Examples of Criteria for Identifying Hazardous Waste based on Mercury Concentration Level
 - Analysis Methods to Determine Concentration of Mercury in Waste
 - ❁ 2.2 Industrial Process Residues Contaminated with Mercury
 - ❁ 2.3 Products Containing Mercury
 - Examples of Products Having Parts Containing Mercury
 - Available Information about Mercury Content in Products



Contents of Good Practice Document

- ✚ Chapter 3: Reduction of Mercury Demands in Industrial Processes and Products
 - ▣ 3.2 Industrial Processes
 - ▣ 3.2.1 Artisanal and Small-Scale Gold Mining (ASGM)
 - Mercury-free ASGM
 - Waste Minimization in ASGM
 - ▣ 3.2.2 Chlor-alkali Production
 - Mercury-free Chlor-alkali Production
 - Waste Minimization in Chlor-alkali Production

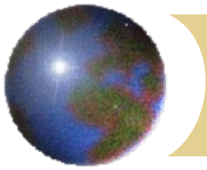
*Contents are mainly those that could not be included in the Basel Convention “Technical Guidelines” due to volume limitation.



Contents of Good Practice Document

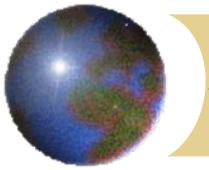
- ✚ Chapter 3: Reduction of Mercury Demands in Industrial Processes and Products
 - ▣ 3.3 Products
 - ▣ 3.3.1 Prohibition of Mercury Use in Products and Examples of Mercury-free Alternatives
 - Examples of Prohibition on Mercury-containing Products
 - Examples of General Ban on Mercury (and Mercury-Containing) Products and Exemptions
 - Mercury-free Alternatives to Mercury-containing Products
 - ▣ 3.3.2 Regulations on Mercury Content in Products
 - Examples of regulations

*Contents are mainly coming from those referred in the Basel Convention “Technical Guidelines” .



Contents of Good Practice Document

- ❖ Chapter 4: Collection of and Mercury Recovery from Waste Containing Mercury
 - 4.1 Existing collection programme
 - Types of collection programme
 - 4.2-4.6 Good Practice Cases
 - Measuring equipment
 - Fluorescent lamps
 - Electrical and electronic equipment
 - Dental amalgam
 - Batteries

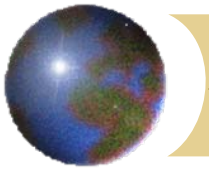


Contents of Good Practice Document

Information format for Good Practices

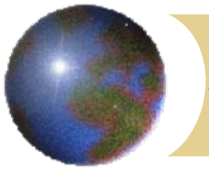
General information

- Target product (name, annual sales volume, weight of Hg in the product), Target area, Year started
- Background, Steps to introduce the system,
- Major outcome, Major challenges, and Remaining issues to be solved



Contents of Good Practice Document

- ✿ Information format for Good Practices
 - Information about the collection system
 - Outline of the system, responsibility of stakeholders
 - Necessary costs for the collection and recovery systems, cost sharing of stakeholders
 - Transport /storage methods for collected used products
 - Ways to handle collected used products where a mercury recovery is not located in the target area
 - Information about mercury recovery system
 - Outline of technology, Process flow
 - Ways to handle materials other than mercury
 - Description of pollution control measures



Contents of Good Practice Document

Information format for Good Practices

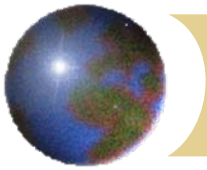
Awareness raising

- Target population
- Activity period/frequency
- Media used for awareness raising and message delivered
- Responsibility of stakeholders
- Cost sharing of stakeholders

Remarks

References and interviewees

Graphs and photos



Contents of Good Practice Document

Chapter 5: Management of Mercury during Waste Combustion

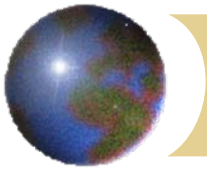
5.1 Flue Gas Control

- Examples of emission standards
- Analytical methods of mercury in flue gas
- Flue gas treatment technology

5.2 Wastewater Treatment

- Examples of effluent standards
- Analytical methods of mercury in wastewater
- Wastewater treatment technology

5.3 Cases of Managing Mercury during Waste Combustion



Contents of Good Practice Document

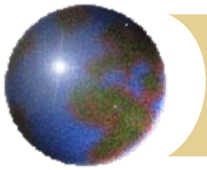
Chapter 6: Disposal of Mercury Waste

6.1 Disposal of Waste Contaminated with Mercury at Landfills

- Examples of acceptance criteria
- Analytical methods to determine the mobility of mercury in waste
- Solidification and stabilization technology
- Cases of disposal of waste contaminated with mercury

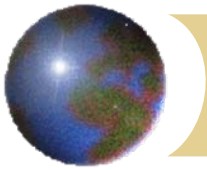
6.2 Permanent Storage of Waste Consisting of Elemental Mercury

- Examples of legal framework
- Cases of Permanent storage



Contents of Good Practice Document

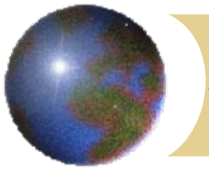
- ❖ Chapter 7: Remediation of Sites Contaminated with Mercury Waste
 - 7.1 Steps to clean up contaminated sites
 - 7.2 Remediation Program
 - Examples of programmes
 - 7.3 Remedial Techniques
 - Examples of remedial techniques for mercury-contaminated sites
 - 7.4 Cases of Remediation of Contaminated Sites



Current Status of Relevant Documents

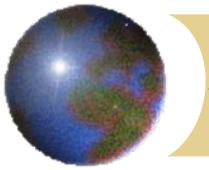
- ❖ Basel Convention “Technical Guidelines for
ESM of Wastes Consisting of Elemental
Mercury and Wastes Containing or
Contaminated with Mercury ”
 - ❑ Updated version to be adopted at COP 12 in
2015

- ❖ UNEP’s Practical Sourcebook on Mercury
Storage and Disposal
 - ❑ To be developed



Discussion Points

- ✚ What scopes of the Good Practice Document and the Practical Sourcebook would be suitable to implement the principles indicated in the Basel Convention Technical Guidelines?
- ✚ What items should be included in the Good Practice Document and the Practical Sourcebook?



Discussion Points

- ⊕ How shall we develop the Good Practice Document and the Practical Sourcebook in terms of collecting, scrutinizing and integrating necessary information?
- ⊕ How shall we develop the two documents in terms of schedule?
- ⊕ Who plays what role?