S3_02



Draft Outline of BAT/BEP Guidance on Reduction of Mercury Releases from Waste Combustion

UNEP Global Mercury Partnership Waste Management Partnership Area Meeting Tokyo, Japan 12-13 March 2009



Organization of Presentation

*****Background *****Objective *****Scope of the BAT/BEP Guidance *Way to prepare the BAT/BEP Guidance Companization of the BAT/BEP Guidance Information Collection Format Discussion points



Background

- UNEP Governing Council Decision 23/9 called for mercury partnerships between government and other stakeholders.
- UNEP Governing Council Decision 24/3 requests the UNEP Executive Director to strengthen the UNEP mercury partnership by specific action including the expansion of the number and scope of partnerships to include new, growing or related sectors such as VCN production, non-ferrous metals mining, cement production and <u>waste combustion</u>



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



Objective

To provide information that supports the implementation of BAT/BEP contributing to the reduction of mercury emissions from waste combustion/burning.

* Waste combustion means that controlled burning of waste while waste burning is not controlled.



Objective

 Reasons why to focus on reduction of mercury releases from waste combustion/burning

- UNEP GC Decision 24/3 refers waste combustion as a sector to be covered by the UNEP Global Mercury Partnership
- According to the technical background of the "Report on Global Atmospheric Mercury Assessment: Sources, Emissions and Transport", the most important pathway for product use of mercury is waste handling. Waste incineration accounts for 47 % of total mercury emission from products and landfill for 37%.



BAT and **BEP**

***** BAT: Best Available Techniques

 Techniques that can most effectively achieving a high level of environmental protection and allow implementation in relevant sector under economically and technically viable conditions

***** BEP: Best Environmental Practices

 The application of the most appropriate combination of environmental control measures and strategies



Scope of BAT/BEP Guidance Document

Before combustion

 Separation of waste containing mercury (legal systems and voluntary actions to implement collection of waste containing mercury for municipal solid waste, measures to clarify and identify waste containing mercury and their treatment methods for industrial waste)

During combustion

- Flue gas treatment (emission standards and technologies)
- After combustion
 - Residue treatment and disposal (landfill criteria



Scope of BAT/BEP Guidance Document

Parts of the Basel Convention Technical Guidelines on ESM of Mercury Waste covered by this BAT/BEP Guidance Document

- Chapter 7: Handling, Collection, Storage (Interim), and Transportation of Mercury Waste
 - 7.4.3 Take-back-programmes
- Chapter 8: Treatment of Mercury Waste and Recovery of Mercury
 - 8.2 Mercury Recovering Process Solid Type of Mercury Waste
 - 8.3 Mercury Recovering Process Mercury in Wastewater and Other Liquid Mercury Waste or Air Gas

Way to Prepare BAT/BEP Guidance Document

- . Japan prepares draft outline based on comments from Japanese experts.
- The Waste Management Partnership Area meeting agrees on objective, scope, organization and information collection format.
- 3. Japan asks Partners and other interested parties to provide information about the items in the BAT/BEP guidance document.
- Japan consolidates the information and prepares a draft BAT/BEP Guidance Document

Way to Prepare BAT/BEP Guidance Document

- Japan asks Partners and other interested parties to provide comments on the draft BAT/BEP Guidance Document.
- 6. Japan revises the draft BAT/BEP guidance document based on the comments received.
- Partners and other interested parties review the revised draft and provide further comments
- 8. Japan revises the draft BAT/BEP guidance document based on the comments received.
- 9. Waste Management Partnership Area adopts the draft BAT/BEP guidance document.



Organization of BAT/BEP Guidance Document

Chapter 1: Introduction

- Chapter 2: General Guidance on mercury Waste Management
- Chapter 3: Management of Waste Containing Mercury Before Combustion
- Chapter 4: Treatment of Flue Gas From Waste Combustion
- Chapter 5: Treatment and Disposal of Residues Generated from Flue Gas Treatment



Information Collection Format

Collection systems of used mercury containing products

- Target used products and area
- Outline of collection system
- Background (problems identified before the introduction of the system)
- Steps to introduce the system
- Responsibility and cost sharing of relevant stakeholders
- Major outcomes
- Remarks, reference and interviewees
- Graphs and charts



Information Collection Format

Emission standards and landfill acceptance criteria

- Legal basis
- Standards/criteria
- Effective date
- Rationale for the standards/criteria
- Enforcement scheme
- Results of enforcing the standards/criteria



Information Collection Format

Techniques

- Description of technology
- Applicable conditions
- Mercury removal efficiency, achievable mercury concentrations
- Other environmental benefits
- Further treatment needs
- Initial and running costs
- Remarks
- Reference



Discussion points

- What would be the best way to prepare the BAT/BEP Guidance Document?
- Is there better organization of the BAT/BEP Guidance Document?
- Does the draft outline of BAT/BEP Guidance document cover necessary items? What items should be focused/prioritized?
- What cases should be included in the BAT/BEP guidance document?
- What format should be suitable to collect information from the Partners and interested parties?