

# **Draft Basel Convention Technical Guidelines on the ESM of Mercury Waste**

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# Contents of the Presentation

- Background of the Basel Convention and mercury classifications
- Basel Convention COP mandate and Work Programme on mercury
- Basel Convention Technical Guidelines on ESM of Mercury Wastes



# Goal of the Basel Convention

- To protect human health and the environment from the adverse impacts of hazardous and other wastes from the generation, transboundary movements and management

- entered into force on 5 May 1992

- 174 States Parties plus European Community



# Hazardous Wastes Controlled by the Basel Convention



- Annexes I, VIII and IX, exhibiting Annex III characteristics (Art. 1(1)(a) of Annex I)
- Annex II (Art. 1(2))
- Wastes considered hazardous under the national legislation of a Party, as notified to the Secretariat under Article 3 (Art. 1(1)(b)) (This information may be accessed at the Secretariat's website: [www.basel.int/natdef/frsetmain.php](http://www.basel.int/natdef/frsetmain.php))



# Environmentally Sound Management

- Central Policy instrument is Environmentally Sound Management (ESM):

***“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”***

- ESM includes minimizing the generation of such wastes, reducing transboundary movements, improving treatment and disposal, and ensuring such wastes are handled as close as possible to where they were generated



# Classification of mercury waste in the Basel Convention

## *Annex I*

- Y1 – Clinical wastes from medical care in hospitals, medical centres and clinics
- Y17 – Waste resulting from surface treatment of metals and plastics
- Y18 – Residues arising from industrial waste disposal operations
- Y29 – Mercury; mercury compounds



# Classification of mercury waste in the Basel Convention

## *Annex VIII (List A)*

- **A1010 – Metal wastes and waste consisting of alloys of ...mercury**
- **A1030 – Wastes having as constituents or contaminants any of the following....mercury; mercury compounds**
- **A1170 – Unsorted waste batteries (when containing Hg)**
- **A1180 – Waste electrical and electronic assemblies or scrap containing e.g. Mercury-switches; glass from CRTs (containing Hg)**
- **A2010 – Glass waste from CRTs and other activated glasses**



# Classification of mercury waste in the Basel Convention

## *Annex VIII (List A)(contd)*

- **A4020 – Clinical and related wastes**
- **A4100 – Wastes from industrial pollution control devices**
- **A4140 – Waste consisting of or containing off-specification or outdated chemicals corresponding to Annex I categories**





# Basel Convention COP Mandates on Mercury

## Decision VIII/33 of COP8 (Nov/Dec 2006)

- **Adopted the programme and budget for 2007-2008 and agreed to include a new Strategic Plan focus area on mercury**
- **Agreed that in cooperation with UNEP to develop partnerships around the theme of environmentally friendly technologies and awareness raising regarding avoidance, use and disposal of mercury wastes; develop capacity building and technical assistance programmes to reduce and prevent pollution from mercury; and to develop guidelines on ESM of mercury waste with emphasis on sound disposal and remediation practices.**



# Work Programme on Mercury in Basel Convention

## Specific objectives:

- To develop methodological tools for implementation of national plans for ESM of mercury wastes with focus on EoL equipment;
- To compile data and information on ESM practices;
- To provide input into the long-term storage of mercury waste;
- To build capacity to monitor TBM of mercury waste and prevent illegal traffic;
- To develop awareness raising programme;
- To provide input into the INC process for the proposed mercury convention



# Basel Convention Work Programme on Mercury

## Development of technical guidelines on ESM of mercury waste

- Feb. 2007: draft Table of Contents were developed
- July 2007: MOU signed with IGES, Japan to develop the technical guidelines
- First draft completed 24 July 2007
- Second draft completed 23 August 2007
- September 2007: Draft technical guidelines was presented to the OEWG6 meeting



# Basel Convention Work Programme on Mercury

## Development of technical guidelines on ESM of mercury waste (contd)

- **3<sup>rd</sup> draft was presented to COP9 (June 2008)**
- **Decision IX/15 of COP9 agreed work to continue**
- **Intersessional Working Group established**
- **Input/comments invited from Parties and other stakeholders**
- **4<sup>th</sup> draft completed on 30 April 2009**
- **5<sup>th</sup> draft completed 5 January 2010**



# Basel Convention Work Programme on Mercury

## Development of technical guidelines on ESM of mercury waste (contd)

- Draft presented to OEWG7 (May 2010) and will be presented to COP10 (Nov. 2011)
- Further comments invited for next revision to be published on 30 Oct 2010
- Next revision expected: 31 July 2011
- Draft available on the Basel Convention website at:

<http://www.basel.int/techmatters/mercury/guidelines/5th-13May2010.doc>



# Contents of the Technical Guidelines

- **Introduction**

- ✓ **Scope, about mercury, human health risks, mercury pollution**

- **Relevant Provisions of the BC and Works under UNEP**

- **Guidance on ESM of mercury waste**

- ✓ **ESM principles, OECD Core Performance Elements, BAT/BEP applications**

- ✓ **Legislative and regulatory framework**

- ✓ **Hg waste prevention and minimization**

- ✓ **Identification and inventory**



# Contents of the Technical Guidelines (contd)

- **Handling, collection, packaging, labelling, interim storage, and transportation**
- **Treatment and recovery**
  - ✓ **Recovery process, pretreatment, stabilization/solidification, etc**
- **Long term storage and landfilling**
  - ✓ **Best management practices, standards for packaging and storage**
- **Remediation of contaminated sites**
- **Health and safety**
- **Emergency response**
- **Public awareness and participation**
- **Bibliography**



# Interim Storage/collection/transport

- In principle, the handling, collection, packaging, labelling, interim storage and transport of mercury wastes are similar for other hazardous wastes
- Hg has some physical and chemical properties that require additional precautions and handling techniques
- Segregation at source and collection of mercury waste are the key factor to implement ESM
- Mercury waste should be separately collected and stored from other wastes





# Interim Storage/collection/transport

- At least three options to collect mercury waste, such as fluorescent lamps, batteries, thermometers, electronic devices containing mercury, etc., from households:

- ✓ At Waste Collection Stations of Municipal Solid Wastes

- ✓ At Public Places or Shops

- ✓ At Households by Collectors

- Collection from Other Sectors

- ✓ Take-back Programme

- Transportation

- ✓ should comply with a national and/or local regulation



# Long Term Storage

## Examples of Long Term Storage:

- **Overpacking mercury-filled carbon steel flasks into steel barrels (USA)**
- **Underground storage in salt mines (Germany)**
- **Terminal storage in deep rock repository (Sweden)**
- **Specially engineered landfills – e.g. for stabilized/solidified mercury wastes, incinerator residues and ashes containing mercury**



# The Basel Ban Amendment

- The BC has established systems to regulate and restrict the export and import of hazardous wastes and other wastes through the notification and prior informed consent procedures.
- Does not permit the exports or imports of hazardous wastes or other wastes between a state Party and a non-Party
- In 1995, adopted a decision to amend the Convention that when fully enforced would ban the export of hazardous wastes from Annex VII (OECD, EC and Liechtenstein) to non-Annex VII countries.
- As of March 2010, 68 ratifications
- Ban Amendment is yet to enter into force.



# FURTHER INFORMATION



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