Recovery Operations

Inception Workshop

Norway ODA Mercury Storage and Disposal Project in the Caribbean

Jamaica, Suriname, Trinidad and Tobago

12-13 August, Port of Spain

Basel R codes

- The Basel Technical Guidelines address recovery operations as an inherent part of disposal and suggest permitting the following operations for mercury wastes:

  - R4 – Recycling/reclamation of metals and metal compounds
  - R5 – 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

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Difference between Recovery and Treatment

- Recovery operations are those operations which may lead to resource recovery, recycling, reclamation, direct re-use or alternative uses
- Where the mercury is recovered for subsequent re-use, this is referred to as a recovery operation.
- By contrast, where the mercury is extracted for subsequent disposal operations, this is referred to as physico-chemical treatment

Steps on Recovery/Recycling

- Step 1 Pretreatment
- Step 2 Thermal Treatment
- Step 3 Purification

Types of Treatment

- Dry collection of phosphor powders from fluorescent bulb recycling (non-thermal)
- Multiple hearth furnace using carbon adsorption
- Pyrolysis of batteries
- Retorting with vacuum distillation
- Indirect Heated Vacuum Drying-vapors separation