Waste containing nanomaterials: Issues and possible work under the Basel Convention

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The Basel Convention on the Control of Transboundary Movements of hazardous wastes and their Disposal

Three pillars:

• **Minimize the generation** of hazardous wastes in terms of quantity and degree of hazard;

• **Control transboundary movements** of hazardous wastes and other wastes (conditions and the PIC procedure);

• Promote the **environmentally sound management** of hazardous wastes and other wastes
Wastes covered

- **Wastes** are substances or objects that are disposed of, intended to be disposed of, or required to be disposed of by national law.

- **Hazardous** wastes
  - Annex I (waste streams, waste constituents) and Annex III (hazardous characteristics), as further elaborated in Annexes VIII and IX
    - Defined nationally

- **Other** wastes
  - Annex II
Work to promote the environmental sound management (ESM) of hazardous wastes

- Technical guidelines specific to waste streams or to disposal operations

- Framework on ESM and tools for its implementation
Possible work on waste containing nanomaterials

➢ Decision BC-13/17:

➢ Secretariat to prepare:

- Report on issues related to waste containing nanomaterials and options for possible work under the Basel Convention within its scope
- Compilation of information on existing activities that address such waste

➢ To be considered by Open-ended Working Group at its 11th meeting (Geneva, 3-6 September 2018)
National Reporting under the Basel Convention

Benefits

• Stimulate discussion of nanomaterials and their potential effects on human health and the environment in the international arena

• Promote consideration of nanosafety throughout the lifecycle: what happens to nanomaterials after disposal?
Issues to be explored

• Obtaining a clear picture as to which waste containing nanomaterials are arising and the quantities that need to be managed

• Understanding how waste containing nanomaterials need to be managed to ensure ESM
  – Hazardousness of waste containing nanomaterials
Key conclusions from Nanomaterials in Waste Streams (OECD, 2016)

• Possible sources entering waste treatment facilities are known but types and quantities of nanomaterials in waste streams unclear;

• State of the art facilities may be able to capture a large share of nanomaterials in waste – more research needed on wide range of nanomaterials

• Fate of nanomaterials when sub-standard waste treatment technologies are used (uncontrolled landfills) unknown

• Nanomaterials may affect effectiveness of some waste treatment processes
Options for work under the Basel Convention?

- Enhance data collection on the generation of waste containing nanomaterials
- Hazardousness of waste containing nanomaterials
- Better understand disposal routes
- Effectiveness of disposal technologies
Parties and others are invited to provide information on existing activities that address waste containing nanomaterials.

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Thank you