“Nanomaterials: informed decision making process”

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Side Event OEWG14 Basel Convention
Geneva, Switzerland, June 25th 2024

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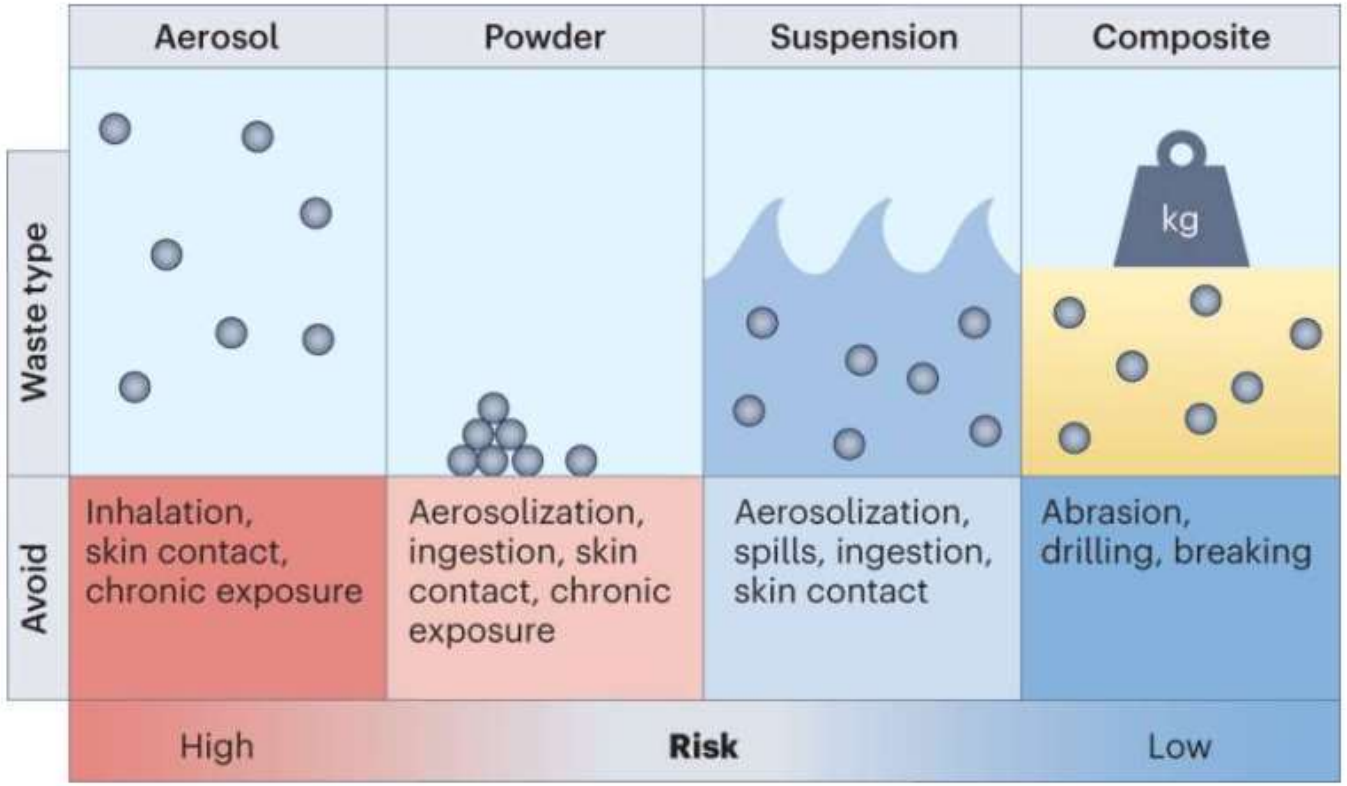
Waste containing nanomaterials



Hazards and risks for different types of nanowaste. Credit: *Nature Nanotechnology* (2023). DOI: 10.1038/s4156...

Waste containing nanomaterials is an emerging safety concern worldwide, requiring ESM and regulation that has yet to be established.

The waste generated falls into three main categories:

(a) Manufacturing waste materials (by-products of the manufacturing process consisting of engineered nanomaterials (ENMs) as a single fraction);

(b) End-of-life nano-enabled products;

(c) Waste (unintentionally) contaminated with ENMs (e.g. containers for cosmetics)

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Nanomaterials Basel Convention

UNITED NATIONS

UNEP

BC

UNEP/CHW/OEWG.11/INF/24

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Open-ended Working Group of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
Eleventh meeting
Geneva, 3–6 September 2018
Item 3 (b) (v) of the provisional agenda*
Matters related to the work programme of the Open-ended Working Group for 2018–2019: scientific and technical matters: waste containing nanomaterials

Report on issues related to waste containing nanomaterials and options for further work under the Basel Convention

Note by the Secretariat

As referred to in the note by the Secretariat on waste containing nanomaterials (UNEP/CHW/OEWG.11/8), a report on issues related to waste containing nanomaterials that may be relevant to work under the Basel Convention and options for further work that may be carried out under the Convention related to such waste is set out in the annex to the present note. The present note, including its annex, has not been formally edited.

Basel Convention Report 2018
Item III. Sub-item d. Effects of engineered nanomaterials on human health and the environment

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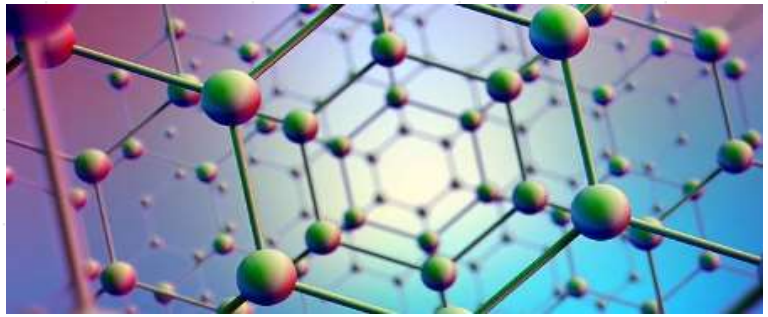
Importance of the Informed Decision Making Process (IDMP)



Risk Assessment and Management:

- **IDMP allows for thorough risk assessments to identify potential toxicological effects, exposure pathways, and the populations at risk.**
- Nanomaterials can persist in the environment and potentially disturb ecosystems. Decisions informed by scientific evidence help predict their environmental behavior, bioaccumulation, and long-term ecological effects.

Regulatory Compliance:

- **IDMP ensures compliance with environmental regulations and standards, reducing legal liabilities and fostering best practices.**
- Basel Convention: IDMP supports the goals of the Basel Convention by ensuring that nanomaterial waste is managed, transported, and disposed of safely and legally.

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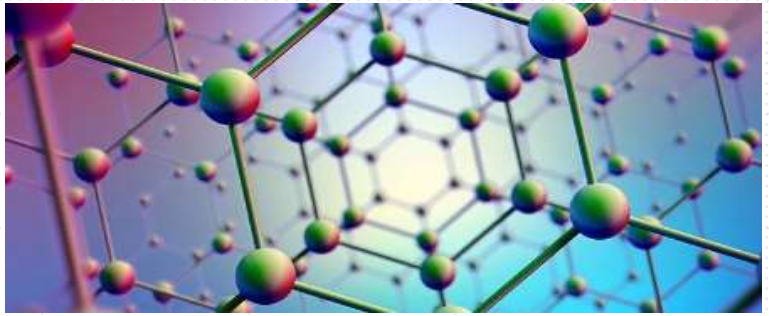

Sustainability:

- Effective waste management practices derived from IDM can enhance resource efficiency, promoting the recycling and reuse of nanomaterials, prevent or minimizing wastes.

Transparency:

- **Providing clear and accurate information about the risks and benefits of nanomaterials in key to build public trust.**
- Involving stakeholders (including the public, industry, and policymakers) in an informed and participatory decision-making process ensures that diverse perspectives are being considered.

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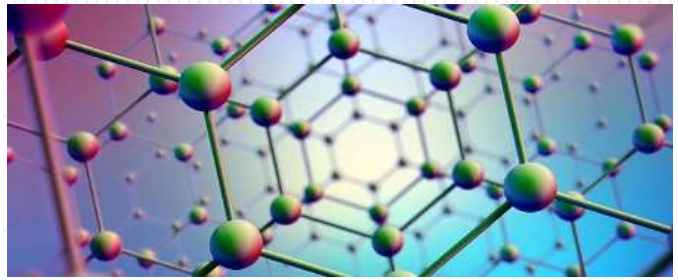

Resolution UNEP/UNEA.1/5 on Chemicals and Waste: **It is necessary to improve access and generation of information** plus the exchange of relevant and understandable data throughout the supply chain for decision making with greater information and political and public awareness.

Global Framework on Chemicals (GFC) Objectives: Requires the prevention of illegal trade and trafficking of chemicals and waste, the implementation of national legal frameworks, and the phasing out by 2035 of highly hazardous pesticides in agriculture. Also the transition to safer and more sustainable chemical alternatives, the responsible management of chemicals in various sectors (including industry, agriculture and healthcare) and **improving transparency and access to information on chemicals and its associated risks.**

2nd Meeting of the Executive Board GFC; 12-14 June 2024 Geneva

Draft guideline for the project request cycle on the Facility *"Integration of sound management of chemicals and waste into* ***sustainable development Decision-Making Processes****, as appropriate"*

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Global Framework on Chemicals (GFC)
Strategic Objective B on Comprehensive and Sufficient Knowledge, Data, and Information:

- Goal B1: By 2035, data and information on the properties of chemicals will be accessible;
- Goal B2: By 2035, stakeholders will make information available on chemicals in materials throughout the entire value chain;
- Goal B3: By 2035, stakeholders will generate and publish data on the production of chemicals;
- Goal B4: By 2035, stakeholders will apply appropriate guidelines and standardized tools;
- Goal B5: By 2030, education and training on chemicals with a gender perspective will be implemented;
- Goal B6: By 2030, all governments will have implemented the Globally Harmonized System (GHS) as applicable to their national circumstances;
- Goal B7: By 2030, stakeholders will generate and share monitoring data on the concentrations and exposure to chemicals in humans, biota, and the environment, disaggregated by relevant health determinants.

Relevant issues:

- Given the anticipated increase in the production of engineered nanomaterials and potential environmental emissions, policies should be based on the **precautionary principle** to regulate their waste. There should be **an informed and participatory decision-making process** that includes all relevant stakeholders.
- There is a rapid and diverse growth of engineered nanomaterials. It is difficult for regulators and risk assessors to **understand the potential for exposure to nanomaterials** and whether methods used for assessing risk of conventional chemicals can be used for nanomaterials. **It is important to have studies in the Latin American region about these risks in order to make informed and science-based decisions in this regard.**
- **Technical guidelines that provide information on best available techniques and best environmental practices** would be needed, specially within the framework of the Basel Convention and for developing countries **to have the necessary information to develop regulation and adequate management procedure especially for developing countries**.

¡Thank you!

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