Chemicals of concern

Session 3 – looking across product sectors to track and manage chemicals of concerns. A thought starter

Sandra Averous and Jacqueline Alvarez – 16 January – Project Inception workshop, Geneva
Lifecycle thinking

**INPUTS:** energy, water, materials, chemicals, land

**OUTPUTS:** greenhouse gases, emissions, effluent, solid waste

**RESULT:** climate change, resource depletion, air, water and soil pollution
A value chain approach for each sector

HC / CoC impact on workers

HC / CoC impact on environment overall

HC/CoC impact on informal sector, and in particular women and children.

HC = Hazardous chemicals, CoC = Chemicals of concern
# Chemicals of Concern

## Table 1: Chemicals of Concern Widely Used in the Buildings, Electronics and Toys Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>International pollution reduction action already agreed (MEAs)</th>
<th>Scientific evidence exists to advance action</th>
<th>Emerging scientific evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>POPs - Brominated flame retardants – plastics, foams ; PFOS – paints, textiles; HBCD – insulation; SCPP – coatings, paints, cables Mercury – switches</td>
<td>Additional RoHS restricted chemicals - cadmium, hexavalent chromium and flame retardants such as PBB Lead batteries PFCs – paints, textiles</td>
<td>Phthalates (DEHP, BBP, DBP, DIBP) Restricted substances on individual electronics company lists</td>
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<tr>
<td>Toys</td>
<td>POPs such as Brominated flame retardants from recycled plastic and PFOS in textile toys</td>
<td>Lead (jewellery, paint and batteries) Cadmium in batteries Perfluorinated chemicals – paints, textiles</td>
<td>EDC in plastics: Phthalates and Bisphenol A Polycyclic aromatic hydrocarbons (PAHs)</td>
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</tbody>
</table>
Sub-categories of focus:

Buildings:
• insulation materials,
• coatings,
• carpets,
• furniture
• lights?

Electronics: TBD

Toys: Plastics toys, Textiles Toys, Electronic toys....
Root causes and barriers to manage Chemicals of Concern

- Lack of transparency in supply chains
- Lack of economic and market based incentives for producers to track and manage hazardous chemicals in their products and supply chains
- Lack of regulatory drivers for increased transparency
- Lack of quantitative sustainability assessment of hazardous chemicals and their alternatives, leading to ‘regrettable substitutions’
1. What are the criteria for selecting CoC?

2. What should be the products/material in focus, for each of the 3 sectors?

3. Which additional Chemicals of Concerns (CoCs) in the 3 sectors do we need to consider: Buildings, Electronics and Toys?

4. Are there identified alternative substances to the identified CoCs?

5. Are there alternative business models and value chains, that would soundly manage these chemicals of concern?
Thank you

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