What are your chemical risks?
The business case for knowing chemicals in products & supply chains
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Questions for the presenters?

- Please type questions into the “Questions” Pane during the webinar.
- The moderator will ask your questions after presenters finish.
- Ask unanswered questions at bizngo@cleanproduction.org.
Chemicals in Products programme: background / status

Kevin Munn
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10 February 2015
• 1972 – UN General Assembly directed UNEP to serve as the coordinator of environmental issues and catalyst for environmental action and awareness within the United Nations System.
International chemicals governance: chemical characteristics and life cycle

- **SAICM**: Strategic Approach to International Chemicals Management
- **ILO 170, 174**
- **Rotterdam Convention**: Prior informed consent
- **Basel Convention**: Transboundary Movements of Hazardous Wastes and their Disposal
- **Montreal Protocol**: Ozone Depleting Substances
- **Stockholm Convention**: Persistent Organic Pollutants

Chemical ‘coverage’

- Heavy metals
- Other chemicals of concern
- Specific Halogenated Compounds

Chemical ‘life cycle’

- Production
- Trade
- Use
- Waste & disposal
SAICM

Strategic Approach to International Chemicals Management (SAICM)

– Overall objective: “by 2020 chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health” (2002 World Summit goal)

– Established in 2006 at the first International Conference on Chemicals Management (ICCM)
  • ICCM is SAICM’s Governing body - ICCM4 in 2015

– Voluntary, multi-sectoral and multi-stakeholder approach (governments, business and industry, civil society, labour)

– SAICM text: political declaration, policy strategy with specific objectives, plan of action

(http://www.saicm.org)
Chemicals in Products project – analysis phase

• ICCM2 (2009) identified chemicals in products (CiP) as an emerging policy issues for global cooperative action (others: nanotechnology, electronics, lead in paint, and perfluorinated chemicals)
  – CiP project basis in SAICM objective on Knowledge and Information (Para 15b) - to ensure that “information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user friendly and appropriate to the needs of all stakeholders”

• Invited UNEP to lead the CiP project to:
  – Investigate existing systems of CiP information exchange
  – Identify stakeholder needs for CiP information and gaps
  – Recommend to ICCM3 (Sept. 2012) actions to address the issue
Chemicals in Products project – the CiP programme

- ICCM3 (2012) – Agreed to develop a *CiP programme* to “facilitate and guide the provision and availability of, and access to, relevant information on chemicals in products among all stakeholder groups”
  - Identify roles and suggest responsibilities of the major stakeholder groups
  - Develop guidance on what chemicals information could be transferred and how
  - Life-cycle; consider best practices; implement pilot(s)
Stakeholders have the information they need to make a sound chemicals management decision.
The CiP programme – enabling sound chemicals management

By 2020 chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health

Policy basis - SAICM 2020 goal

High level objectives
- OPS Objective 15(b)

Objectives of Chemicals in Products information exchange

CiP programme Guidance (general)

Sector specific Guidance (if needed)

Chemicals in products information exchanged

Sound chemicals management actions

“information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user friendly and appropriate to the needs of all stakeholders”

KNOW AND EXCHANGE IN SUPPLY CHAINS information on what chemicals are in your products, associated hazards and sound management practices.

DISCLOSE information to stakeholders outside the supply chain to assist in informed decision making.

ENSURE that information is accurate, current, verifiable and accessible.
A textile sector pilot of the CiP programme

Policy basis - SAICM 2020 goal

High level objectives
- OPS Objective 15(b)

Principles of Chemicals in Products information exchange

CiP programme Guidance (general)

Sector specific Guidance (as needed)

Chemicals in products information is exchanged

Sound chemicals management actions

Ø ZDHC
THANK YOU

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CiP project URL:
http://www.unep.org/chemicalsandwaste/UNEPsWork/
ChemicalsinProductsproject/tabid/56141/Default.aspx
Open-ended Working Group of the International Conference on Chemicals Management
Second meeting
Geneva, 15–17 December 2014

Emerging policy issues and other issues of concern:
report on progress on emerging policy issues:
chemicals in products

Making the business case for knowing chemicals in products and supply chains

Note by the secretariat

The secretariat has the honour to circulate, for the information of participants, a report received from the Inter-Organization Programme for the Sound Management of Chemicals on making the business case for knowing chemicals in products and supply chains (see annex). The report is reproduced as received by the secretariat, without formal editing.

CORE BUSINESS

Take Ownership – directly traceable to your organization
[supply chain]

Take Action – impacts you contribute to + have problem solving competence
[sector initiatives]

Take Interest – ripple effects - no special competence, but capacity to inform
[public policy]
Beauty and Personal Care Products Sustainability Summit

The chart illustrates the impact of chemicals on health and the environment, focusing on transparency. The main categories include:

- Waste & disposal of products
- Packaging
- Consumer behavior
- Extraction of raw materials (e.g., palm oil)
- Labor standards/livelihoods in the supply chain
- Energy use & GHG emissions during production
- Water & energy consumption during product use
- Animal testing
- Women's self-esteem
- Other

Option 1.

Material ingredient reporting: The manufacturer has published complete content inventory for the product
Global Product Regulations on the Rise!

Companies facing increasing...

- Regulatory Complexity
- Effort to Fulfill Obligations
- Customer Demands

- ELV/GADSL 2000
- RoHS
- REACH
- RoHS 2
- Conflict Minerals
- EU Battery
- 2005 2006 2007 2008 2009 2010 2011 2012 2013 TODAY

Source: Compliance and Risks 2014
PASSIVE TO ACTIVE

- Benefits – lower initial investments
PASSIVE TO ACTIVE

- **Benefits** – lower initial investments
- **Costs** – recalls, non-compliance, lost sales/markets
Costs of Not Knowing – Fines for Non-Compliance

- Walmart: $81.6 million
- Target Corp.: $22.5 million
- Walgreen Co.: $16.6 million
- CVS Pharmacy: $13.75 million
Product Recall – Mattel

- U.S. – 2007
- more than 9 million toys, including Barbie dolls
- recalled due to lead in paint
- $110 million in costs
- Stock price down 18% (August-December 2007)
Non-Disclosure: SIGG USA Bankruptcy

- SIGG sales soar: consumers switch from polycarbonate to aluminum to avoid BPA (2007)
- BPA in SIGG linings public (2008)
- Consumers stop buying
- Retailers -- REI, Patagonia, Whole Foods Market -- pull bottles
- SIGG USA (subsidiary of SIGG Switzerland) files for bankruptcy with $13 million in liabilities due to failure to disclose BPA (2011)
Lost Sales & Market Share – Johnson & Johnson

- NGOs report formaldehyde, 1,4-dioxane in baby care products (2009)
- Impacts in China
  - survey of consumers: 75% of ~120,000 stopped buying J&J products
  - retailers remove J&J bath products: e.g., NGS Supermarket Group - 3,500 stores
- Market share for baby products – down from 64.3% to 55.9% by 2010
PASSIVE TO ACTIVE

- Costs – higher upfront
PASSIVE TO ACTIVE

• Benefits – compliance costs↓ sales, brand rep ↑

• Costs – higher upfront

Value

Investment
Resources required to react to new substance restrictions typically follow a 'sawtooth' line, and increase over time.

- Emerging new restrictions result in spikes of NRE and business process change.
- Resource levels rise over time to sustain compliance.

**Challenge:**
Meet increasing requirements with limited resources.

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Slide courtesy of Brian Martin, Seagate
Seagate Costs of Managing Full Material Disclosure and Conflict Mineral Data

Seagate invested in CAS* system and developed full materials disclosure ("FMD") strategy to deal with changing requirements.

Increasing restrictions and demands for data will impact resources unless new tools and standards are released, so Seagate is actively engaged in development activities.

Seagate is able to respond quickly to changing substance restrictions.

Seagate effectively manages substance restrictions at low cost and resource levels.

*CAS - Compliance Assurance System, Seagate's materials content compliance database

Slide courtesy of Brian Martin, Seagate
Using data compiled from supplier FMD, Seagate can assemble a bill of substances for our products.

The Seagate supplier specification restricts almost 2000 CAS numbers.
Shaw Industries – EcoWorx Carpet Backing

- Eliminated
  - PVC
  - Phthalate plasticizers
  - Antimony trioxide flame retardant
- Comparable cost
- 40% recycled content
- Equal to improved performance
- Customers preferred EcoWorx, within 5 years, 1999-2004, ended all PVC use
PASSIVE TO ACTIVE

Passive Strategy – strive for compliance

Benefits - Delay
• low initial investments

Costs – Crisis

Chemical Risks -- hidden liabilities of chemicals in products & supply chains

• non-compliance
• product recalls
• lost sales, market share, valuation
• product reformulation under crisis conditions
• supply chain disruption
• brand reputation tarnished
PASSIVE TO ACTIVE

Benefits - Value
• ↑ sales, market valuation, brand reputation, & supply chain reliability
• Innovative products
• ↓ costs of compliance

Costs – Investment
• Invest in:
  o knowing chemicals in products & supply chains
  o systems to collect data (either directly or 3rd party)
  o product reformulation ahead of regulations & market demand
• Train suppliers
• Test products
Thank You!

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