HBCDD in Stockholm and Basel convention
A policy perspective
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STOCKHOLM AND BASEL CONVENTION

Stockholm Convention:
- Since 2004 with 181 Parties
- Elimination and irreversible destruction of POP's
- 12 initial POPs and 12 new POPs
- EU POP Regulation 850/2004

Basel Convention:
- Since 1992 with 186 Parties
- Control transboundary movement of hazardous wastes
- List of wastes and of allowed disposal operations
- EU Waste Shipment Regulation 1013/2006
HBCDD: how did it start?

2008: Proposal Norway to list HBCDD as a POP

2010: Risk Profile. POP Review Committee concludes:
- HBCDD is a VPvB, it is a POP with long range transport
- Significant adverse human health and environmental effects
- Global action is warranted

2011: Risk Management Evaluation and 2012: Addendum
- Long-term source, especially in EPS-waste
- Specific exemption needed, including transition time for EPS in buildings

2011: EU list HBCDD as SVHC in Annex XIV REACH
- Sunset date August 21, 2015, authorisation needed!
Developing a NL policy perspective

2011: First contacts NL CA with FR/EPS industry on HBCDD in EPS

2013: preparation of CoP 6 Stockholm Convention in the EU
   -> NL proposal for recycling exemption: feasibility!
   -> Political choice in NL: recycling or incineration?
   -> Ministerial outcome: maintain recycling option!

2013: COP 6 -> No recycling exemption
   -> Only 5 year exemption for use EPS in buildings (2019)

2014: Authorisation HBCDD in ECHA -> 2 year review period
2016: COM Decision: authorisation valid until August 21, 2017
2015: NL CA supports CreaSolv™ Process in Geneva, Brussel and NL
Challenges at UN and EU level

Setting the low POP content concentration for HBCDD:
- > 1000 ppm a POP waste
- > All waste streams for recycling > 100 – 1000 <
- > All products < 100 ppm

State of play waste management in EU

Waste Shipment Regulation:
- > Is EPS containing HBCDD > 1000 ppm hazardous waste?
- > Legal and technical problems for incinerators in DE
- > June 2017 DE: status non-hazardous waste

Bigger picture: Interface chemicals, products and wastes policies
In general, countries with landfill ban achieve higher recycling rates

Treatment of post-consumer plastics waste 2014 (EU-28 + CH/NO)
Source: Consilic
Interface Examples

- Pb and Cd in rigid PVC
- DEHP in soft PVC
- DecaBDE mainly in HIPS and ABS
- PAH in rubber infill
- POPs in electronics
How does PS Loop fit in?
Basel Convention: Decision at COP 13 May 2017

Technical Guidelines on POP wastes:
- Environmentally sound management of POP wastes
- Status of soft law, recognition as disposal operation
- CreaSolv™ Process accepted as pretreatment technology
- D4 (dissolution, distillation) and D10 (incineration)
- Followed by R2 (solvent recovery) and R3 (PS recovery)
NL Waste Management Plan

Sectorplan 85: EPS
- Implementing Stockholm/Basel/EU obligations
- Separate collection and recycling of ‘clean’ EPS
- Still a draft, publication early 2018?

2016 Inventory of size and value of HBCDD in EPS/XPS wastes in NL
- 6 productgroups, 8 waste streams, recycling and disposal options
- Overview of quantities and costs
- Degree of ‘cross-contamination’ unknown

2017 Inventory of concentrations of HBCDD in a number of product and waste streams
- Massflow and opportunities for improvement
- Results early 2018
The way forward

Feasibility is key for success!

EU-wide exemption for plastics: non-hazardous wastes!

Circular Economy:
  -> Interim policy needed at the interface of chemicals and wastes
  -> PS Loop mentioned as ‘bulls eye’ by Commission!

Start-up PS Loop plant in 2018
  -> Teething troubles to overcome
  -> Potential for strong growth
Create a number of PS Loop plants in the EU the next decades!
Figure 6-97: Estimated annual quantity of HBCD in EPS waste from construction and demolition that will be disposed of until 2060 (calculation based on the consumption figures provided in Table 6-70; lifetime 50 +/- 25 years; 1% cut offs becoming waste at the construction site taken into account)
**PS Loop**

The key to happiness is having dreams.

The key to success is making them come true.

Congratulations