



CHEMTrust

Protecting humans and wildlife
from harmful chemicals

Circular Economy & Chemicals

CHEM Trust position

Dr A. Michael Warhurst
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“Closing the Loop”

EU Commission stakeholder conference
25th June 2015



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About CHEM Trust

- A charity working at UK, EU & Global levels to protect humans & wildlife from harmful chemicals
- Working with scientists, technical processes and decision makers, in partnership with other civil society groups
- Focus on identification of, and action on, endocrine disrupting chemicals
- See our blog & twitter for more: www.chemtrust.org.uk

The screenshot shows the CHEMTrust website header with the logo and navigation menu. The main content area features a news article titled "EU Chemical Agency committee agrees that Bisphenol A in receipts poses risk to workers" by Michael Warhurst, dated June 11, 2015. The article text states that the hormone disrupting chemical Bisphenol A (BPA) is used in many till (cash) receipts, and the French government has proposed that the EU should ban this use. The article also mentions that the European Chemical Agency (ECHA) has agreed with the French government that this chemical presents a risk to workers. Below the article is a "Share this:" section with social media sharing buttons for Twitter (28), Facebook, LinkedIn, Pocket, Email, and Google+. To the right of the article is a sidebar with a "HORMONE DISRUPTING CHEMICALS?" section featuring a "Hormone Disrupting Chemicals FAQ" graphic and a link to "What are Hormone Disrupting Chemicals?". Below that is a "POPULAR POSTS" section with three links: "EU Chemical Agency committee agrees that Bisphenol A in receipts poses risk to workers", "Medicines in the Environment: A Growing Threat to Wildlife and Drinking Water", and "The EU claims that TTIP won't reduce EU food safety standards – but is this true?". At the bottom of the main content area, there is a link to "Chemical found in till receipts affects parenting behaviour in mice".



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Chemicals: Closing the loop

1. In assessing safety of chemical use in a product, assume 100% recycling, i.e. a fully circular economy
 - also make conservative assumptions on potential use of recycled materials (e.g. in food packaging)
2. Chemical assessment should be rapid & future-focussed
 - Need faster assessment, restriction, authorisation processes
 - Companies must avoid moving from one problem chemical to another in a group; e.g. use ChemSec SIN list and SINmilarity tool
 - Chemicals get more toxic, new exposures emerge, we are always dealing with 'currently estimated toxicity'; see EEA's "Late Lessons from Early Warnings" [6]
3. Better availability of information on hazardous chemicals in all articles, and labelling *if* any hazardous materials are permitted to re-enter the economy
4. Some materials should be removed from the loop:



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Don't recycle some materials

- Three destinations for a waste containing hazardous chemicals:
 - (1) Landfill or (2) Incineration
 - (3) Our homes, workplace and living environment
- Shouldn't assume recycling always best option when waste contains hazardous chemicals
 - Balance value of resource vs concern re hazard, e.g. BPA in thermal paper
- Landfill shouldn't be dismissed
 - May be the safest place for a material containing hazardous chemicals
 - In case of plastics, analysis shows if not recyclable then landfill preferable to incineration for climate reasons, under typical Swedish/EU conditions (Eriksson & Finnveden, Energy & Environmental Science, 2009.) NB: Doesn't include carbon capture & storage role of landfill.
- Major risk of scandal, loss of confidence in recycled products
 - Once 'not waste', may end up anywhere – e.g. plastic pipes being used as a toy in a kindergarten
 - Already bad examples out there, don't want to create a loss of confidence



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Summary

- Assume 100% circularity
- Faster assessment and regulation, future-focussed approach
- Information on hazardous chemicals in articles, clear labelling *if* any hazardous materials are permitted to re-enter the economy
- Don't recycle some materials
- **Big risk of loss of confidence if EU gets it wrong**
- More detailed presentation on this subject at:
 - <http://www.chemtrust.org.uk/wp-content/uploads/chemtrust-circular-economy-chemicals-24th-june-2015.pdf>