Heavy Metals Continued Presence in Consumer Packaging



Packaging!

Packaging is one-third of the waste stream

- Most packaging is a single-use product
- Packaging is a strong candidate for recycling
- Packaging can contain toxic metals – impacts on waste and recycling



CONEG SRC

Coalition of Northeast Governors-Source Reduction Council





Toxics in Packaging!



Model Toxics in Pkg. Law

- Prohibits intentional introduction of any amount of the four regulated metals
- Limits incidental presence of the four metals to 100 ppm (0.01%) total concentration
- Applies to finished packaging and each individual packaging component
- Limited exemptions available, e.g., recycled content, certain reusable packaging
- Model approved by CONEG Governors Jan. 3, 1990; enacted in Maine April 17 and New Hampshire April 19, 1990

How do the laws work?

Creates supply chain responsibility
Producer companies self-certify based on:

- > analytic tests
- » supplier certification
- Provide Certificate of Compliance to customers (downstream producers), and states on request
- Most laws provide state with authority to levy monetary penalties against packaging and product producers and distributors





Maintains/Updates the model law Coordinates implementation of state laws to promote consistency among states (and saves states lots of time!) Single point of contact for companies (save companies time) Packaging screening projects

members/non-members/no law



Success Stories

Lead foil wine bottle wrappers (not addressed by FDA as food contact issue) > Major manufacturer: cadmium pigment in yellow plastic container > Lead solder in non-food cans (e.g., paint) Electronics and batteries in product packaging and displays Lead and cadmium in flexible plastic film

Screening Projects/Publications

<u>2006-2007:</u>

Screened 355 pkgs; 16% overall failure, average Cd 449 ppm, Pb 1,740 ppm 2009:

Screened 409 pkgs; 14% overall failure, 52% of imported PVC



2011: Laboratory Round Robin Testing: Assessing Performance in Measuring Toxics in Packaging – 16% of testing for Pb and Cd > 25% off

2012: Testing of packaging "Cheap Junk from China" showed a "propensity" (almost 40%) to contain the restricted metals.





Screening of Inks & Colorants (screened 125 bags; 3 failed big-time, but 17% failed in 2007)







Evaluated test methods for determining total conc. of regulated metals in glass matrix packaging (need SW-846 Method 3052, hydrofluoric acid)

2017 PVC Report

> Approx 20 products found with PVC packaging that contains Cadmium; no Lead Includes five suppliers to one major retailer > Home furnishings, housewares, pet toy and chew packaging made overseas Several companies withdrew significant inventory from stores and distribution chain

Other recent findings in glass...

High % of bottles from Argentina - Malbec! ③





Ongoing Work of TPCH & Next Steps

✓ Updating model legislation?

✓ Screening projects

New member recruitment

www.toxicsinpackaging.org

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