Awareness raising for policy makers: Wastewater to drinking water - the case Windhoek (Namibia). What lessons for circularity transitions?

Oliver Keserue, Veolia, Department of Technical and Scientific Expertise
WINGOC (Windhoek Goreangab Operating Company
20 year PPP: 67% Veolia, VATech Wabag 33%
Waste Water to drinking water
21,000 m³ (¹/₃ of demand)

https://www.youtube.com/watch?v=t15FsW-Zl-c
**REACH**

EU system registration for all substances covering identification, information on production and potential use and safety assessment.

- **Candidate List** (annex XIV) of Substances of Very High Concern (SVHC) not allowed or with authorization. In case of, it requires:
  - provision of Safety Data Sheet (SDS)
  - To notify ECHA for authorization if substances present above 0.1% by mass
- **Restriction list** (annex XVII) of SVHC allowed with limitations (concentration, use, …).
- **Authorization list** (Annex XIV): authorization is required to allow the use the substance

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**Waste Framework Directive (WFD)**

SCIP (Substances of Concern In articles as such or in complex objects Products) is the database established under the Waste Framework Directive (WFD) for registration on substances of very high concern (SVHCs) of the Candidate List (REACH) in a concentration above 0.1% by mass.

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**Packaging Waste Directive (94/62/EC)**

Requirements on packaging to permit packaging recycling.

- **Heavy metal limit**: sum of Pb, Cd, Hg, Cr < 0.01% (100 ppm)
- The **compliance is mandatory** for applications in the packaging of “home care” and “body care” products

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**Cosmetic Regulation (1223/2009)**

- List of restricted substances
  - Threshold = 10 ppm
- List of prohibited substances as CMR
  - 0.015 ppm for leave-on products
  - 1 ppm for rinse-off products
- Tolerance regarding unintentional added molecules if unavoidable and if they do not affect safety for consumer

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**CLP Regulation (1272/2008)**

Substances Classification for Labeling and Packaging

- Supplier has to indicate substances present above 0.1% by mass.
- A specific threshold of 0.01% (100 ppm) for specific sensitizers (respiratory and skin sensitizers category 1A)

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**Detergents Regulation (648/2004)**

No restriction on plastic packaging but rather focused on detergents themselves.

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**Biocides Regulation (528/2012)**

Linked with REACH and CLP regulation (1272/2008) restrictions.