POPs limits in wastes / basic criteria

Wastes and Low POPs content

Basic approach to establishment of Low POPs Content Level:

- POPs waste is **NOT ALLOWED** to be **RECYCLED** (Article 6, Stockholm Convention)[1]
- Current (EU) Low POPs Content Levels for PCDD/Fs and PBDEs are established on principle TO ALLOW continued RECYCLING of wastes containing these POPs (e.g. waste incineration fly ash, and/or e-waste plastics)

1) (iii) Not permitted to be subjected to disposal operations that may lead to recovery, recycling, reclamation, direct reuse or alternative uses of persistent organic pollutants; and (Article 6,Stockholm Convention)

Food chain

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Incinerator fly ash (and other dioxin waste) – weak limits poison food

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Dioxin in waste
3,900 pg TEQ/g dry matter

↓

Dioxin in soil
50 pg TEQ/g dry matter

↓

Dioxin in eggs
30 pg TEQ/g lipid

Less than current provisional limit (LPCL) of 15,000 pgTEQ /g

12X EU limit!

- „In several demonstrated cases processing/disposal of waste containing PCDD/Fs between 20 and 12,000 pg TEQ/g (below LPCL of 15,000 pg TEQ/g)

  led to contamination of the food chain (eggs or poultry meat) up to levels >20-times higher than the suggested EU limit for PCDD/Fs in food (2.5 pg TEQ/g fat). Levels from reference sites (background levels) in free range chicken eggs was exceeded up to 280-times."

- Petrlik J, Katima JHY, Bell L, Behnisch PA, Wangkiat A: High levels of PCDD/Fs around sites with waste containing POPs demonstrate the need to review current standards. Dioxin 2018 Conference, 25 – 31 August 2018, Krakow.

Incinerator fly ash – losing control with many uses (allowed due to weak LPCL)

- Agriculture
- Embankments
- Roads and sidewalks
- Construction products
- Cover layer at municipal landfills

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Scope of the problem – PCDD/Fs in waste

(incineration fly ash only)

IPEN estimates
~7-10 kg TEQ/yr dioxins in fly ash
(100 kg TEQ/yr total dioxin releases)

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What are the consequences of weak hazardous waste limits?

Large amounts of POPs can be released

Permits use of POPs in ways that increase exposure

(POPs) waste can be exported to developing countries

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Low POPs Content – IPEN proposals

- PCDD/Fs (dioxins) including DL PCBs -1 ppb (ng TEQ/g)
- and 0.05 ppb limit for untreated waste use on surface
- PBDEs (including deca-BDE) – 50 ppm (mg/kg; µg/g)
- HBCD – 100 ppm
- SCCPs – 100 ppm
- PFOA/PFHxS – 10 ppm

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TOXIC ASH POISONS FOOD CHAIN

https://ipen.org/documents/toxic-ash-poisons-our-food-chain

https://ipen.org/documents/pops-eggs-report-africa

https://ipen.org/documents/pops-recycling-contaminates-childrens-toys-toxic-flame-retardants

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CREPD

Thank you - Gracias - Tack Arigato - Děkuji - Спасибо

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