



2nd ELFM Seminar in the European Parliament: 5 Lessons Learned

*Why we need to develop a broad Dynamic Landfill Management strategy
and vision for Europe's 500,000 landfills*

Dr. Peter Tom Jones (Coordinator EURELCO, ETN NEW-MINE)
Antwerp, WRF-COCOON Workshop, 26-02-2019



2nd ELFM Seminar in the EP – 20-11-2018



Download: <https://kuleuven.sim2.be/policy-brief-elfm-new-mine/>

Organisation:

- MEP Hilde Vautmans (ALDE)
- SIM² KU Leuven, EURELCO, CTF
- EU ETN NEW-MINE, Interreg Europe COCOON, Interreg NWE RAWFILL

60 expert participants

Topics:

- Short-term opportunities for landfill management & mining
- EU legislation/policies (LFD, Soil Directive, CE, climate targets) and landfill management & mining benefits

Lesson Learned #1 – ELFM Amendment to LFD was rejected by the EC as ELFM is a red line for the Eastern EU MSs



On 14-3-2017 EP voted YES to include Enhanced Landfill Mining in the EU Landfill Directive

- Amendment was **blocked** in May 2017 during Trilateral Meeting EP, EC, Council
- Why? Eastern EU Member States have **other, more pressing priorities** in waste management, such as the avoidance of landfilling and the setting up of basic recycling schemes

“The Commission shall further examine the feasibility of proposing a regulatory framework for enhanced landfill mining so as to permit the retrieval of secondary raw materials that are present in existing landfills. By 31 December 2025 Member States shall map existing landfills and indicate their potential for enhanced landfill mining and share information.”

Lesson Learned #2 – The EU Landfill Directive suffers from multiple blind spots

- For EU's historic landfills:
 - LFD **does not address historic landfills**, which predate LFD (1999): i.e. > 90% of EU's landfills
 - Existence of such a vacuum is mind boggling
- For Sanitary Landfills:
 - LFD offers **NO ANSWER to long-term liabilities**: aftercare funds are underfunded, → future remediation/mining less attractive
 - Long-term liability increasingly important as new threats, such as **climate change**, will impact landfills in coastal and alluvial areas, requiring remediative action in the future

"It is amazing how many people believe that monitoring and aftercare of EU landfills can stop. Funding needs to cover at least 30 years. But monitoring only stops when a landfill poses no hazard to the environment any more. An assessment method doesn't exist. Therefore, landfills in the EU cannot be discharged from aftercare and monitoring."

Heijo Scharff (Senior Advisor, AFVALZORG, The Netherlands)



Lesson Learned #3 – Prioritise incorporation of multi-phased concept of Dynamic Landfill Management in EU legislation

“Several ongoing EU-funded projects show that there is still much to learn about how to manage the EU’s many landfills in a sustainable and innovative way. These experiences are especially relevant as the European Commission is putting more emphasis on the transition to a circular economy, including in its proposals for the 2021-2027 cohesion policy. This will help Member States and regions to manage the transition and reap its benefits for regional development.”

Sander Happaerts (EC DG REGIO,
Belgium)



- Landfill paradigm needs to change from **LFD-linked, risk-based, static view to a comprehensive, long-term, multi-phased Dynamic Landfill Management (DLM) vision**, in which ELFM is the icing on the cake for some specific landfills in specific situations
- **Current EU legislation** does not accommodate this shift in any way (yet)
- Integrate the more encompassing DLM framework in EU legislation. DLM approach offers more straightforward solutions now, without major investments, while even creating some revenues from interim uses

Lesson Learned #4 – Prioritise a sound definition for the Dynamic Landfill Management concept

- COCOON stakeholders to prepare comprehensive definition for DLM, to be used by EU Institutions in future legislative work:
 - An **integrated framework** with multiple objectives: pollution prevention, land reclamation & restoration, new landfill void space, interim use of landfill surface, recovery of materials & energy
 - Highlight need for **cross-cutting approach** with respect to distinct EU policies and legislations



Photo: SIM² KU Leuven (Giorgian Dinu)

Lesson Learned #5 – Resource-recovery driven ELFM as one, more advanced component in broader DLM approach

- In a dynamic view on landfills, ELFM allows to **reintegrate landfilled waste** into the (circular) economy, if and when the time is right
- Despite 10 years of ELFM activities: **no formal reference** to ELFM in EU Policy documents
- ELFM definition and endorsement should be **integrated as one specific, more advanced component** in broader DLM approach, in line with EU's CE Action Plan

Academic definition of ELFM: “the safe exploration, conditioning, excavation and integrated valorisation of (historic, present and/or future) landfilled waste streams as both materials (Waste-to-Material) and energy (Waste-to-Energy), using innovative transformation technologies and respecting the most stringent social and ecological criteria.” (Jones et al., *JCLEPRO*, 2013)

