



Landfill Aftercare in Wallonia

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Legal aspects

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ISSeP and landfill sites : what do we do ?



Legal Framework - Aftercare



Walloon policies regarding Landfill mining



Conclusion



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Scientific Institute working on behalf of the Walloon Administration

Management of the landfill monitoring network

- Since 1998
- For the Environmental Police Dpt
- Non dangerous/inert/industrial landfill
- Environmental impact assessment
- Validation of monitoring performed by the owners
- ...

Landfill and old dumpsite aftercare

- Since 2016
- Methodology to assess the possibility to cease/to modify landfill aftercare (decisional flowcharts)
- Criteria to shift towards more passive aftercare activities
- ...



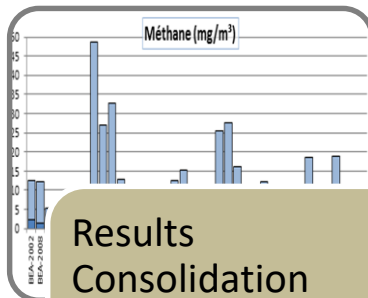
To adapt current law !

The landfill monitoring network – The entire value chain



Sampling campaigns

- Water
- Air



Results Consolidation

- Identification of non compliance
- Temporal evolution
- Impact assessment
- Campaign report



Recommendations

- Increased control
- Specific monitoring
- Corrective actions
- ...

+ Database including all the results of the monitoring performed by the owners for liquid matrix (since 1999 !)
(leachate, WWTP discharge, groundwater, surface water)





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Sanitary landfills vs Old dumpsites ?



**Sectoral Conditions related to the
operation of landfills**
(AGW 27/02/2003)

All the landfill sites in operation in 1999 and
listed in the « Sanitary landfill plan »

Waste Decree
(27/06/1996)

Dumpsites operated before 1999 and non
listed in the « Sanitary landfill plan »

Sanitary landfills and controlled dumpsites (Sectoral Conditions)

Current situation and reglementation :

- Landfill emissions stabilized at levels that are **not** compliant with their local environment (even after 30 years of aftercare)
- No clear indications of when aftercare can be ceased ...
« *until the landfill do not pose any threat to the environment and human health* »



Decisional flowchart to cease/modify
aftercare activities



Sanitary landfills and controlled dumpsites (Sectoral Conditions)

A very tricky situation !!

- Current regulation does not fit anymore with field constraints
For example : How to manage residual production of methane ?
- Difficulty to set general criteria for site-specific evaluation
What about risk evaluation ?
- Guidelines and criteria
 - Hierarchisation of emission management practices
 - Criteria allowing alternative treatment of biogas (other than combustion) or leachate
 - Standards to be met at compliance and exposure points

Sanitary landfills and controlled dumpsites (Sectoral Conditions)



Modification of the relementation



- Taking into account the evolution of landfilling practices and knowledge
- Including decisional flowcharts, guidelines and criteria to manage end-of-life of landfills and controlled dumpsites

Due date : end 2019 – beginning 2020

“Old dumpsite” (Waste Decrete)

- Several and successive modifications of the relementation led to a **legal vacuum**.
- Remediation only in case of “serious threat” !
- Regarding other dumpsites : no tool to manage aftercare

What about Landfill mining according to the walloon reglementation ?



Sectoral Conditions

Landfill mining is not mentionned but...

Art. 36. [...] Waste recovery on the landfill is forbidden but the specific operating conditions can set valorisation conditions (on site or offsite) as long as the **environmental benefit is demonstrated** by the owner.

Waste Decrete

Currently, no mention of the landfill mining...

Modification of the Waste Decrete (ongoing)
→ remediation of old dumpsites through waste recovery and valorisation !



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Walloon Waste and Resources Plan (March 22, 2018)



Framework and vision of Wallonia for the waste policy that will be carried out over the forthcoming years.

➔ LFM is included in the **central ideas** of the Plan (circular economy, waste to resources) as :

“Measure to recover certain waste currently not operated - for example, landfill mining - or to redirect waste towards more efficient sectors [...].”

Walloon Waste and Resources Plan (March 22, 2018)



➔ But also in the chapter dedicated to landfill aftercare !

Among different options such as :

- Activation of waste stabilisation
- Putting a time limit for operator's liability
- Improvement of bonding mechanism

The ability of the landfills to landfill mining and / or the profitability of the operation will be established on a case-by-case basis, but a coordinated reflection of Wallonia in this context seems essential.



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Wallonia keeps door open for landfill mining !

- ➔ Forthcoming review of the Sectoral Conditions
- ➔ Amendments of the Waste Decree
- ➔ Recent approval of the “Walloon Waste and Resources Plan”
- ➔ + **“Green Deal” in the framework of Rawfill !!**

But...

Much remains to be done in terms of communication and information !!



Thanks for your attention!

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Website of the Landfill Monitoring Network (in French): <http://environnement.wallonie.be/data/dechets/cet/>

Web : <http://www.issep.be> Suivez nous sur



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