TOGETHER WE MAKE TOMORROW MORE BEAUTIFUL
How to tackle all former gassites in Flanders?

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Summary

- Introduction – Soil Policy in Flanders
- History of gas manufacturing plants in Flanders
- Tackling all former gassites?
  - Why?
  - How?
    - Inventory
    - Prioritization
    - Investigation
    - Remediation
Introduction - Flanders

- Environmental legislation is different in Flanders, Brussels and Wallonia
Development of soil legislation in Flanders

- Start Decree on Waste Management 1981
- First Decree on Soil Remediation in 1995
- New Decree on Soil Remediation and Soil Protection in 2008
Dual aim of the soil legislation in Flanders

Remediate **historical** soil contamination
- Only when a risk
- Priority but before 2036
- Risk elimination

Prevent and clean up new soil contamination
- When exceeding standards
- Immediate action
- Make it clean (guide values)
Key instruments to reach this goal

- Soil investigations to get a better idea of the real situation:
  - Exploratory soil investigation for each:
    - transfer of 'risk'land
    - closure of risk activities or periodically for existing risk activities
    - in case of bankruptcy
  - Investigations done by qualified experts
  - Soil = fixed part of the ground + groundwater
Key instruments to reach this goal

- Remediation plan/project: always BATNEEC
- Soil Remediation objectives
  - new contamination: guide values
  - historical contamination: remove the risk
- Soil remediation project = permit
- Soil Certificate with end statement
Key instruments to reach our goal

Solution to prevent blocking the process (obligation versus liability)

- **Operator, user or owner** of the land has the **duty** to clean up
- **Multi-stage** approach in obligation (operator, user and owner)
- Possibility for **exemption:**
  - operator and user: not caused and not in period of use or operation
  - owner: + not known at purchase
- Final burden to **liable party**
Succes keys of our legislation

- **Link with transfer of land**: market guarantees the investigations and remediation

- **Soil certificate** as main information tool

- **Pragmatism** and open for new ideas to assure the positive stimuli

- **Innovation and sustainability**

- **Solutions** for specific cases, e.g. former gassites
History of gas manufacturing plants in Flanders

- When? Historical activities
- Why? Light in the dark
History of gas manufacturing plants in Flanders

- Aerial photo 1944 of gas plant Berchem (near Antwerp)
History - Manufacturing process
Tackling all former gassites

Why?

Interesting location for redevelopment

- Near residential areas
- Adjacent to railways
- Adjacent to watercourses
Tackling soil contamination at former gas sites

Why? Environmental – tar and cyanide contamination
Tackling all former gassites

How? → Inventory

- Historical data
- Result: 122 former gassites in Flanders
  - Former gassites =
    - manufacturing gasplants
    - parcels with only gasometers
    - industries with gasproduction as sideline activity
Tackling all former gassites

- How? → Prioritization

- Dual score
  - Data quality
  - Scores by environmental and redevelopmental need

- Dynamic system
  - filter for the timing of the investigation approach
  - filter for the timing of remediations.
Tackling all former gassites

- How? → Investigation
  - 61 / 122 former gassites already investigated
    - Flemish soil legislation:
      - Soil investigation prior to transfer
      - Brownfield policy
      - Commitment of the intermunicipalities
  - 61 / 122 former gassites still need to be investigated
    - By 2015
Tackling all former gassites

- How? → Remediation
  - Completed and ongoing remediation
    - complex and expensive
    - Lessons learned
  
  - Remediation Concept
    - Support by Tellum Environmental Consultants
  
  - Program: ex officio remediations
    - Start of all gassites by 2022
    - Completion by 2027
Redevelopment of the gassites

- Redevelopment plan for the gassite in Berchem