

Risk Based Land Management: from European theories to Flemish experiences

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Introduction

- Flanders in Belgium
- Legislation in evolution
 - Flemish Waste Decree (1981)
 - Problems \Rightarrow Soil Decree (1995)
- OVAM
 - Agency for Waste and Contaminated Land Management
 - Tasks: policy preparation to coordination

EU Soil Strategy: history

2002: communication on soil

- Soils are as essential to human society as air and water
- In many areas of Europe, soil is degraded or irreversibly lost
- Pressures
 - hamper soil functions - essential for all ecosystems
 - reduce soil availability for land-based activities
- No specific Community policy on soil

EU Soil Strategy: history

Council + European Parliament+ Committee of
Regions + EESC

welcomed the Communication

recognised the need for appropriate Community
action to protect soil and its sustainable use

Working groups were started (and finished)

Contaminated Land Management results:



Definitions

- Land = geographical, 3D entity comprising soil, groundwater, surface water, sediment
- Site = area of land ~ ownership, use
- Contaminated Land = land with contamination that poses a risk that requires management actions

Historical - “new” contamination

- Legacy is so big that “prioritisation” is necessary
 - strategic approach at national level
 - information exchange on strategic approaches
- Immediate “action” desirable for new contamination
- Action is more than “dig and dump”
- Remediation ~ BAT(NEEC)

Risk assessment

- “Formalise” RBLM in soil strategy
example in results Clarinet
- Harmonise elements where possible

Management of con'd sites

- RBLM
- Dynamic concept
- Relation spatial planning
- Fit for present and planned use
- Protection of surroundings
- Long-term care
- Sustainable contaminated land management

EU: where are we now?

- EC has launched interservice consultation
- ? Soil strategy by summer
- ? Relation WFD
groundwater is also water!
- Directive on environmental damage covers
“soil damage”
(~new contamination)!

Flemish policy

- Soil = the solid part of Earth, \supset groundwater
- Investigation duty risk-activities
transfer, stop, periodically
 \Rightarrow many data, available to public, limited
cost government
- Central register of polluted soils
 \Rightarrow data mining
- Accredited experts and labs

New contamination

- taken place > 29 Oct 1995
- immediate clean-up if SRC are exceeded
 - dependent on soil type
 - dependent on soil use:
 - environment
 - agriculture
 - living area
 - recreation
 - industry

Historical contamination

- taken place < 29 Oct 1995
- clean-up if serious risk
- clean-up
 - according to priority
 - at the moment of transfer

Remediation goal

- BATNEEC-evaluation:
 - background values
 - soil remediation standard
 - risk elimination

Transfer of land

- Protection of new owner! But why?
 - Soil contamination is often invisible
 - Many buyers are unaware of risks
 - When pollutor is gone and buyer goes bankrupt: government?
 - RBLM~fit for use
 - use can change
 - remediation duty can emerge with change
- Money is “available” at transfer

Transfer of land

- Transfer of any land : soil certificate informs buyer and pays for the databank (25 €)
- Transfer of land with 'risk-activity'
 - preliminary investigation
 - descriptive examination, remediation plan
 - financial guarantee
- Prior to transfer! Risk annihilation

But ...

- Strict procedures are nice for certainty, but not adapted to “land management”
- Legislation ↔ complex cases
- Focus on remediation ↔ acceptance

Shifts in policy

- Focus on real risks
- Optimisation ~ cost reduction
- “Solidarisation” of high costs
- Procedures ~ land management
 - partial remediations
 - integrated investigations
 - risk management or remediation?

Shifts in policy (2)

- Remediation~”sustainable development”
 - brownfield redevelopment
 - contaminated groundwater~grey water use
 - diffuse contamination~energy crops
- Urban sites~urban renovation
- Long term management

Research challenges

- Remediation ~building: fast result
- Risk management concepts:
 - low cost
 - sustainable
 - added “social” value
- Communicate to “world”
 - benefits of remediation
 - “risks” of contamination/management



Research challenges (2)

- Link to applied sciences
- Link to “marketing”
 - move to application
- Cooperate, harmonise where possible
- Talk about solutions, not problems

Integrate
soil contamination/remediation
in
sustainable land management

