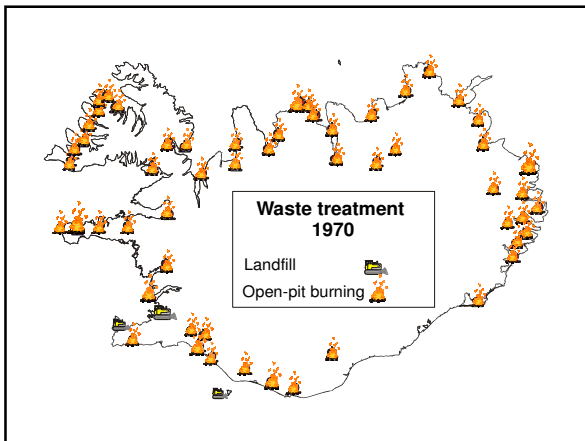


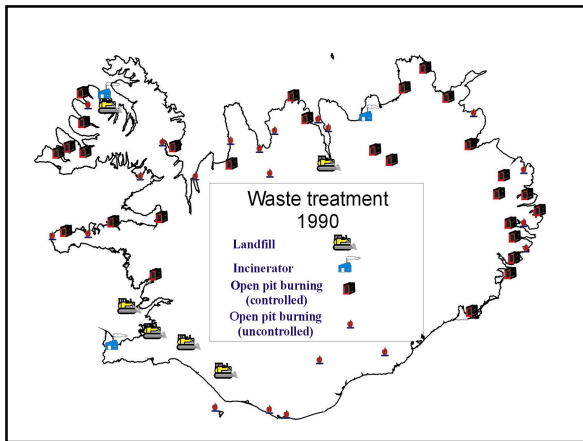
Iceland: specific conditions

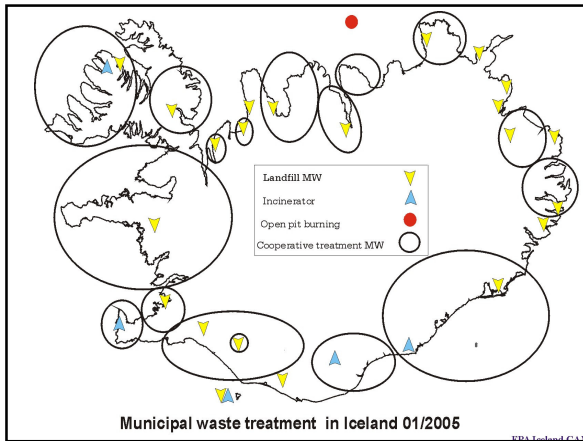
- Relatively low number of inhabitants, small waste amounts
- Low urbanisation degree, except capital area
- Substantial distances (between municipalities, other markets)
- Harsh weather conditions great part of the year
- Enough space
- Abundant energy, low prices
- "Unlimited" fresh water & clean air
- Soil erosion











Suspected sites in Iceland (estimated nr. +% of total suspected surface)

• 60 Landfills (municipal waste), ca. 40%	Miscellaneous
• >200 Fuel stations ca. 15%	Mineral oil, PAH, BTEX
• 30 Fuel storage sites, ca. 10%	Mineral oil, PAH, BTEX
• >2000 Quarries, ca. 10%	Mineral oil, BTEX
• >1000 Smaller companies, ca. 10%	Miscellaneous
• 50 Shipyards, harbour sediments, ca. 6%	Mineral oil, PCB, VOC, PAH, BTEX, TBT, heavy metals
• 3 Industrial sites (2 alu-melters, 1 furnisher), ca. 4%	Heavy metals, PAH
• 5 Former military sites, ca. 2%	Mineral oil, BTEX, PCB, dioxins, heavy metals + ???
• 5 Shooting ranges, ca. 2%	Pb, As
• 3 Scrap metal recycling stations, ca. 1%	Mineral oil, PCB, BTEX, heavy metals

Suspected sites in Iceland (2)

- > 100 sites where anthrax has been confirmed
- > 250 sites where scrapie has been confirmed
 - 66 cases in 2005

So far, so good:

No foot & mouth disease, bird flue nor pig pest

Draft regulation discussed in 2002

- Fire brigade first to know in case of accidents
- Smaller cases solved on regional level
- Bigger cases in cooperation with EPA
- EPA working on categorization of sites and the release of guidelines for preliminary, risk- and final assessment
- Unofficial national limit values and measures related to land-use
- Liability not settled, no sufficient legislative support

Conclusions/further consideration:

- Need for identification, categorisation and registration of polluted and sensitive areas (connected with regulations on prevention of (ground)water pollution)
- National legislation does not support responsibility & liability for soil pollution: new law needed. Focus on:
 - Liability, old/new cases
 - Financing: insurance, funds, clean soil declaration?
 - Is landowner allowed to carry out remediation measures?
 - Consensus on limit values and land use needed
- In-situ treatment: zero-option (do nothing) feasible in some cases
- Ex-situ treatment: strong relation with European waste legislation: Landfill Directive & Council Decision on Acceptance criteria (Leaching tests)

Status 2006

- Identified: 6 bigger cases so far Heiðarfjall, Nikkel-area, Leirdalur, Hringrás, shipyard Reykjavik, Gufunes-landfill
- Also a number of smaller sites identified and remediated (oil contamination)
- In first 4 cases whole loop completed
 - Preliminary assessment
 - Main site investigation, risk assessment
 - Implementation of measures/remediation
 - Final assessment
- In 2 cases (preliminary) assessment ongoing
- Landfill for hazardous waste in preparation
- Good experience with ex-situ treatment of oil-contaminated soil (top-cover of landfill)

More information?

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Thank you!
