

NORDROCS

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PERSPECTIVES ON RE-USE OF CONTAMINATED SOILS

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REMEDIATION

- **Approximately 300 – 400 contaminated sites are remediated each year in Finland.**
- **Some 1,5 million tons of contaminated soils are produced each year.**

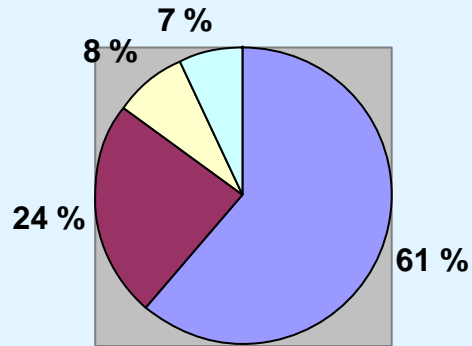
BUILDING SECTOR

- **The building sector use 100 million tons of soil each year.**
- **The soil consists 55 – 60 % of sand and gravel, and the rest is crushed rock.**

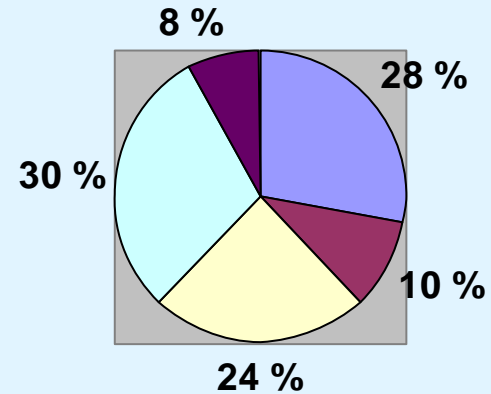
UNKNOWN SITUATION

- **The follow up and the knowledge about the fate of contaminated soils have been too vague and unsystematic to be of any use, as a basis for planning re-use strategies.**
- **A study made in SYKE in 2007 and 2008 by Satu Jaakkonen has brought some new information about these soils.**

QUANTITIES AND QUALITIES

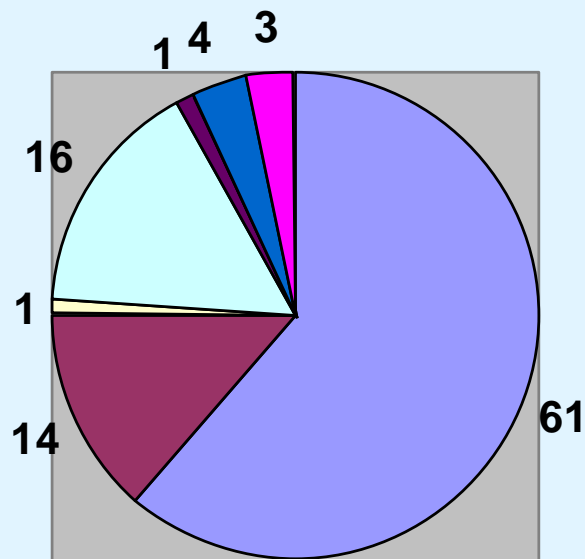


- Low level
- Contaminated
- Hazardous waste
- Unknown



- Hydrocarbons
- Metals
- Hydrocarbons and metals
- Unknown
- Others

TREATMENT



- Dumping place constr.
- Compost
- In situ
- Stabilization
- Termic
- Washing
- Isolation
- Waste dump
- Combination
- Intermediate storage

RE-USE TODAY

- **67 % contaminated soils were re-used in 2005.**
- **84 % contaminated soils were re-used in 2006.**
- **Almost all soils are used without any pre-treatment.**
- **Those soils, for which treatment would have been expensive, were disposed off or isolated.**
- **There are almost no re-use outside of dumping places.**

SOME THOUGHTS 1

- **The situation in Finland is “not too bad” as it is, but the situation can be another on local level.**
- **We cannot have a similar system as they have in some Central European countries.**
- **Contaminated soils are not the remedy for the needs of the building sector.**
- **We need usable tools for making supply and demand to converge.**

SOME THOUGHTS 2

- **We need usable norms and guidance. Also norms, that are not only based on chemical criteria.**
- **Similar treatment of all applicants.**
- **The most important task is to develop feasible technology for remediation in situ or on place.**
- **Remediation is more than just "risk management".**