

Waste and Soil

Save on environmental costs

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Many waste materials can have useful applications, such as in foundation and as filler in concrete. But how can you be sure that toxic contaminants do not leach into the environment? And would leaching cause damage to the environment? As an accredited test laboratory, ECN offers a combination of tests and services to assess the environmental risk of solid waste materials.

- Environmental risk assessment
- Geochemical modeling
- Hazard classification
- Emission tests (leaching)
- Waste re-use process development

Save on environmental costs

Toxic contaminants in waste are not necessarily mobile. And even if they leach out, environmentally safe application may still be possible. We help you assess environmental risks and save costs.

Waste processing for safe application

We develop and advise on processing such as contaminant immobilization or removal if required. As an example, ECN has developed a patented process for immobilizing contaminants in incinerator bottom ash.

Emission tests (leaching)

ECN is strongly involved in test development and standardization at EU-level (CEN).

Emissions of granular material (column test) NEN-7373

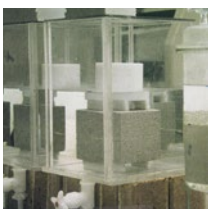
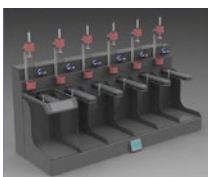
Long-term leaching behaviour of materials. Water is percolated through the material and the eluate is analyzed for contaminants.

Emission of monolithic products (diffusion test) NEN-7375

Long-term leaching behaviour of materials. Product is soaked in a tank with water, which is refreshed at set intervals. The eluate is analyzed for contaminants.

Emission characterization (pH stat test) EN-14997

Emission characterization at various pH levels to predict leaching behaviour under various conditions of use. Also used as basic characterization for geochemical modelling.





Tailored tests

Fully characterize your material or provide R&D support, e.g. ageing, special conditions, DOC fractionation.

Decades of experience across many sectors

ECN performs environmental risk assessments for various sectors, such as waste incineration, construction, mining, nuclear waste, and landfilling. We also advise on and develop methods to enable safe application of (waste) materials, such as contaminant immobilization and removal.

- Waste and Soil
- Circular Economy
- Hazard Classification
- Sustainable landfilling
- Leaching test equipment
- LeachXS

Materials that we have worked with include industrial waste, municipal waste, incinerator bottom ash, fly ash, boiler ash, electric arc furnace slag, steel slag, concrete, cement, mortar, red mud, various filter cakes, and many more.



Accredited, high-quality work

All standardized tests are performed according to relevant norms and under ISO 17025 accreditation. Please contact us to determine which tests are most suitable for your product.

