



## Former Lime Sludge Landfill

### Project Description:

In the area of the former lime sludge landfill, lime sludge from the phenol and cresol production had been deposited upon official authorization. For the landfill body which is forested today, a toxicological exposition risk quantification (TERQ) was carried out with regard to the future use as park and recreational area. The current investigations deal with groundwater as subject of protection in the downgradient area of the landfill.

### HPC Services:

- Historical review and elaboration of an investigation program,
- Risk assessment for groundwater as subject of protection on the site and downgradient of the landfill,
- Toxicological exposition risk quantification (TERQ) for the area of the landfill body,
- Feasibility study on various remediation methods (comparison of alternatives),
- Toxicological exposition risk quantification (TERQ) for the groundwater downgradient area.
- Remediation investigations/remediation:
  - Feasibility study for application of MNBA (Monitored Natural Bio-Attenuation) and/or DNBA (Dynamized Natural Bio-Attenuation),
  - Investigation concept for establishment of a remediation plan,
  - Planned: Application of innovative remediation methods such as ISOC<sup>®</sup>, sorption barricade using humic substances in laboratory and field tests.

### Project Name:

Remediation investigation/remediation – Landfill of the former tar processing industry in Oberhausen-Lirich

### Country:

Germany, Northrhine Westphalia

### Client:

Rütgers Chemicals GmbH  
Dr. Domalski

### Purpose:

Remediation of groundwater contamination, evaluation of the landfill body with regard to health risks

### Contract Volume:

310 000 €

### Project Duration:

Since 1994 (ongoing)

### Project Managers:

U. Hintzen, Dr. F. Karg

### Field of Service:

Recycling/investigation of contaminated land, TERQ

### Project Data:

- Contaminants BTEX, PAH, phenols, TPH