

# Analysis of column tests for the effectiveness of the reactive materials for the usage as a sealing material for the dump „Schüsselgrund“.

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**Project Objective:** Analysis of column tests for the effectiveness of the reactive materials for the usage as a sealing material for the dump „Schüsselgrund“.

**Location:** Koenigstein / Saxony

**Client:** WISMUT GmbH

**Beneficiary:** WISMUT GmbH

**Year:** 2004

**Budget:** 25.000 €



## Initial Situation:

The background of the study is the preparatory measures for planning and final closure of the dump “Schlüsselgrund” in the branch Koenigstein of Wismut GmbH. For this the column tests have been done with the different barrier layers for the time period of around 2 years. The obtained results were to be evaluated and the conclusion on the effectiveness of the applied reactive materials was drawn. The evaluation of the long-term effectiveness of the applied material should be made. Column dismantling should also give information on possible secondary mineral formation.

## Services provided:



- Mineralogical characterisation of the columns materials
- Solid analysis using REM, XRD, EDX and microscopy
- Determination of leaching activity
- Analysis of columns tests with evaluation of mass balances, total discharge amount and effects of the reactive barrier layers
- Modelling of solution equilibrium (PHREEQC) and assessment for long-term effectiveness of barrier layer