

## Expansion of the mineral landfill NORGAM (Bottom sealing of landfill category II)

### Characteristics:

- Landfill sections 3 and 4
- Deposition surface: 10.5 ha
- Landfill volume: approx. 1.2 million m<sup>3</sup>
- Intensive dynamic compacting for surface preparation
- 0,5 m geological barrier/0,5 m clay sealing
- 2 sealing components (according to Landfill Ordinance)
- Cost-effective solution with all applicable laws and safety standards



**3<sup>rd</sup> construction phase of the mineral landfill**

### Scope of Work:

- Service phases 1 to 4 of the HOAI for the 3<sup>rd</sup> and 4<sup>th</sup> landfill sections
- Plan approval procedure incl. public participation
- Service phases 5 to 8 of the HOAI for the landfill sections 3.1 und 3.2 (3,2 ha)
- Service phases 1 to 8 of the HOAI for EMSR-technology
- Conversion and extension of leachate treatment and collection system

### Description:

The North German Association for Deposition of Minerals mbH – NORGAM – operates a landfill for mineral waste material in the district of Helmstedt on the north site of the former lignite mining of Alversdorf. The landfill was put into operation in 1999 and expanded in 2006. Since these landfill sections are soon to be filled, an extension of the landfill has become necessary. The extension of the sections 3 and 4 was approved in a comprehensive planning approval process with public participation.

The approval planning included both the basic and surface sealing of the new sections. The extension has been realized after an intensive compaction of the subsoil with a bottom liner according to DepV. The new section 3.1 connects directly to the section 2 so that the waste overlaps it. Since only waste from section 1+ was stored in section 2, an intermediate seal is installed between the waste. The leachate collection system connects to the already existing system. As an additional storage volume for leachate a retention soil filter tank was realized.