Objective: The unsorted landfill which is located in the open-cast mine was extended to the basis sealed areas. Within the landfill closure the landfill body must be reshaped in such a way that the surface sealing could be applied according to the Technical Guideline for Residential Waste after the finalisation of subsidence. In this connection there were constructed the leachate collection and storage reservoirs, surface water catchment and discharge, passive gasification using the gas oxidation window. The profiled landfill body must be covered by mineral layer.

Location: Markersdorf by Chemnitz

Client: Waste Management Association Chemnitz

Beneficiary: Waste Management Association Chemnitz

Initial situation: After the waste deposit at the landfill it was planned the profiling and waste relocation within the site boundary of landfill body for the final sealing under consideration of all facilities (leachate collection and storage, surface water catchment and discharge, route construction and greening, passive gasification). Without the measures for infiltration prevention the contract with the groundwater in the former open-cast mine effected an acute hazard for water pathway.

Services provided:
- Overall design
- Preparation of tender documents
- Project management and site supervision
- Geotechnics, hydrogeology

Technical data:
- Passive gasification: gas-permeable covering
- Gas oxidation window
- Leachate collection: drainage, storage
- Leachate treatment: external
- Surface water catchment and storage and discharge in the receiving water
- Total area: 3.4 ha
- Final height: approx. 20 m
- Slopes: 0.5 m