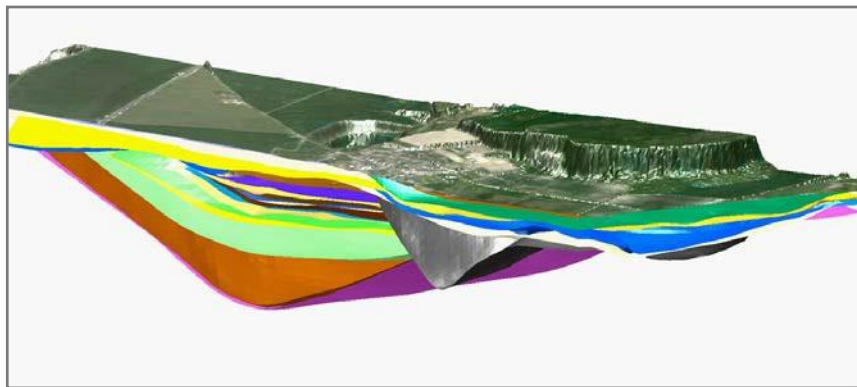


3-dimensional geological & formation model, Nachterstedt, Germany

LMBV Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft mbH, Leipzig

Service area	Contract value	Project duration
Natural Resources and Mining, Mine Decommissioning	(protected)	2013 - 2014 / model actualiza- tion ongoing



Project description:

Extension of an established 3D model of the Nachterstedt area regarding the adjacent Frose area field. Establishment and update of the 3D formation model by means of Surpac™ model software that forms a geological base for hydrogeological and geotechnical analyses of slope slides.

Further project data:

- Model area: 10 km²
- Number of considered boreholes and information: > 1 000
- Number of geological model layers: 39

Client benefits:

- 3D visualization of the underground conditions to improve the understanding of interconnections
- Data supply for specific professional models (hydrogeology, geotechnical safety)

Our services:

- Adoption of geological data from borehole logs including plausibility check
- Digital recording of historical geological cross-sections and surveys
- Transformation of the geological data into Surpac™ conformity
- Establishment of a 3D interface model for totally 39 stratigraphic units
- Implementation of the hollows from open cast mining and from historical mining structures (panels, mining sections) into the 3D formation model
- Evaluation of geological data (layers' distribution, thicknesses, hydraulic by-passes, location of special mining structures)
- Data processing for interchange formats (Microstation, GoCad, PCGeoFim)