Risk assessment for old mining area

C&E · Consulting und Engineering GmbH D-09117 Chemnitz ● Jag



D-09117 Chemnitz • Jagdschänkenstraße 52 Tel.: +49 (0) 371 881 22 39 • Fax: +49 (0) 371 881 45 89 E-mail: info@cue-chemnitz.de Internet: www.cue-chemnitz.de

Lichterfeld

Objective: Risk assessment analysis of the danger situation in the old mining area

Lichterfeld in the region of Elbe-Elster

Location: Lichterfeld

Client: Ministry of Economy of Beneficiary: State Brandenburg

the State Brandenburg

Year: 2006 - 2007

Services provided:

Research and registration of data:

- Verification of existing safekeeping documents and final reports
- Registration of data of topographical, morphological analyses, using of surface, ownership relations for old mining objects
- Description of geological and hydrogeological conditions
- Archive research relating to historical and mining historical demolition of mine operations
- Mining characteristics
- Registration of already occurred mining damages, already carried out investigation and/or security measures

Survey

- Digitalisation of operation mining plan
- Presentation of mine plans

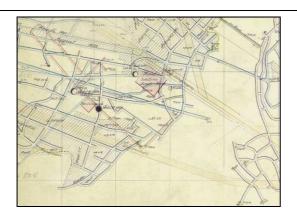
Interpretation for the determination of mine damages

- Subsidence simulation, damages of subsidence (analytical subsidence estimation and simulation by using of FEM)
- Determination of danger levels / areas of damages
- Determination of size of investigation and security measures

Risk assessment for old mining area Lichterfeld



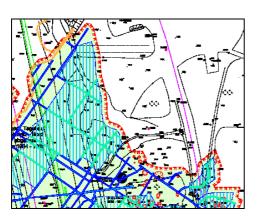
D-09117 Chemnitz • Jagdschänkenstraße 52 Tel.: +49 (0) 371 881 22 39 • Fax: +49 (0) 371 881 45 89 E-mail: info@cue-chemnitz.de Internet: www.cue-chemnitz.de



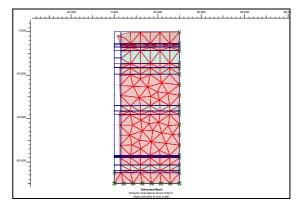
Extract from the mine layout plan pit Elvira, Lichterfeld



Shaft 3, pit Elvira



Extract from operation mining plan, pit Elvira, Lichterfeld



Simulation of subsidence (FEM)