Facts:

- Project Duration: December 2010 – November 2013
- Total Budget: 3,435,975 Euro
- More informations: www.vodamin.eu, www.umwelt.sachsen.de/umwelt/wasser/8420.htm

This project is implemented through the object 3 cross-border programme Saxony – Czech Republic, co-financed by the ERDF.

groundsill in the old pit „Grenzschacht" (Zinnwald)

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Saxon State Office for Environment, Agriculture and Geology
Pillnitzer Platz 3, 01326 Dresden
Phone: + 49 351 2612-0
Fax: + 49 351 2612-1099
E-mail: lfulg@smul.sachsen.de
www.smul.sachsen.de/lfulg

Editorial:
Department: Water, Soil and Useful Materials
Department: Mining Redevelopment
Dr. Christin Fritze
Phone: + 49 351 8928-4602
Fax: + 49 351 8928-4099
E-mail: Christin.Fritze@smul.sachsen.de
Perry Arnswald
Phone: + 49 351 8928-4605
Fax: + 49 351 8928-4099
E-mail: Perry.Arnswald@smul.sachsen.de

Project Management:
Core-consult GmbH & Co. KG
www.core-consult.de

Photos:
Cover picture: LMBV, 2009: Redevelopment ship on the post mining lake Burghammer (Bernsteinsee)
Page 3: Christin Fritze (LfULG), 2011
Page 4: Peter Radke (LMBV), 2011
Page 5: Rainer Sennewald (GEOS), 2011

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SAXON STATE OFFICE FOR ENVIRONMENT, AGRICULTURE AND GEOLOGY

Freistaat SACHSEN

VODAMIN

A project to solve water problems in mining regions

Ziel 3 | Cíl 3

Europäische Union. Europäischer Fonds für regionale Entwicklung: Investition in Ihre Zukunft/ Evropská unie. Evropský fond pro regionální rozvoj: Investice do vaší budoucnosti

VODAMIN

Cross-border solutions for mining-influenced waters

mining induced iron hydroxide deposition in the river "Kleine Spree"

neutralisation of the post mining lake „Scheibesee", lime slurry spreading by using input cable

The project

In the context of the cross-border „Ziel 3 / Cíl 3" project VODAMIN saxon and czech project partners carry out studies and data investigations in order to develop solutions for the efficient management of the legacy of the Saxon and Czech coal and ore mining.

Topics:

- Basic determination to address the consequences of the former coal and ore mining in Saxony
- Assessment of the impact of mine water rise on the environment, infrastructure and future approaches to dealing with the problem of groundwater in lignite and hard coal fields
- Solutions for water treatment of surface water in brown coal mining
- Studies on ground and surface water issues in the former areas of the underground ore and coal mining Lugau / Oelsnitz and Cinovec / Zinnwald
- Cross-border action plans for landscapes or mining influenced water bodies

The majority of the investigations and studies will be awarded through public tenders. The projects include widespread investigations, researches and investments of over 3 Million Euros by 2013.
In the implementation of 34 projects, the project partners are working closely with engineering firms, government research institutions, mining companies and authorities, and together with the communities in mining regions.

Project Partner

Lead Partner: Regional Administration Ústí, Ústí nad Labem (CZ)
Project Partner 1: Saxon Mining Office (SächsOBA)
Project Partner 2: Saxon State Office for Environment, Agriculture and Geology (LfULG)
Project Partner 3: City of Oelsnitz / Erzgeb.

Ústecký kraj

SÄCHSISCHES OBERBERGAMT | Freistaat SACHSEN

LANDESAMT FÜR UMWELT, LANDWIRTSCHAFT UND GEOLOGIE | Freistaat SACHSEN

Sub-projects of the Saxon State Office

- Consequences of the impact of dump leachate on buildings and infrastructure (Lugau / Oelsnitz)
- Effects of mine water rise on the stability of mining structures (Lugau / Oelsnitz)
- Monitoring and evaluation of large-scale mine water rise in the former territory Lugau / Oelsnitz and assessment of the risk potential, development of a methodology
- Concepts and recommendations for dealing with mine water rise in Saxony and the Czech Republic
- Monitoring of large-scale mine water rise in the former coal district Lugau / Oelsnitz, establishment of a deep groundwater measuring point

Sub-projects of the Saxon State Office for Environment, Agriculture and Geology

- Electrochemical sulphate reduction in a pilot plant of the mine water treatment plant Rainitza
- Percolating- and groundwater measuring point in the opencast mine Nochten
- Comparison of current mine water purification processes and economic evaluation
- Studies of ammonium in eastern Saxony mining lakes
- Determinations of the interactions of groundwater and surface water in mining areas
- Effects of high iron concentrations on the biology of surface waters
- Feasibility study: using sulphate mine water for fertilization in agriculture
- Economical measure comparison for different methods of collecting, draining and cleaning mining-contaminated groundwater
- Derivation of optimal technical measures to stabilize the water management situation in the immediate border area Zinnwald / Cinovec

Sub-projects of the City of Oelsnitz/Erzgebirge

- Possibilities for the use of pits and dump water for special applications
- Flooding concept: Technical solutions in special cases of mine water leakage
- Construction of a GIS - post mining monitoring for the coal district Lugau / Oelsnitz