

Revitalisation of the former Cast Glass Works in Pirna



BAUERUmweltgruppe

Client:	Stadtentwicklungsgesellschaft Pirna GmbH, Germany
Engineering Design:	BEAK Consultants GmbH Freiberg
Supervision:	G.E.O.S. Freiberg Ingenieurgesellschaft mbH
Participating Authorities:	AFC Consortium Saxony National Environmental Agency Radebeul District Administration Pirna Regional Council Dresden
Scope of Works:	Deconstruction of Buildings, Excavation and Disposal of contaminated Construction Wastes and Soil, Backfilling of the Excavation Pit, Drainage and Cleaning of Water
Contract Period:	May 2004 until August 2004



Project

Apart from the soil remediation and the preparation for further land development the revitalisation of the industrial estate in Pirna covered the allocation of supply and disposal facilities, the breaking down of material in depth, the operation of a crusher plant, drainage and cleaning of water and occupational health and safety measures.

the agenda regarding the industries health and safety legislation. Three excavators equipped with filter cabs as well as two rollers were constantly in operation on site. Moreover a crusher plant, a mobile vehicle scale, as well as a tire washing plant were operated. In order to be able to treat contaminated groundwater resulting from the construction measures if necessary, a treatment plant was held out on site.



Remediation Site

The former cast glass works in Pirna had its own gas generator station. Thus the underground showed a contamination specific for gas works. Due to the commercial use of the location the requirement of remediation existed in accordance with the given brownfield site exemption.

On the remediation site 173,000 to contaminated soil and 3,000 to contaminated construction waste had to be excavated and be disposed off.

Result

The remediation of the property of the former gas generator station was executed within 16 weeks. During this time the BAUER Environment Group executed the following services in constant and close coordination with all project partners:

- Preparation of the remediation area, soil removal on 11,000 m²
- In-depths break-down of material until 7 m under the surface
- Excavation, transport and disposal of 73,000 to contaminated soil and 3,000 to contaminated construction waste
- Backfilling of the excavation pit with approximately 112,000 to of non-contaminated material
- Continuous monitoring of the pollutant emissions



The backfill of the excavations took place in several layers with 112,000 to of non-contaminated material.

The contaminated material was excavated up to 7 m under top the surface, loaded and transferred onto the soil treatment centre to Hirschfeld (Saxonia) owned by Bauer Environment Group. In response filling material was supplied on the building site. The average mass movement was between 2,000 to and 8,000 to per day. Parallel to the progress of the remediation the delivery of subsections took place. On this location the erection of a new manufacturing enterprise is planned. The completion of the remediation measure took place parallel to the delivery of the carcass of the new production hall.

The building site was completed under strict spatial conditions and according to a tight time schedule. High standards were on