

## Flagged anaerobic in-situ remediation of ground water contaminated with CHC downstream a CHC plume flow

Biostimulation | Depth oriented pressurised injections | Neutralisation

### Project description

Several hundred of meters downstream of a CHC contaminated plume being treated with the “pump-and-treat” technology, signs of CHC contamination were observed and subsequently flagged. A field test was carried out by stimulating microbial cDCE dechlorination. This was done by the in-situ addition of several tons of co-substrate solution.

In addition, to avoid detrimental effects from pH lowering by the metabolites of the added co-substrates, the environment’s pH was adjusted by adding pH buffers.



### Customer

Industrial enterprise (metal works)

### Project value

Approx. 165,000 Euro

### Project timing

Since November 2007

### Project areas

Laboratory process engineering, on site engineering, ground water biotreatment and environmental technology

### Project data

- Contaminants  
CHC (cDCE, VC) 6,000 µg/l
- Plume size  
Approximately 25,000 m<sup>3</sup> of contaminated ground water at a depth of 25 m

### Services rendered

- Participation in remediation concept
- Laboratory process engineering, laboratory testing, in-situ pH stabilisation, biostimulation of the plume
- Design and setup of sensor technology, data transmission
- Generating technical documentation

### Customer expectations

- Unrestricted access to the remediated area
- Significant cost reduction compared to traditional disposal procedures

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