

# Discharge of surface water from the remediated industrial tailing pond Culmitzsch into the receiving water courses

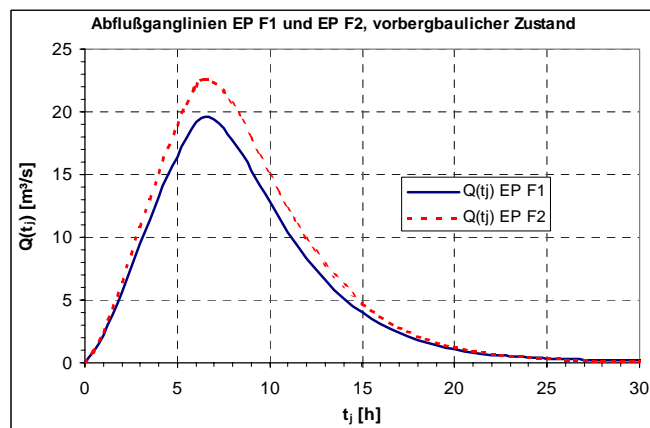
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**Objective:** By the discharge of surface water after the remediation of industrial tailing pond into the receiving water courses the peak discharge of the receiving water course Fuchsbach and Culmitzsch should not be exceeded the rate since the beginning of mining activities in the event of flooding HQ<sub>100</sub>. Thereby both receiving water courses were hydraulically modelled from the concerned discharge points to the mouth in the river Weiße Elster.

**Location:** Seelingstädt  
**Client:** Wismut GmbH  
**Beneficiary:** Wismut GmbH  
**Year:** 2004



**Initial situation:**

The industrial tailing pond Culmitzsch was remediated using the dry in-situ depositing. The covered areas were greened and reforested. By specification of the future contours of the tailing pond the catchment areas of the concerned receiving water courses Culmitzsch and Fuchsbach were defined. The size and location derived from the existing contour variants of the current catchment areas were calculated under different vegetation conditions at the HQ<sub>100</sub> maximal occurred rate of flow. In addition the necessary flood retention basin was dimensioned.

**Services provided:**

- Quantification of pre and post mining hydrological flow conditions, quantification of maximal discharge amount
- Dimensioning of flood retention reservoir
- Dimensioning of surface water collection reservoir

