



Groundwater Investigation Strategy

UNTERSUCHUNGSSTRATEGIE GRUNDWASSER

The guide deals with the investigation of harmful soil changes (SBV) and contaminated sites as the basis for:

- the risk assessment according to the Federal Soil Protection Law (Bundes-Bodenschutzgesetz - BBodSchG) and Federal Soil Protection and Contaminated Site Ordinance (Bundes-Bodenschutz- und Altlastenverordnung - BBodSchV) within the scope of the preliminary investigation (Orientierende Untersuchung - OU) or detailed investigation (Detailuntersuchung - DU),
- the decision regarding the need for a remediation investigation (Sanierungsuntersuchung - SU),
- characterisation of the hydrogeological and hydrochemical conditions with respect to the selection and planning of remediation methods within the scope of the SU,
- the monitoring or review of the success of remediation measures or natural attenuation (NA). Above all, it is aimed at experts, specialist consultants and functional authorities, as well as at property owners and bodies obligated to investigate, who develop, check or commission investigation strategies. It describes the procedure for developing investigation strategies to create the database for decisions according to contaminated site legislation concerning the sensitive receptor groundwater. The cost and time-saving potential of innovative investigation methods are also taken into account, such as integral

pumping tests or fast methods of sample and measured value determination. Detailed explanations of individual methods is left to separate documents such as methods literature, status reports or special action aids and specialist literature.

The guide is divided into three sections:

- Chapter 1 explains the targets of the investigations as well as important soil protection and water legislation investigation and assessment principles.
- Chapter 2 explains the development of suitable investigation strategies as well as conceptual requirements for groundwater investigations. It explains both the legal issues and the technical investigation.
- Chapter 3 deals with the groundwater investigation methods. In particular, it encourages the use of innovative or newer investigation methods and equipment to save costs and time.

This guide contains the important decision-making criteria of the, now expired, joint administrative regulations of the Ministry of the Environment and Transport and the Ministry of Social Security Baden- Württemberg concerning indicative values for dealing with contaminated sites and contamination (VwV OW Verwaltungsvorschrift des Ministeriums für Umwelt und Verkehr und des Sozialministeriums Baden-Württemberg über Orientierungswerte für die Bearbeitung von Altlasten und Schadensfällen), so

that future decisions of the administrative authorities can be based on these guidelines.

This guide also updates and replaces the “Leitfaden Erkundungsstrategie Grundwasser” [37] (Groundwater Investigation Strategy Guide) published in 1996 by the then LfU.

