



Deutscher Verein des
Gas- und Wasserfaches e.V.



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Technical Rule – Standard **DVGW W 107** February 2016

**Guidance for the Application of Numerical Groundwater Models
in Catchment Areas of Drinking Water Abstraction Points**

WATER

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Preamble

This Code of Practice was compiled by a project group of the joint DVGW Technical Committee / DWA Expert Committee "Groundwater and Resource Management". It serves as guidance for the establishment and application of numerical groundwater flow and transport models as instruments of resource management in the abstraction of groundwater for the drinking water supply.

In order to ensure a sustainable management of the resource groundwater in water catchment areas, foresighted quantitative and qualitative water protection in the entire area of influence of the drinking water abstraction point is necessary. Groundwater models are suitable tools for this purpose and assume planning and monitoring functions in conjunction with other models and information systems. While information systems are used to characterise the condition of a water catchment area, it is the specific task of numerical groundwater models to render the effects of implemented, planned or omitted measures on the groundwater comprehensible, visible, reproducible and quantifiable, while taking into account temporal factors. Due to their prognostic capability, they thus support necessary decision-making processes in accordance with their objectives, possibilities and limits.

Amendments

Compared to DVGW Code of Practice W 107:2004-06, the following amendments were made:

- a) Fundamental revision of contents and amendment of all parts of the text
- b) Amendment of informational annexes, including synopses with regard to areas of application, databases and quality-assuring measures.

Earlier editions

DVGW W 107:2004-06