Deutscher Verein des
Gas- und Wasserfaches e.V.

DVGW
REGELWERK

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Technical Rule – Standard
DVGW W 126 September 2007

Design, construction and operation of artificial groundwater recharge facilities for drinking water abstraction

WATER

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Content

Foreword

This standard has been prepared by a Project Group of the DVGW / DWA Technical Committee "Ground Water and Resource Management". It serves as basis for the design, construction and operation of artificial groundwater recharge facilities for drinking water abstraction.

The fundamental operational goals of artificial ground water recharge for the purpose of drinking water abstraction lies in an increase of the water supply by means of artificial regeneration of ground water with simultaneous natural treatment of the infiltrated water. Provided suitable site-specific procedures are selected, artificial groundwater recharge for the purpose of drinking water abstraction is an effective method.

At the same time, it shall be taken into account that the artificial ground water recharge for the purpose of drinking water abstraction resorts to very different methods that are used in the waterworks in various combinations and in most cases lead to site-specific solutions. The principle of artificial groundwater recharge is thus based on a modular system, which, depending on local specifics, allows for the combination of different facilities. During groundwater recharge, the infiltrating water is treated by means of its passage through the subsoil. Complementary to this, it may be necessary to treat the recharge water prior to infiltration and possibly also the captured recharged groundwater.

This standard summarises good professional practice that has over the years developed with regard to the individual ground water recharging methods. It also points out existing problems and risks, thus making it easier for the user to select a suitable method.

With publication of this standard, DVGW Guideline W 132 "Mass development of algae in slow sand filters and facilities for artificial groundwater recharge – possibilities of avoidance" is dispensed with.

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