

# DWA- Topics



## Assessment of Process Steps for the Treatment of Wastewater for Reuse

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## Assessment of Process Steps for the Treatment of Wastewater for Reuse

The German Association for Water, Wastewater and Waste (DWA) is the spokesman in Germany for all universal questions on water and is involved intensely with the development of reliable and sustainable water management. As politically and economically independent organisation it operates specifically in the areas of water management, wastewater, waste and soil protection.

In Europe the DWA is the association in this field with the greatest number of members and, due to its specialist competence it holds a special position with regard to standardisation, professional training and information of the public. The ca. 14,000 members represent the experts and executive personnel from municipalities, universities, engineer offices, authorities and businesses.

The emphasis of its activities is on the elaboration and updating of a common set of technical rules and standards and with collaboration with the creation of technical standard specifications at the national and international levels. To this belong not only the technical-scientific subjects but also economical and legal demands of environmental protection and protection of bodies of waters.

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## Foreword

Since years it has been pointed out with increasing intensity that, in future, water will globally be an even more scarce resource than oil and gas. Many information, as also UNEP's recently issued global environmental report "GEO-4" (UNEP, 2007), clearly indicates the causes: the world population of over six billion people and the level of consumption of a large part of these people lead to a consumption of resources, which is greater than nature can re-supply. The approach to a solution must therefore be: reduction of the consumption of resources. Applied to water this means: reuse of water and small cycles!

In Germany, due to the up to now extensively sufficient fresh water resources, this subject has been dealt with at a subordinate level. With an eye on the challenges within the international market and by it increasing requirements for information also within the German water industry, in addition to a Specialist Committee working on "New types of sanitary systems", the Working Group BIZ-11.4 "Water Reuse" was launched within the DWA.

One of the tasks of the working group is the identification and description of process steps for the treatment of wastewater for reuse. This concerns, in particular, also processes for which, due to the lack of application in Germany, little experience is available. Therefore, within the working group, a matrix was elaborated in which techniques for the treatment of wastewater are presented and assessed with the aim of water reuse.

It is pointed out that the results from the honorary work of the DWA Working Group BIZ-11.4, presented with this Volume of Topics, are not part of the DWA Set of Rules and Standards. The assessment matrix introduced has been created from today's point of view and expressly makes no claim to completeness but rather is to be developed further. In this regard the Working Group is grateful for contributions and information.

On <http://www.dwa.de/master/wastewater-reuse> the user is given access to prepared Excel-sheets from the Annex in *Assessment Matrix of Process Steps for the Treatment of Wastewater for Reuse*. The user is able to revert to these tables and adapt them to his/her requirements.

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