

Buy now on
shop.wvgw.de

Deutscher Verein des
Gas- und Wasserfaches e.V.



➞ www.dvgw-regelwerk.de

Technical Information – Guideline

DVGW W 105 October 2016

Forest Management and Water Resources Protection

WATER

in Cooperation with



The DVGW is the technical and scientific association of gas and water engineers and comprises approximately 14,000 members. For more than 150 years, the DVGW has been setting the technical standards for the safe, secure and reliable supply of gas and water, actively initiating the exchange of ideas and information in the gas and water sectors and encouraging and promoting on-going progress in the sectors through practical guidance.

The DVGW is an independent non-profit organisation free from economic lobbyism and political influence.

The DVGW Set of Rules is a key instrument for the DVGW to meet its statutable purpose and accomplish its tasks. The DVGW Set of Rules notably defines, on the basis of statutory regulations, the requirements on technical safety, hygiene, environmental protection, fitness for use and consumer protection and organisation for the supply and use of gas and water. The DVGW Set of Rules ensures that the DVGW complies with the statutory principle of self-responsibility of the utilities, for the benefit of technical safety and hygiene as well as environmental and consumer protection.

Note for users

The DVGW Set of Rules rests on the following principles:

- The DVGW Set of Rules has been elaborated in an honorary capacity in accordance with the applicable principles (DVGW Constitution, Rules of Procedure GW 100). On the basis of jurisdiction, both the content and the technical information can be assumed to be correct.
- Everybody can use the DVGW Set of Rules. Duties and obligations may arise from legal or administrative regulations or from a contract or from other legal grounds.
- Nobody can abdicate their responsibility for correct action when applying the DVGW Set of Rules. Anyone applying the DVGW Set of Rules shall ensure its correct application in each concrete case.
- While the DVGW Set of Rules is not the only source of knowledge when looking for professional solutions, it does constitute an important source of such knowledge. It cannot however cover all possible special cases that may require more comprehensive or restrictive measures.

Warning

This English-language version is an informal translation from the German original. However, only the original German language version has been exclusively authorised by the DVGW and its Technical Bodies. The DVGW reserves the right to revise this version at any time due to possible translation errors.

Anybody is free to use the DVGW system of rules. Users are responsible for the proper use of the DVGW system of rules in each individual case.

ISSN 0176-3504

Price group: 2–4

© DVGW, Bonn, October 2016

DVGW German Technical and Scientific Association for Gas and Water

Josef-Wirmer-Straße 1–3
D-53123 Bonn

Phone: +49 228 9188-5
Fax: +49 228 9188-990
Email: info@dvgw.de
Internet: www.dvgw.de

Reprinting and photomechanical reproduction, also of excerpts, is only permitted with the approval of the DVGW e. V., Bonn.

Distribution: Wirtschafts- und Verlagsgesellschaft Gas und Wasser mbH, Josef-Wirmer-Str. 3, D-53123 Bonn
Phone: +49 228 9191-40 · Fax: +49 228 9191-499
Email: info@wvgw.de · Internet: shop.wvgw.de

DVGW Guideline W 105 is also published with the same content as DWA Guideline DWA-M 906.

Forest Management and Water Resources Protection

Contents

Foreword	4
1 Scope	5
2 Normative references	5
3 Terms, symbols, units and abbreviations	5
3.1 Stand (of trees)	5
3.2 Stand density index	6
3.3 Continuous forest	6
3.4 Progressive group felling	6
3.5 Forest management plan	6
3.6 Clear cutting	6
3.7 Bait site	6
3.8 Short rotation plantations	6
3.9 Amelioration (land improvement)	6
3.10 Skid trails	6
3.11 Shelterwood felling	7
3.12 Forest residue	7
3.13 Forest site	7
3.14 Browsing damage	7
3.15 Game feed plot	7
4 Facts of water-protecting forest management	7
4.1 General	7
4.2 Water protection functions of forests	8
5 Measures of water-protecting forest management	8
5.1 Silviculture	8
5.2 Regeneration / initial afforestation	9
5.3 Timber harvest	9
5.4 Construction and maintenance of forestry roads	10
5.5 Handling of substances hazardous to water	10
5.6 Forest protection	10
Bibliography	11
Annex A (informative) – Further forest management measures relevant to water bodies	12

Foreword

This guideline, which has also been published with the same content as DWA Guideline M 906, has been prepared by a project group of the joint DVGW Technical Committee/DWA Expert Committee "Groundwater and Resource Management" with participation of the Working Group of Drinking Water Dams (*Arbeitsgemeinschaft der Trinkwassertalsperren e.V., ATT*), by representatives of the German Forestry Council (Deutscher Forstwirtschaftsrat) and the forest owner federations.

This guideline describes the facts and recommends measures for water-protecting forest management. The background to this is that the forest serves several functions – utilisation, protection and recreation. Forest management can have an impact on the quality and quantity of bodies of water, i. e. both surface and groundwater. The aim is to concretely define the importance of forests for water protection and to point out possibilities of forest management that are relevant for water protection.

Amendments

Compared to DVGW Guideline W 105:2002-03, the following amendments were made:

- a) Update of all sections
- b) Extension of the scope to all forests

Earlier editions

DVGW W 105:1981-12

DVGW W 105:2002-03

Bonn, October 2016

DVGW German Technical and Scientific Association for Gas and Water