

American Water Works Association

ANSI/AWWA B101-01

(Revision of ANSI/AWWA B101-94)



AWWA STANDARD
FOR
PRECOAT FILTER MEDIA



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AMERICAN WATER WORKS ASSOCIATION

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Foreword

This foreword is for information only and is not a part of AWWA B101.

I. Introduction.

I.A. Background. Precoat media filtration is a process in which a filter medium, typically diatomite or perlite, is applied to filters, and then run, removed, and disposed of on a cyclic basis. This process is unlike granular-media filtration in which graduated layers of granules installed in granular-media filters are more or less permanently placed in the filters and periodically backwashed or mechanically cleaned and reused.

In precoat media filtration, a thin layer of the filter medium or precoat is applied to specially designed media-support structures, or septa, within the filter vessel or structure, by recirculating a slurry of the filter medium through the filter. After the precoat layer is established and filtration has begun, additional precoat filter medium material is continually added as the raw water is passed through the filter. This is done to disperse the accumulation of solids from the source water on the precoat surface and throughout the media depth. The addition of a filter medium is called bodyfeeding. Using a bodyfeed reduces or eliminates premature clogging or fouling of the surface of the precoat layer. At the completion of the filtration cycle, the filter septa and the vessel are flushed. The spent filter medium and the collected particulates from the source water are drained to the waste disposal facility. The clean filter is precoated again and a new filtration cycle begun.

I.B. History. AWWA B101-94 was approved as a new standard by the AWWA Board of Directors on June 23, 1994. This edition was approved on June 17, 2001

I.C. Acceptance. In May 1985, the US Environmental Protection Agency (USEPA) entered into a cooperative agreement with a consortium led by NSF International (NSF) to develop voluntary third-party consensus standards and a certification program for all direct and indirect drinking water additives. Other members of the original consortium included the American Water Works Association Research Foundation (AWWARF) and the Conference of State Health and Environmental Managers (COSHEM). The American Water Works Association (AWWA) and the Association of State Drinking Water Administrators (ASDWA) joined later.

In the United States, authority to regulate products for use in, or in contact with, drinking water rests with individual states.* Local agencies may choose to impose requirements more stringent than those required by the state. To evaluate the health effects of products and drinking water additives from such products, state and local agencies may use various references, including

1. An advisory program formerly administered by USEPA, Office of Drinking Water, discontinued on Apr. 7, 1990.
2. Specific policies of the state or local agency.
3. Two standards developed under the direction of NSF: ANSI[†]/NSF[‡] 60, Drinking Water Treatment Chemicals—Health Effects, and ANSI/NSF 61, Drinking Water System Components—Health Effects.
4. Other references, including AWWA standards, *Food Chemicals Codex*, *Water Chemicals Codex*,[§] and other standards considered appropriate by the state or local agency.

Various certification organizations may be involved in certifying products in accordance with ANSI/NSF 61. Individual states or local agencies have authority to accept or accredit certification organizations within their jurisdiction. Accreditation of certification organizations may vary from jurisdiction to jurisdiction.

Annex A, “Toxicology Review and Evaluation Procedures,” to ANSI/NSF 61 does not stipulate a maximum allowable level (MAL) of a contaminant for substances not regulated by a USEPA final maximum contaminant level (MCL). The MALs of an unspecified list of “unregulated contaminants” are based on toxicity testing guidelines (noncarcinogens) and risk characterization methodology (carcinogens). Use of Annex A procedures may not always be identical, depending on the certifier.

AWWA B101 does not address additives requirements. Thus, users of this standard should consult the appropriate state or local agency having jurisdiction to

1. Determine additives requirements, including applicable standards.
2. Determine the status of certifications by all parties offering to certify products for contact with, or treatment of, drinking water.

*Persons in Canada, Mexico, and non-North American countries should contact the appropriate authority having jurisdiction.

†American National Standards Institute, 11 W. 42nd St., New York, NY 10036.

‡NSF International, 789 N. Dixboro Rd., Ann Arbor, MI 48113-0140.

§Both publications available from National Academy of Sciences, 2102 Constitution Ave. N.W., Washington, DC 20418.