

American Water Works Association

ANSI/AWWA F101-02

(Revision of ANSI/AWWA F101-96)



AWWA STANDARD
FOR
**CONTACT-MOLDED, FIBERGLASS-
REINFORCED PLASTIC WASH
WATER TROUGHS AND LAUNDERS**



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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 F101.

I. Introduction.

I.A. Background. The purpose of this standard is to establish the minimum quality requirements for contact-molded, glass-fiber-reinforced, thermoset resin wash water troughs and launders for use in municipal and industrial water treatment plants. The troughs or launders are intended for use in treatment basins or tanks. However, the specific application must consider the limitations specified under Sec. 1.1, and information must be provided by the purchaser to completely describe the fabrication requirements. Purchaser-specific information that should be considered is summarized in the foreword, Sec. III.A. The purchaser should review these recommendations and other appropriate data and make provisions in the purchaser's specifications to describe the specific service requirements.

I.B. History. In 1986, the American Water Works Association (AWWA) Standards Council authorized the development of AWWA standards to describe contact-molded, glass-fiber-reinforced, thermoset resin wash water troughs and launders. Beginning in 1987, with preliminary, unfinished standards developed by an earlier American Society for Testing and Materials (ASTM) group, the AWWA Standards Committee on Fiberglass Weirs, Troughs, and Baffles formulated and reviewed several drafts of this final standard. The AWWA Standards Committee on Fiberglass Weirs, Troughs, and Baffles prepared AWWA F101 and completed work on the first edition of this standard titled AWWA Standard for Contact-Molded, Fiberglass-Reinforced Plastic Wash Water Troughs and Launders. The final draft was submitted to the committee for letter ballot voting on Aug. 23, 1990, and a consensus for acceptance was received. The second edition of this standard was approved by the AWWA Board of Directors on June 23, 1996. This edition was approved by the Board of Directors on Jan. 20, 2002.

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 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.

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

[†]American National Standards Institute, 25 W. 43rd St., Fourth Floor, New York, NY 10036-7406.

[‡]NSF International, 789 N. Dixboro Rd., Ann Arbor, MI 48105-9723.

[§]Both publications available from National Academy of Sciences, 2101 Constitution Ave. N.W., Washington, DC 20418-0006.

AWWA F101 does not address additives requirements. Thus, users of this standard should consult the appropriate state or local agency having jurisdiction in order 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.
3. Determine current information on product certification.

II. Special Issues. This standard has no applicable information for this section.

III. Use of This Standard. AWWA has no responsibility for the suitability or compatibility of the provisions of this standard to any intended application by any user. Accordingly, each user of this standard is responsible for determining that the standard's provisions are suitable for and compatible with that user's intended application.

III.A. Purchaser Options and Alternatives. The following items should be covered in the purchaser's specifications:

1. Standard used—that is, ANSI/AWWA F101, Standard for Contact-Molded, Fiberglass-Reinforced Plastic Wash Water Troughs and Launderers, of latest revision.
2. Trough or launder flow capacity.
3. Dimensional and weight limitations.
4. Materials present in the water to be treated, with which the fabrications will be in contact.
5. Range of normal operating and extreme ambient temperatures anticipated during storage, project construction, maintenance, or other dewatered conditions.
6. Fittings and attachment methods to be used and their requirements.
7. Type of installation.
8. Operating conditions.
9. Fabrication classification (Sec. 1.1.1).
10. Whether certified drawings are to be provided (Sec. 4.1).
11. Color and aesthetic treatments (Sec. 4.2.2.1(b)).
12. Whether ultraviolet stabilizers are required (Sec. 4.2.3).
13. Loading conditions and design criteria for the fabrications (Sec. 4.3.2).
14. Specimens to be provided by the manufacturer (Sec. 5.1).
15. Tests to be performed by the manufacturer (Sec. 5.2).
16. Retest agreement requirements (Sec. 5.2.3).
17. Whether plant inspection is required (Sec. 5.3).