



**American Water Works
Association**

The Authoritative Resource for Safe Drinking WaterSM

ANSI/AWWA C512-04
(Revision of ANSI/AWWA C512-99)

AWWA Standard

Air-Release, Air/Vacuum, and Combination Air Valves for Waterworks Service



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Foreword

This foreword is for information only and is not a part of ANSI/AWWA C512.

I. Introduction.

I.A. *Background.* This standard describes three types of air valves: air-release valves, air/vacuum valves, and combination air valves.

1. Air-release valves, also called small orifice valves, are designed to automatically release small pockets of accumulated air from a pipeline while the system operates under pressure exceeding atmospheric pressure.

2. Air/vacuum valves, also called large orifice valves, are designed to exhaust large quantities of air automatically during pipeline filling and to admit large quantities of air automatically when the internal pressure in the pipeline drops below atmospheric pressure.

3. Combination air valves are designed to perform the same function as air/vacuum valves but, in addition, they will automatically release small pockets of air from the pipeline while under pressure, like an air-release valve.

I.B. *History.* The ANSI/AWWA Standards Committee on Waterworks Air-Release Valves was authorized on Nov. 17, 1984, to respond to a request for a standard on air valves. The first edition of this standard, ANSI/AWWA C512, was approved by the AWWA Board of Directors on Jan. 26, 1992, and the second edition on June 20, 1999. This edition was approved on June 13, 2004.

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

*Persons outside the US should contact the appropriate authority having jurisdiction.

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, NSF^{*}/ANSI[†] 60, Drinking Water Treatment Chemicals—Health Effects, and NSF/ANSI 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 NSF/ANSI 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 NSF/ANSI 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.

ANSI/AWWA C512 does not address additives requirements. 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.

^{*}NSF International, 789 N. Dixboro Rd., Ann Arbor, MI 48105.

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

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