

ANSI/AWWA **G510-21**
(Revision of ANSI/AWWA G510-13)

AWWA Management Standard

Wastewater Treatment Plant Operation and Management

Effective date: April 1, 2022.

First edition approved by Board of Directors June 9, 2013.

13th edition approved Oct. 25, 2021.

Approved by American National Standards Institute Nov. 11, 2021.



American Water Works
Association



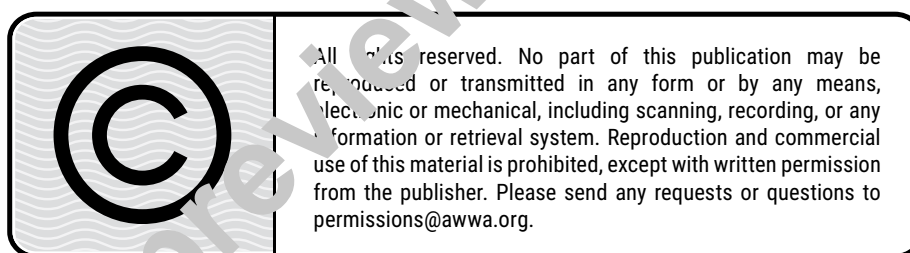
AWWA Management Standard

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ISBN-13, print: 978-1-64717-061-6

ISBN-13, electronic: 978-1-61300-614-6

DOI: 10.12999/AWWA.G510.21

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Committee Personnel

The AWWA Standards Committee on Wastewater Treatment Plant Operation and Management, which reviewed and approved this standard, had the following personnel at the time of approval:

Roy Hesemann, *Chair*

Yanjin Liu, *Vice-Chair*

Management Interest Members

A. Ambulkar, Toledo Technology Academy, Toledo, Ohio

R. Komaragiri, In-Pipe Technology LLC, Wood Dale, Ill.

E. Meek, (*liaison, nonvoting*) AWWA Standards Engineer, Denver, Colo.

User Members

D. Falkner, Village of Mukwonago, Mukwonago, Wis.

R. Hesemann, Cedar Rapids Water Dept., Cedar Rapids, Iowa

Y. Liu, AM Water, Camden, N.J.

L. Olds, Clean Water Services, Portland, Ore.

C.A. Ortiz, ETAG Corp., Caguas, Puerto Rico

P.E. Petersen, Milwaukee, Wis.

Consulting Services Members

A. Ford, Hazen and Sawyer, Virginia Beach, Va.

J. Jebelli, Blainville, Quebec

K. Nartey-Quaye, LNV Inc., Corpus Christi, Tex.

D.L. Russell, Global Environmental Operations Inc., Lilburn, Ga.

L. Thomas (*liaison, nonvoting*), Standards Council Liaison, Stanley Consultants, Lakewood, Ill.

G.S. Whittaker, CHD, Phoenix, Ariz.

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Foreword

This foreword is for information only and is not a part of ANSI/AWWA G510.*

I. Introduction.

I.A. *Background.* The AWWA standards program is designed to serve water, wastewater, and reuse utilities—hereafter, the water sector—and their customers, owners, service providers, and government regulators. The standards developed under the program are generally intended to improve a plant’s overall operations and service. Among these standards is this effort to establish formal management and operations guidelines. These guidelines identify appropriate practices, procedures, and behaviors whose implementation will promote effective and efficient plant operations and contribute to the protection of public health, public safety, and the environment.

AWWA’s standards process has been used for more than 100 years to produce American National Standards Institute (ANSI)-recognized standards for materials and processes that are used by the water sector. These standards are recognized worldwide and have been adopted by many utilities and organizations. Likewise, this management standard is developed using the same ANSI-recognized formal process. Volunteer standards committees establish standard practices in a uniform and appropriate format.

The Utility Management G-Series Standards were developed to assist utilities with identifying and implementing applicable best management practices. To further enhance the use of the Standards, the AWWA Utility Quality Management Committee developed both self-assessment and peer-review programs to assist utilities that choose to meet performance criteria contained within the Standards. The Committee developed a framework for the stringent expectations of all Utility Management Standards, as follows:

- Utility Management Standards are voluntary, and their intent is to provide guidance toward best management practices.
The requirements set forth in the Standards describe best practices that are achievable but not necessarily the best of class.
- The language used in the Standards should avoid requirements related to numeric values, and words such as “shall” or “must” in areas that describe or could be considered in exceedance of existing local and/or federal regulations.

Formal standards committees have been and continue to be formed to address the individual standards practices for the diverse areas of water sector operation. A formal

* American National Standards Institute, 25 West 43rd Street, Fourth Floor, New York, NY 10036.

standards committee was created in 2009 to develop a standard for wastewater treatment plant operation and management. This standard is the outcome of the Wastewater Treatment Plant Operation and Management Standards Committee.

I.B. *History.* The first edition of this standard was approved by the AWWA Board of Directors on June 9, 2013. This edition was approved by the AWWA Board of Directors on Oct. 25, 2021.

I.C. *Acceptance.* ANSI/AWWA G510 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 parties offering to certify products for contact with or treatment of wastewater, including reclaimed water.
3. Determine current information on product certification.

II. Special Issues.

II.A. *Advisory Information on Application of Standards.* This standard includes only those requirements that are limited exclusively to management practices for wastewater treatment plant operation and management. Separate standards adopted by the Standards program cover utility management programs, such as water treatment, water distribution, source water protection, security, emergency preparedness practices, business practices, and communication and customer relations.

III. **Use of This Standard.** It is the responsibility of the user of an AWWA standard to determine that the products and practices described in that standard are suitable for use in the particular application being considered.

III.A. *Options and Alternatives.* The following should be considered by the user:

1. Standard used—that is, ANSI/AWWA G510, Standard for Wastewater Treatment Plant Operation and Management, of the latest revision.
2. Details of other federal, state or provincial, and local governments (Sec. 4.1).
3. If a pretreatment program is required.
4. If a hauled-waste program is required.
5. If a fats, oils, and grease (FOG) management program is required.
6. Treated effluent requirements for reclaimed water use.
7. If a stormwater management system is required.

III.B. *Modification to Standard.* Any modification of the provisions, definitions, or terminology in this standard must be provided by the purchaser.

IV. Major Revisions. Major changes made to the standard in this revision include the following:

1. Guidance was added to the Foreword to clarify the intent of a utility management standard.
2. Definitions for FOG, Manufacturer, and Purchaser were added.
3. Renewable power sources were added as an option to *Power* (Sec. 4.3.10.1)
4. Collection system requirements reference ANSI/AWWA G520 (Sec. 4.3.13)
5. Record keeping was expanded to include additional documentation (Sec. 4.4.3.4)
6. Sec. 4.6 was added to address risk and resilience management and emergency preparedness

V. Comments. If you have any comments or questions about this standard, please call AWWA Engineering and Technical Services at 303.794.7710, write to the department at 6666 West Quincy Avenue, Denver, CO 80235-3098, or email at standards@awwa.org.

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ANSI/AWWA G510-21
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AWWA Management Standard

Wastewater Treatment Plant Operation and Management

SECTION 1: GENERAL

Sec. 1.1 Scope

This standard describes the essential or critical requirements for the effective operation and management of a wastewater treatment plant.

Sec. 1.2 Purpose

The purpose of this standard is to define the minimum requirements for the effective operation and management of wastewater treatment plants, including water quality, system management programs, and operation and maintenance of facilities.

Sec. 1.3 Application

This standard can be referenced in the evaluation of the operation and management of a wastewater treatment plant. The stipulations of this standard apply when this document has been referenced and then only to the operation and management of wastewater treatment plants.