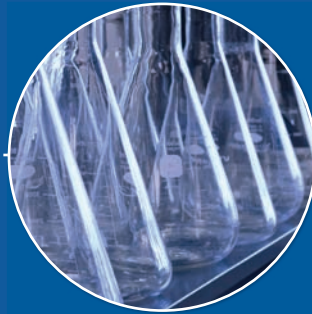




*NSF International Standard /  
American National Standard*

## NSF/ANSI 46 - 2010

Evaluation of Components and  
Devices Used in Wastewater  
Treatment Systems



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American National Standard  
for Wastewater Technology —

**Evaluation of components  
and devices used in  
wastewater treatment systems**

Standard Developer

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## Foreword<sup>2</sup>

The purpose of this Standard is to establish minimum materials, design and construction, and performance testing and evaluation requirements for components and devices used in wastewater treatment systems. Minimum literature requirements to be supplied by manufacturers to authorized representatives and owners are also specified.

This edition of the Standard (NSF/ANSI 46 – 2010) includes the following revisions:

### **Issue 19**

- To add requirements for Ozone disinfection devices to NSF/ANSI 46. This language provides a uniform certification for all manufacturers to have their products certified for use with domestic wastewater.

Ozone is one of the recently emerging technologies for reducing pathogens in treated domestic wastewater. Certification standards exist for chlorine and ultraviolet disinfection devices. Manufacturers of ozone disinfection devices approached the Joint Committee (JC) with a request for a similar certification standard at the 2009 JC meeting.

ANSI Procedures prohibit the inclusion of commercial terms and conditions, such as manufacturers' warranties and guarantees, in American National Standards. However, the NSF Joint Committee on Wastewater Technology has historically believed strongly that all certifiers of NSF/ANSI 46 systems should have certification program policies that contain several key elements, including requirements for warranties. It is the Joint Committee's belief that these key elements provide valuable assurance of long-term performance as well as protection of public health and the environment. To emphasize the Joint Committee's convictions on this issue, two annexes, which are not part of this Standard, were added for informational purposes and guidance. These annexes are intended to establish a uniform program by which products meeting the scope of this Standard should be certified. Annex A provides the key elements of a certification program, and annex B is a sample warranty.

This Standard was developed by the NSF Joint Committee on Wastewater Technology using the consensus process described in the American National Standards Institute.

Suggestions for improvements of this Standard are welcome. Comments should be sent to Chair, Joint Committee on Wastewater Technology, c/o NSF International, Standards Department, P.O. Box 130140, Ann Arbor, Michigan 48113-0140, USA.

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<sup>2</sup> The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. Therefore, this Foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

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NSF/ANSI Standard  
for Wastewater Technology –

# Evaluation of components and devices used in wastewater treatment systems

## 1 General

### 1.1 Purpose

The purpose of this Standard is to establish minimum materials, design and construction, and performance requirements for components and devices used in the handling, treating, recycling, reusing, or disposal of wastewater. This Standard is intended to protect public health and the environment as well as to minimize nuisance factors.

### 1.2 Scope

This Standard is intended for use with components and devices not covered by other NSF wastewater standards. Components and devices covered by this Standard are intended for use with greywater or blackwater or both. Management methods for the end-products of these components and devices are not addressed in this Standard. This Standard shall in no way restrict new system designs, provided that such designs meet the minimum specifications described herein.

All devices and components meeting the scope of this Standard shall comply with all of the requirements described in 1 through 8. In addition, devices and components shall comply with the applicable subsequent section(s) contained in this Standard. Where subsequent sections of the Standard include requirements that overlap with those found in 1 through 8, the requirements of both sections shall be met unless otherwise specified in the requirements of the subsequent section.

### 1.3 Alternate materials, design, and construction

While specific materials, designs, and construction may be stipulated in this Standard, devices that incorporate alternate materials, designs, or construction may be acceptable when it is verified that such systems meet the applicable requirements.

## 2 Normative references

The following documents contain provisions that, through reference in this text, constitute provisions of this Standard. At the time of publication, the indicated editions were valid. All standards are subject to revision, and parties are encouraged to investigate the possibility of applying the recent editions of the standards indicated herein.

APHA, *Standard Methods for the Examination of Water and Wastewater*<sup>3</sup>, 19th edition (herein afterwards referred to as Standard Methods)

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<sup>3</sup> American Public Health Association, 800 I Street NW, Washington, DC 20001 [www.apha.org](http://www.apha.org)