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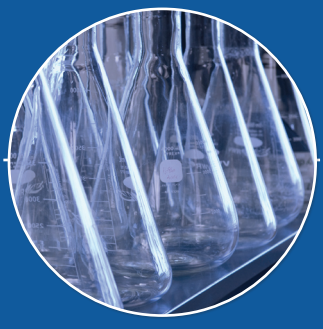
# NSF/ANSI 53 - 2018

## Drinking Water Treatment Units - Health Effects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NSF International Standard /
American National Standard
for Drinking Water Treatment Units –

# Drinking Water Treatment Units – Health Effects

Standard Developer
**NSF International**

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Prepared by
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**Contents**

## Foreword[2]

The purpose of this Standard is to establish minimum requirements for materials, design and construction, and performance of drinking water treatment systems that are designed to reduce specific health-related contaminants in public or private water supplies. NSF/ANSI 53 specifies minimum product literature requirements that manufacturers must provide to authorized representatives and owners.

This edition of the Standard contains the following revisions:

**Issue 109**

This revision adds an asbestos reduction protocol for batch treatment systems under Section 7.3.1.

**Issue 112**

The revision addresses inconsistent language across the scopes of the DWTU Standards and adds clarifying language on systems that include components or functions covered under other NSF Standards.

**Issue 113**

This revision adds clarification to the product literature requirements under Section 8.3 for replacement components.

**Issue 114**

This revision adds a performance reduction claim for perfluorocctanoic acid (PFOA) and perfluoroctane sulfonate (PFOS) for drinking water treatment devices that use activated carbon adsorption.

**Issue 116**

Informational Annex M was notify the user of an upcoming ballot in 2019 to revise the current pass/fail criteria for lead reduction from 10 µg/L to 5 µg/.

This Standard was developed by the NSF Joint Committee on Drinking Water Treatment Units using the consensus process described by the American National Standards Institute.

Suggestions for improvement of this Standard are welcome. This Standard is maintained on a Continuous Maintenance schedule and can be opened for comment at any time. Comments should be sent to: Chair, Joint Committee on Drinking Water Treatment Units at standards@nsf.org, or c/o NSF International, Standards Department, PO Box 130140, Ann Arbor, Michigan 48113-0140, USA.

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NSF/ANSI Standard
for Drinking Water Treatment Units —

# Drinking Water Treatment Units — Health Effects

## 1 General

### 1.1 Purpose

It is the purpose of this Standard to establish minimum requirements for materials, design and construction, and performance of point-of-use and point-of-entry drinking water treatment systems that are designed to reduce specific health-related contaminants in public or private water supplies. Such systems include point-of-entry drinking water treatment systems used to treat all or part of the water at the inlet to a residential facility or a bottled water production facility, and includes the material and components used in these systems. This Standard also specifies the minimum product literature and labeling information that a manufacturer shall supply to authorized representatives and system owners, as well as the minimum service related obligations that the manufacturer shall extend to system owners.

### 1.2 Scope

The point-of-use and point-of-entry systems addressed by this Standard are designed to be used for the reduction of specific substances that may be present in drinking water (public or private) considered to be microbiologically safe and of known quality. Systems covered under this Standard are intended to reduce substances that are considered established or potential health hazards. They may be chemical or particulate (including filterable cysts) in nature. It is recognized that a system may be effective in controlling one or more of these contaminants, but systems are not required to control all. Systems with manufacturer claims that include components or functions covered under other NSF or NSF/ANSI Standards or Criteria shall conform to the applicable requirements therein. Systems covered by this Standard are not intended to be used with drinking water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

> NOTE — Systems that are compliant with NSF/ANSI 55 Class A or other standards that cover technologies to treat microbiologically unsafe water (e.g., US EPA Guide Standard and Protocol for Testing Microbiological Water Purifiers or NSF P231) are examples of demonstrating adequate disinfection before or after the system.

### 1.3 Alternate materials, designs, and construction

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

### 1.4 Minimum requirements

A system as defined in this Standard shall meet the applicable requirements of Sections 4, 5, 6, and 8, plus at least one performance claim as described in Section 7.

A component as defined in this Standard shall meet the requirements of Sections 4 and 8. If the component is pressure bearing, it shall also meet the applicable requirements of Section 5.