

NSF International Standard / American National Standard

NSF/ANSI 58 - 2014

Reverse Osmosis Drinking Water Treatment Systems









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NSF International Standard/ American National Standard for Drinking Water Treatment Units –

Reverse osmosis drinking water treatment systems

Standard Developer

**NSF International** 

**NSF International** 

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# Foreword<sup>2</sup>

The purpose of this Standard is to establish minimum requirements for materials, design and construction, and performance of point-of-use reverse osmosis drinking water treatment systems. NSF/ANSI 58 also specifies minimum product literature requirements that manufacturers must provide to authorized representatives and owners. Minimum service related obligations for manufacturers to extend to system owners are also specified in this Standard.

Water contact materials in Drinking Water Treatment Units listed under NSF/ANSI 42, 44, 53, 55, 58, and 62 are tested and evaluated under a separate protocol from NSF/ANSI 61 with criteria that were developed specifically for the intended end-use. NSF/ANSI 61 listing should not be additionally required for acceptance of these listed units for water contact application.

#### Issue 65

This revision removes the definitions from the Standard and adds language under section 2 to address undated normative references.

#### Issue 66

This revision modifies the influent cyst challenge concentration from 50,000 particles per mL to 50,000 particles per liter for the cyst reduction claims under section7.2.2.

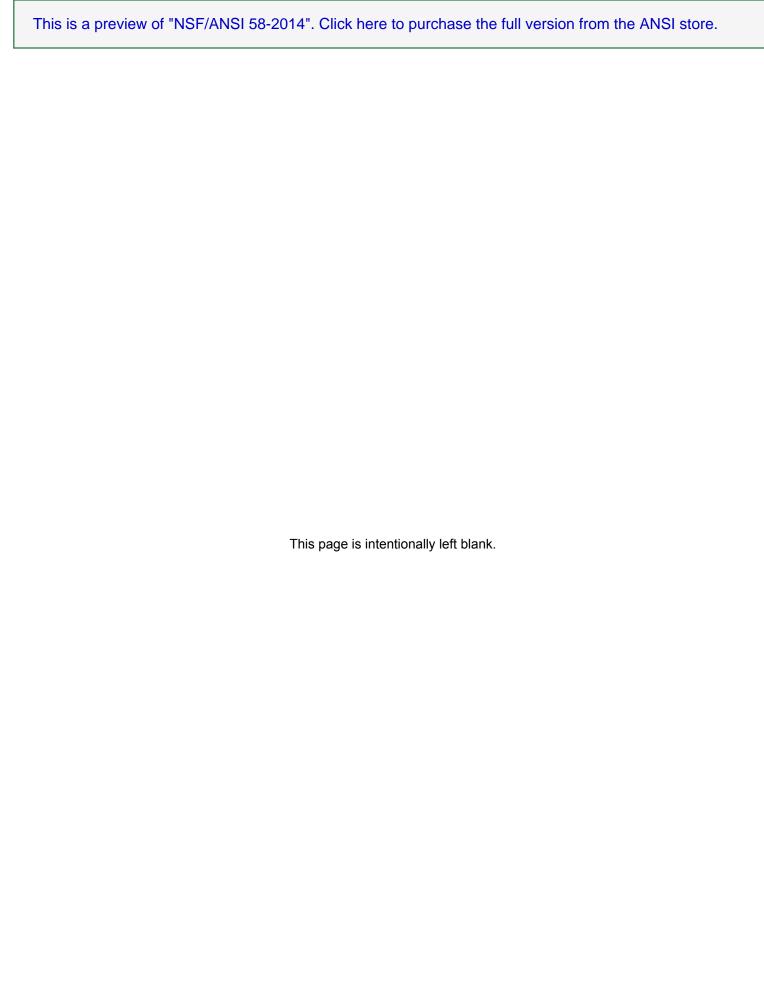
#### Issue 67

This revision allows for the turbidity and cyst reduction tests under sections 7.2.3 and 7.2.3.4 to run simultaneously.

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 <a href="mailto:standards@nsf.org">standards@nsf.org</a>, or c/o NSF International, Standards Department, P.O. Box 130140, Ann Arbor, Michigan 48113-0140, USA.

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NSF/ANSI Standard for Drinking Water Treatment Units —

# Reverse osmosis drinking water treatment systems

#### 1 General

# 1.1 Purpose

The purpose of this Standard is to establish minimum requirements for materials, design and construction, and performance of reverse osmosis drinking water treatment systems. This Standard also specifies the minimum product literature that manufacturers shall supply to authorized representatives and owners, as well as the minimum service-related obligations that manufacturers shall extend to system owners.

## 1.2 Scope

The point-of-use reverse osmosis drinking water treatment systems addressed by this Standard are designed to be used for the reduction of specific substances that may be present in drinking water supplies (public or private) considered to be microbiologically safe and of known quality (except that claims for the reduction of filterable cysts may be permitted). Systems covered by this Standard are intended for reduction of total dissolved solids (TDS) and other contaminants specified herein. Systems with components or functions covered under other NSF or NSF/ANSI Standards or Criteria shall conform to the applicable requirements therein.

# 1.3 Chemical and mechanical reduction performance claims

- **1.3.1** All NSF/ANSI 58 performance claims shall be verified and substantiated by test data generated under the requirements of NSF/ANSI 58.
- **1.3.2** When performance claims are made for substances not specifically addressed in the scope of this Standard or for those substances not specifically addressed but falling under the scope of NSF/ANSI 58, claims not specifically addressed in the Standard shall be so identified.

#### 2 Normative references

The following documents contain provisions that constitute requirements 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 most recent editions of the standards indicated below. The most recent published edition of the document shall be used for undated references.

APHA, Standard Methods for the Examination of Water and Wastewater, twentieth edition<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> American Public Health Association (APHA), 1015 Fifteenth Street, NW, Washington, DC 20005 <www.apha.org>.