

NSF/ANSI 58 – 2004

Reverse osmosis drinking water treatment systems

**NSF International Standard/
American National Standard**

NSF/ANSI 58 – 2004



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American National Standard
for Drinking Water Treatment Units –

**Reverse osmosis
drinking water treatment systems**

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Foreword²

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.

NSF/ANSI 58 – 2004 contains the following revisions:

- Sections 8.1.2 and 8.2.2 have been revised allowing manufacturers to reference individual chemicals when using the surrogate test for VOC on the packaging and literature review. Manufacturers are prohibited from implying that specific testing for the chemical was conducted if only a surrogate test was completed.
- Section 4.4.3.4 has been revised to clarify how without media testing is to be conducted in complex scenarios involving media that is chemically bound to non-media materials.

For informational purposes, the reformat table has been included in NSF/ANSI 58 – 2004 edition.

NSF/ANSI 58 – 2003e was reformatted to make the Standard more user friendly. Some of the section headings have been modified to more accurately reflect the contents of the sections. Structural integrity is a stand-alone section. For all substance claims being made the claim, method, and sampling will be found under the substance heading. Tables and apparatus were moved to the appropriate sections for ease of use.

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² 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. As such, 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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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. Comments should be sent to Chair, Joint Committee on Drinking Water Treatment Units, c/o NSF International, Standards Department, PO Box 130140, Ann Arbor, Michigan 48113-0140, USA.

NSF/ANSI Standard
for Drinking Water Treatment Units —

Reverse osmosis drinking water treatment systems

1 General

1.1 Purpose

It is the purpose of this Standard 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 comply with those applicable requirements.

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 making performance claims 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, those 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 recent editions of the standards indicated below.

APHA, *Standard Methods for the Examination of Water and Wastewater*, twentieth edition³

NSF/ANSI 53 – 2001. *Drinking water treatment units – Health effects*

NSF/ANSI 61 – 2001. *Drinking water system components – Health effects*

³ American Public Health Association (APHA), 1015 Fifteenth Street, NW, Washington, DC 20005