

NSF/ANSI 41 – 2005

Non-liquid saturated treatment systems

**NSF International Standard/
American National Standard**

NSF/ANSI 41 – 2005



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American National Standard
for Wastewater Technology —

**Non-liquid saturated
treatment systems**

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Foreword²

ANSI/NSF 41 is intended for devices that do not utilize a liquid saturated medium as a primary means of storing or treating human excreta or human excreta mixed with other organic household materials. Its purpose is to establish minimum materials, design and construction, and performance testing and evaluation requirements for these devices. Minimum literature requirements to be supplied by manufacturers to authorized representatives and owners are also specified.

In this edition of ANSI/NSF 41, the following sections were revised: 1.2 – Scope, 2 – Normative References, 6.1 – Owner's Manual, 11.1.3 – Cottage Systems, 14 – Performance Criteria, 14.1 – Liquid Containment, and 14.4 – Liquid End Products. The scope now clarifies that this standard addresses treatment systems that treat both solid and liquid waste, as well as those that only treat solid waste. The references in 2 have been updated. An additional line has been added to 6.1 clarifying that a description of suitable options for treatment of liquid waste for systems treating only solid waste is necessary in owner's manuals. In 11.1.3, the word seasonal has been added to the section title to clarify that cottage systems are recognized as for occasional use. Several modifications have been made to 14 – Performance Criteria including formatting changes and clarification to differentiate the performance criteria for systems treating only solid waste.

ANSI/NSF 41 was developed by the NSF Joint Committee on Wastewater Technology using the consensus process described by the American National Standards Institute (ANSI).

ANSI prohibits the inclusion of commercial terms and conditions, such as manufacturers' warranties and guarantees, in product standards. However, the NSF Joint Committee on Wastewater Technology has historically believed strongly that all certifiers of ANSI/NSF 41 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, are included 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. At NSF, both annexes have been adopted as ANSI/NSF 41 certification program policies.

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

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NSF/ANSI Standard for Wastewater Technology —

Non-liquid saturated treatment systems

1 General

1.1 Purpose

The purpose of this Standard is to establish minimum materials, design and construction, and performance requirements for non-liquid saturated treatment systems. It is intended to protect public health and the environment as well as minimize nuisance factors. This Standard also specifies the minimum literature that manufacturers shall supply to authorized representatives and owners.

1.2 Scope

This Standard contains minimum requirements for treatment systems that do not utilize a liquid saturated media as a primary means of storing or treating human excreta or human excreta mixed with other organic household materials. It addresses treatment systems that treat both solid and liquid waste, as well as those that only treat solid waste. Management methods for the end products of these systems are not addressed by this Standard.

System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the requirements contained in those other standards. This Standard shall in no way restrict new system designs, provided such designs meet the minimum specifications described herein.

1.3 Systems classification

For the purpose of this Standard, systems are classified according to the use environment for which they are intended to be installed. The systems classifications identified in this Standard are residential systems, day-use park systems, and cottage systems. Performance testing and evaluation requirements for each of these systems classifications are described herein.

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 below.

APHA *Standard Methods for the Examination of Water and Wastewater*, twentieth edition (herein after referred to as Standard Methods)³

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