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NSF/ANSI 360 - 2014

Wastewater Treatment Systems - Field Performance Verification



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NSF International Standard/
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for Wastewater Technology —

Wastewater treatment systems – Field performance verification

Standard Developer

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Foreword[2]

The purpose of this standard is to establish consistent site selection, sampling, laboratory analysis and data evaluation methods for obtaining field performance results for onsite wastewater treatment systems. This Standard provides site selection, field sampling, analytical, and statistical methods for evaluating the field performance of residential wastewater treatment systems capable of providing at least secondary treatment.

A number of field studies published in past years have varied significantly in methodology, quality, and performance results. Further, many state and local regulatory jurisdictions are increasingly interested in field performance data to compliment lab performance data. While NSF/ANSI 40 and 245 remain a valuable demonstration of initial product performance under defined conditions of test, the addition of field data can further demonstrate system performance when subjected to the variability of individual residences.

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

In this version of NSF/ANSI 360, the normative references were updated and editorial corrections were made throughout the standard.

Suggestions for improvements 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 Wastewater Technology at standards@nsf.org, or c/o NSF International, Standards Department, PO Box 130140, Ann Arbor, Michigan 48113-0140, USA.

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for Wastewater Technology —

Wastewater treatment systems – Field performance verification

1 General

1.1 Purpose

The purpose of this standard is to establish consistent site selection, sampling, laboratory analysis and data evaluation methods for obtaining field performance results for onsite wastewater treatment systems.

1.2 Scope

This Standard provides site selection, field sampling, analytical, and statistical methods for evaluating the field performance of residential wastewater treatment systems capable of providing at least secondary treatment.

Only treatment systems that are certified in accordance with NSF/ANSI 40 or NSF/ANSI 245 as applicable may be evaluated under this Standard. A treatment system completing third-party testing in compliance with an evaluation, certification and listing protocol equivalent to NSF/ANSI 40 or NSF/ANSI 245 as applicable shall be acceptable, provided all data pursuant to the testing is published and the results verify that the device is capable of treatment as defined in NSF/ANSI 40 or NSF/ANSI 245 as applicable.

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. The most recent published edition of the document shall be used for undated references.

American Public Health Association (APHA), American Water Works Association (AWWA) & Water Environment Federation (WEF): *Standard Methods for the Examination of Water and Wastewater,* 22nd Edition, (hereinafter referred to as *Standard Methods*)[3]

NSF/ANSI 40, *Residential wastewater treatment systems*

NSF/ANSI 245, *Wastewater treatment systems – nitrogen reduction*

USEPA, *Code of Federal Regulations (CFR), Title 40: Protection of Environment, July 1, 2010*[4]

3 Definitions

3.1 biochemical oxygen demand (BOD_5): The concentration of oxygen (expressed as mg/L) utilized by

[3] Standard Methods for the Examination of Water and Wastewater <www.standardmethods.org>

[4] Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 <www.gpo.gov>