NSF International

MEMORANDUM

TO: Joint Committee on Wastewater Technology

FROM: Dr. Robert Powitz, Chair of the Joint Committee

DATE: February 15, 2022

SUBJECT: Proposed revision to NSF/ANSI 40 – *Residential Wastewater Treatment Systems* (40i43r1)

Revision 1 of NSF/ANSI 40, issue 43 is being forwarded to the Joint Committee for consideration. Please review the proposal and **submit your ballot by March 8, 2022** via the NSF Online Workspace <www.standards.nsf.org>.

When adding comments, please identify the section number/name for your comment and add all comments under one comment number where possible. If you need additional space, please upload a word or pdf version of your comments online via the browse function.

Purpose

The proposed revision will revise language in NSF/ANSI 40 to bring language more in line with NSF's formatting guidelines.

Background

This paper was submitted goal of revising language to add clarity and have the standard be more in line with NSF's formatting guidelines for standards.

If you have any questions about the technical content of the ballot, you may contact me in care of:

Dr. Robert Powitz
Chair, Joint Committee on Wastewater Technology
c/o Jason Snider
Joint Committee Secretariat
NSF International
Tel: (734) 418-6660
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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of ~~strikeout~~ and additions by grey highlighting. Rationale Statements are in *italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard
For Wastewater Technology –

Residential Wastewater Treatment Systems

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6 Product literature

6.1 Owner's manual

Each system shall be accompanied by a manufacturer-prepared owner's manual. The authorized representative shall provide the manual to the owner at the time of system installation. The manual shall be written so as to be easily understood by the intended reader and shall include, at a minimum:

— the system's model designation;

— a statement designating the classification of the system (Class I or II), as well as a confirming statement that the system meets the requirements in ~~NSF/ANSI 40~~ this standard corresponding to the designated classification;

— a functional description of system operation, preferably including diagrams illustrating basic system design and flow path;

— a clear statement of examples of the types of waste that can be effectively treated by the system;

— a list of household substances that, if discharged to the system, may adversely affect the system, the process, or the environment;

— comprehensive operating instructions that clearly delineate proper function of the system, operating and maintenance responsibilities of the owner and authorized service personnel, and service-related obligations of the manufacturer;

— requirements for the periodic removal of residuals from the system;

— a course of action to be taken if the system is to be used intermittently, or if extended periods of nonuse are anticipated;

— detailed methods and criteria to be used to identify system malfunction or problems;

— a statement instructing the owner to reference the system data plate in the event that a problem arises, or service is required;

— the name and telephone number of an appropriate service representative to be contacted in the event that a problem with the system occurs; and

— a description of the initial and extended service policies.

If not appearing on the system, electrical schematics for the system shall be included in the owner's manual.
Rationale: brings language in line with NSF formatting policies

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6.2.2 Operation and maintenance manual

Manufacturers shall provide comprehensive and detailed operation and maintenance instructions to authorized representatives. The manual shall be written so as to be easily understood by the intended reader and shall include, at a minimum:

— a maintenance schedule for all components;

— requirements and recommended procedures for the periodic removal of residuals from the system;

— a detailed procedure for visual evaluation of system component functions;

— a description of olfactory and visual techniques for the evaluation of system effluent and mixed liquor;

— recommended methods for collecting effluent samples; and

— the expected effluent produced by the operational system as established through analytical methods described or referenced in ~~NSF/ANSI 40~~ this standard.
Rationale: brings language in line with NSF formatting policies

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8.5.1.2 In the event that a catastrophic site problem not described in this Standard including, but not limited to, influent characteristics, malfunctions of test apparatus, and acts of God, jeopardizes the validity of the performance testing and evaluation, manufacturers shall be given the choice to:

— perform maintenance on the system, reinitiate system start-up procedures, and restart the performance testing and evaluation; or

— with no routine maintenance performed, have the system brought back to pre-existing conditions and resume testing within 3 weeks after the site problem has been identified and corrected. Data collected during the system recovery period shall be excluded from the 7- and 30-d averages of effluent measurements.

~~NOTE —~~ Preexisting conditions shall be defined as the point when the results of three consecutive data days are within 15% of the previous 30-d average(s).
Rationale: NOTEs are informative and cannot contain requirements (shall).

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Informative Annex 2

Key elements of a certification program for residential wastewater treatment systems

The information contained in this Annex is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. Therefore, this Annex 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.

A certification program for residential wastewater treatment systems should contain the following program elements.

I-2.1 Marking the product

— certified systems should bear a registered certification mark;

— certified components intended to be used with other components to make a complete functional system, as defined by ~~NSF/ANSI 40~~ this standard, should bear a certification mark indicating device is a component; and

— each system should have a model designation.

I-2.2 Listing certified companies

A listing of all certified systems and components should be published. The listing format should include at least the following information:

— company name and address;
— product description;
— trademark / model designation;
— class rating;
— rated capacity; and
— listing of each state in which the certified company has an authorized distributor.

I-2.3 Annual audits

— annual audits of all facilities and production locations of the certified company; and

— annual audits of a subset of the company's authorized distributors of certified systems, including field inspections of operational systems.

I-2.4 Testing

— testing in accordance with ~~NSF/ANSI 40~~ this standard's, requirements prior to certification; and
— a retest program that includes reevaluation and retesting at least once every 7 y.

I-2.5 Corrective action

Corrective action for all items of noncompliance found during audits and reevaluation.

I-2.6 Enforcement

Enforcement action by the certifier for the following:

- use of a mark on a noncertified product;
- general noncompliance;
- unauthorized change to a certified product;
- unauthorized shipment or disposal of product placed on hold;
- bribes; and
- recall of products.

Rationale: brings language in line with NSF formatting policies