



TO: Joint Committee on Drinking Water Treatment Units

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

DATE: October 19, 2022

SUBJECT: Proposed revisions to NSF/ANSI 53: *Drinking Water Treatment Units — Health Effects* (53i150r1)

Revision 1 of NSF/ANSI 53 issue 150 is being forwarded to the Joint Committee for consideration. Please review the proposal and **submit your ballot by November 9, 2022** via the NSF Online Workspace <www.standards.nsf.org>.

Please review all ballot materials. When adding comments, please include the section number applicable to your comment and add all comments under one comment number whenever possible. If you need additional space, please use the attached blank comment template in the reference documents and upload online via the browse function.

Purpose

The proposed revisions will update normative references and correct a typo.

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 Drinking Water Treatment Units
c/o Monica Milla
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NSF
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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 **gray 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 Drinking Water Treatment Units

Drinking Water Treatment Units — Health Effects

2 Normative references

The following documents contain ~~requirements provisions~~ that, by reference in this text, constitute requirements of this standard. At the time of publication, the indicated editions were valid. All of the documents ~~standards~~ are subject to revision and parties are encouraged to investigate the possibility of applying the recent editions of the documents ~~standards~~ indicated below. The most recent published edition of the document shall be used for undated references.

21 CFR, *Food and Drugs*, Subchapter B, *Food for Human Consumption*, Parts 170-199³

40 CFR Part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants*

40 CFR Part 141, *National Primary Drinking Water Regulations*³

40 CFR Part 143, *Other Safe Drinking Water Act Regulations*, Subpart A, *National Secondary Drinking Water Regulations*³

APHA/AWWA/WEF, *Standard Methods for the Examination of Water and Wastewater*, (hereinafter referred to as *Standard Methods*)⁴

EPA-600/4-79-020, *Methods for the Chemical Analysis of Water and Wastes*, March 1983⁵

~~EPA-600/4-82-057~~~~EPA-600/4-84-053~~, *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*, ~~May 2002~~~~June 1984~~⁵

EPA-600/4-88-039, *Methods for the Determination of Organic Compounds in Drinking Water*, December 1988⁵

EPA-600/4-90-020, *Methods for the Determination of Organic Compounds in Drinking Water*, Supplement 1, July 1990⁵

EPA-600/4-91-010, *Methods for the Determination of Metals in Environmental Samples*, June 1993⁵

EPA-600/R-05-054, *Method 521: Determination of Nitrosamines in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography With Large Volume Injection and Chemical Ionization Tandem Mass Spectrometry (MS/MS)*, September 2004⁵

EPA-814/B-95-003, *ICR Protozoan Method for the Detecting Giardia Cysts and Cryptosporidium Oocysts in Water by a Fluorescent Antibody Procedure*, June 1995⁵

³ National Archives and Records Administration, Office of the Federal Register. 7 G Street NW, Suite A-734, Washington, DC 20401. <www.ecfr.gov>

⁴ American Public Health Association, American Water Works Association, and Water Environment Federation. <www.standardmethods.org>

⁵ US Environmental Protection Agency. 1200 Pennsylvania Avenue NW, Washington, DC 20004. <www.epa.gov>

EPA Method 100.1, *Analytical Method for Determination of Asbestos Fibers in Water*, formerly US EPA-600/4-83-043⁵

EPA Method 180.1, *Analytical Method for Determination of Turbidity by Nephelometry*⁵

NSF/ANSI 42, *Drinking Water Treatment Units – Aesthetic Effects*

NSF/ANSI 51, *Food Equipment Materials*

NSF/ANSI/CAN 60, *Drinking Water Treatment Chemicals – Health Effects*

NSF/ANSI/CAN 61, *Drinking Water System Components – Health Effects*

NSF/ANSI/CAN 600, *Health Effects Evaluation and Criteria for Chemicals in Drinking Water*

ISO 12103-1:1997, *Road Vehicles – Test dust for filter evaluation – Part 1: Arizona test dust* SAE J726-1993, *Air Cleaner Test Code*⁶

Rationale: Updates introductory paragraph for consistency with other DWTU standards; corrects document number and publication year of an EPA document; adds EPA Method 180.1, NSF/ANSI 51, and NSF/ANSI/CAN 600, which are mentioned in the standard; and adds an ISO document which supersedes an SAE document.

6 Minimum performance requirements

6.12 Active agents and additives

Where an active agent or additive is used in the drinking water treatment process, the product water shall not contain that substance (or its degradation products) at a concentration of toxicological significance as given by the US EPA *Primary Drinking Water Regulations*,⁵ by the Health Canada *Maximum Acceptable Concentrations*,⁷ by any US federal regulatory agency, or at a concentration that exceeds constituent limits of the US EPA *Secondary Drinking Water Regulations*⁵ for all sample points. If the substance does not have a maximum drinking water concentration established by US EPA or Health Canada, a TAC shall be established according to the requirements of NSF/ANSI/CAN 600 NSF/ANSI 61, Annex A.

Rationale: Updates to the current standard.

8 Instruction and information

8.2 Data plate

8.2.3 Where applicable and appropriate, the following information shall also be included:

“Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.”

— ~~where~~ where the physical size of the system does not permit affixing the caution statement, the statement shall be prominently displayed in the literature accompanying the system.

Rationale: Corrects a typo.

⁶ International Organization for Standardization. Chemin de Blandonnet 8, Case Postale 401, 1214 Vernier, Geneva, Switzerland. <www.iso.org> SAE International. 400 Commonwealth Drive, Warrendale, PA 15096. <www.sae.org>