

Joint Committee on Drinking Water Treatment Units

August 2, 2024

Proposed revisions to:

- NSF/ANSI 53: Drinking Water Treatment Units Health Effects (53i160r1)
- NSF/ANSI 58: Reverse Osmosis Drinking Water Treatment Systems (58i111r1)

Revision 1 of NSF/ANSI 53, issue 160 and NSF/ANSI 58, issue 111 is being forwarded to the Joint Committee for consideration. Please review the proposal and **submit your ballot by August 23, 2024** via the NSF Online Workspace.

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 purpose of this ballot is to change to the influent challenge for asbestos to solely chrysotile fibers in Section 7.3.1.4.3 of NSF/ANSI 53 and Section 7.2.1.4 of NSF/ANSI 58.

Background

An issue paper indicated that it has become increasingly more difficult for laboratories to purchase anthophyllite asbestos. The issue paper was discussed at the May 2024 DWTU Joint Committee annual meeting and was voted to go to ballot as written.

Chrysotile is the most commonly used form of asbestos, used in the vast majority of products containing asbestos. Chrysotile was widely used in roofs, ceilings, walls, and floors of homes and businesses. It was also found in automobile brake linings, gaskets, and insulation for pipes and appliances. Anthophyllite is an asbestos mineral belonging to the amphibole family. Anthophyllite is the rarest form of asbestos and was used in limited quantities for insulation products and construction materials.

Please refer to the issue paper (DWTU-2024-3) and the asbestos discussion excerpt from the DWTU Joint Committee annual meeting summary under Referenced Items for additional background information.

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

Joint Committee Secretariat

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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 53:

Drinking Water Treatment Units — Health Effects

7 Elective performance claims – Test methods

7.3 Mechanical filtration reduction claims

7.3.1 Asbestos reduction testing

7.3.1.4.3 Influent challenge – Asbestos

A 50/50 blend of c Chrysotile and anthophyllite asbestos shall be added to the general test water specified in Section 7.3.1.4.1 to produce a chrysotile and anthophyllite asbestos fiber concentration in the range of 10⁷ to 10⁸ fibers per liter. Only fibers > 10 µm shall be counted to confirm challenge.

NSF/ANSI 58:

Reverse Osmosis Drinking Water Treatment Systems

7 Elective performance claims – Test methods

7.2 Mechanical filtration reduction claims

7.2.1 Asbestos reduction claims

7.2.1.4 Influent challenge

A 50/50 blend of c Chrysotile and anthophyllite asbestos shall be added to the general test water specified in Section 7.2.1.3 to produce a fiber concentration in the range of 10^7 to 10^8 fibers per liter. Only fibers > 10 μ m shall be counted to confirm challenge.

Rationale:

Changes the influent challenge to solely chrysotile fibers as it has become increasingly difficult for labs to purchase anthophyllite asbestos. Chrysotile is the most commonly used form of asbestos.