TO: Joint Committee on Wastewater Technology
FROM: Dr. Robert Powitz, Chair of the Joint Committee
DATE: July 13, 2020
SUBJECT: Proposed revision to NSF/ANSI 350 – Onsite Residential and Commercial Water Reuse Treatment Systems (350i54r1)

Revision 1 of NSF/ANSI 350, issue 54 is being forwarded to the Joint Committee for consideration. Please review the proposal and submit your ballot by August 3, 2020 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 incorporate backflow prevention language in section 5 of NSF/ANSI 350.

**Background**

During a recent CPHC ballot (350i42r2 – Fresh water addition, approved), a comment attached to an affirmative vote pointed out that Standard 350 does not specify backflow prevention for any potable water connections to a Standard 350 treatment system. This would seem to be a public health oversight. In order to prevent greywater from entering the potable water system, backflow prevention should be required for all treatment system connections to potable water.

The proposed language is boilerplate language from many of the Food Equipment standards and is proposed for a new section under design and construction requirements:

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

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Chair, Joint Committee on Wastewater Technology
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5.12 Backflow prevention

5.12.1 It is common for greywater treatment systems to connect to a treated water supply system for the purpose of topping off the treated water storage tank when needed and sometimes to assist in a treatment function, such as backflush. Units intended to be connected to a water supply system under pressure shall have one of the following:

— an air gap at least twice the diameter of the water supply inlet but not less than 25 mm (1.0 in); or

— a vacuum breaker that conforms to ANSI/ASSE 10015, Atmospheric Type Vacuum Breakers (for intermittent pressure conditions); or

— a vacuum breaker that conforms to ANSI/ASSE 10205, Pressure Vacuum Breaker Assembly (for continuous pressure conditions); or

— a backflow prevention device that conforms to ANSI/ASSE 10245, Dual Check Backflow Preventers; or

— a statement in the installation instruction and on a label permanently affixed to the equipment that clearly indicates that the equipment is to be installed with adequate backflow protection to comply with applicable federal, state, and local codes.

5.12.2 A screen of at least 100 mesh (minimum 100 strands per inch) shall be installed immediately upstream of all check valve type backflow preventers used for water supply protection. The screen shall be accessible and removable for cleaning or replacement.