TO: Joint Committee on Plastics and Recreational Vehicle Plumbing Components

FROM: Mr. Barry Pines, Vice Chairperson

DATE: May 8th, 2020

SUBJECT: Proposed revision to NSF/ANSI 14 Plastics piping system components and related materials (14i109r2)

Draft 2 of NSF/ANSI 14 issue 109 is being forwarded to the Joint Committee for balloting. Please review the changes proposed to this Standard and submit your ballot by May 29, 2020 via the NSF Online Workspace (http://standards.nsf.org).

Please review all ballot materials. When adding comments, please include the section number applicable your comment and add all comments under one comment number whenever possible. If additional space is needed, you may upload a word or .PDF version of your comments online via the browser function.

Purpose
This ballot will revise language regarding use of rework materials in NSF/ANSI 14.

Background
Section 4.1.2.2 was previously added to NSF 14 to permit the use of rework material in polyethylene products, provided the material was of the same designation (e.g. PE 4710) and from the same product manufacturer. However, this section needs some restriction with respect to PE materials that carry an oxidative resistance classification. The use of rework involving materials of different oxidative resistance classifications could possibly affect the overall oxidative resistance, so a reference to section 5.8 is needed to ensure that appropriate testing is performed.

The issue paper submitted on this subject was presented at the 2019 Joint Committee on Plastics and RV Plumbing Components meeting and was sent to the Plastics Task Group on Rework Materials for further language development. That group met 3 times and drafted an r1 ballot that was presented to the Task Group. The r1 ballot received 3 negative votes, and the Task Group met once more to address those comments. This r2 language presented in this ballot is the result of the group’s efforts.

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

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4 Requirements for plastic piping system components and related materials

4.1 Materials

Plastics piping system components and related materials shall meet the specific public health requirements and the requirements set forth in the applicable product standard(s).

4.1.1 Virgin materials

Plastic piping system components and related materials shall be produced from virgin plastics complying with this Standard, unless the applicable product standard(s) contained in Section 2 of this Standard specifically allows the use of recycled plastics.

When recycled plastics are used, they shall only be used as specified in the applicable product standard. For example, ASTM F1732 and ASTM F1760 have requirements for recycled plastics, including but not limited to the types of plastics that can be used and any limitations on the amounts of various materials that can be incorporated into the final product.

4.1.2 Rework materials

4.1.2.1 All materials excluding polyethylene

The use of clean rework material of the same formulation from the same piping product manufacturer shall be acceptable provided that the finished products meet the requirements of the applicable product standard(s). Plastic piping system components and related materials shall be manufactured in such a way as to prevent contamination.

4.1.2.2 Polyethylene

The use of clean, rework polyethylene material from the same material designation (e.g., PE 4710) and from the same piping product manufacturer shall be acceptable provided that the finished products meet the requirements of the applicable product standard(s). Plastic piping system components and related materials shall be manufactured in such a way as to prevent contamination.

For potable water applications, when mixing rework materials at any ratio of a different ORC (Oxidative Resistance Classification) than the virgin compound, the resulting product receives the ORC of the lowest rated compound within the mixture.
NOTE - For example, rework of CC2 ORC can be mixed with CC3 ORC virgin compound and the resulting product would be classified as CC2 ORC.