TO: Joint Committee on Plastics and RV Plumbing Components

FROM: Kevin Kalakay, Chair of the Joint Committee

DATE: July 29, 2022

SUBJECT: Proposed revision to NSF/ANSI 358-2: *Polypropylene Pipe and Fittings for Water-Based Ground-Source "Geothermal" Heat Pump Systems* (358-2i3r1)

Revision 1 of NSF/ANSI 358-2, issue 3 is being forwarded to the Joint Committee for consideration. Please review the proposal and **submit your ballot by August 19, 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 revision will update language in NSF/ANSI 358-2 to bring it more in like with NSF publishing guidelines.

Background

During a review of NSF/ANSI 358-2, opportunities to add more consistency were identified:

1. Updating the normative references opening paragraph to current boilerplate language
2. Updating normative references
3. Removing "shall" requirement from definitions.
4. Replacing the word "must" with "shall" to be more consistent with Standards language

This issue paper was presented at the 2022 Joint Committee on Plastics and Recreational Vehicle Plumbing Components annual meeting, and a motion to send the language to ballot was approved there.

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

Kevin Kalakay
Chair, Joint Committee on Plastics and RV Plumbing Components
c/o Jason Snider
Joint Committee Secretariat
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 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 Plastics —

Polypropylene Pipe and Fittings for Water-Based Ground-Source "Geothermal" Heat Pump Systems

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2 Normative references

~~The following documents contain provisions that, through reference, constitute provisions of this NSF Standard. At the time this Standard was balloted, the editions listed below were valid. All documents are subject to revision, and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.~~

The following documents contain requirements 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 are subject to revision and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

Normative References for Polypropylene Pipe and Fittings for Water-Based Ground-Source "Geothermal" Heat Pump Systems:

ASTM D2290-~~12~~ 19a, Standard Test Method for Apparent Hoop Tensile Strength of Plastic or Reinforced Plastic Pipe by Split Disk Method

ASTM D2837-~~13~~ 21, Standard Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials or Pressure Design Basis for Thermoplastic Pipe Products

ASTM D543-~~06~~ 21, Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents

ASTM F1588-96 (20~~15~~19) , Standard Test Method for Constant Tensile Load Joint Test (CTLJT)

ASTM F412-~~12~~21, Standard Terminology Relating to Plastic Piping Systems

ASTM F2389-~~10~~ 21, Standard Specification for Pressure-rated Polypropylene (PP) Piping Systems

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3 Definitions

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3.8 joint: The location at which two pieces of pipe or a pipe and a fitting are connected together. ~~Various joint types not defined in this standard shall be defined by ASTM F412~~[Error! Bookmark not defined.].

Rationale: Definitions cannot contain requirements (shall). This has been moved to 5.4

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5 General requirements

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5.4 Joining

Joints between PP pipe and fittings shall be socket-fusion, butt-fusion, electrofusion, or fusion outlet in accordance with ASTM D2657.

Various joint types not defined in this standard shall be defined by ASTM F412.

7 Quality assurance

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7.2.2 Qualification of molds

The test frequency indicated for fittings shall be used only after the mold has been qualified. In order for a new or retooled mold to be considered “qualified,” all products from all cavities in the mold shall attain compliance with all of the appropriate dimensions and tests. This does not include annual or semiannual tests. After qualification, the indicated test frequencies shall apply to one cavity per mold, rotating cavities within the mold, including start-ups. If any physical change is made to the mold itself, all cavities within the mold ~~must~~ shall be re-qualified.

Rationale: “shall” is more in alignment with NSF policies for standards language