Memorandum

TO: Joint Committee on Plastics and Recreational Vehicle Plumbing Components

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

DATE: September 19 2014

SUBJECT: Proposed revision to NSF/ANSI 14, Plastics piping system components and related materials (14i55r1)

On behalf of Tim Haenftling and Mark Mapili, Issue proponents, the ballot for NSF/ANSI 14, issue 55, revision 1, normative references has been recommended to be sent to the Joint Committee for consideration. Please review the proposal and return your ballot by the ballot due date of October 10 2014 via the online workspace (http://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 purpose of this ballot is to update the normative references in NSF/ANSI 14.

Background

This issue was proposed at the 2013 and 2014 JC meetings and was motioned to ballot through two separate issue papers. Harmonization of the two has been completed to create the ballot document for updating the normative references.

Public Health Impact

The proposed language will have a positive impact on public health by keeping up-to-date with the references within this standard.

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

Dr. Robert Powitz, Joint Committee Chairperson
Joint Committee on Plastics and Recreational Vehicle Plumbing Components
c/o Joint Committee Secretariat,
Mindy Costello
NSF International
Tel: (734) 827-6819
Fax: (734) 827-7875
E-mail at: mcostello@nsf.org
2 Normative 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. It is the responsibility of the user of this Standard to determine the acceptance of the referenced standards to the application and requirements of the local jurisdictions. The most recent published edition of the document shall be used for undated references.

2.1 Normative references for plastic pipe and related components

ASME A112.4.14 – 2004. Manually Operated, Quarter-Turn Shutoff Valves for Use in Plumbing Systems


ASME A112.18.6/CSA B125.6 – 2009. Flexible Water Connector

ANSI/ASSE 1049-2009. Performance Requirements for Individual and Branch Type Air Admittance Valves for Chemical Waste Systems


ANSI/ASSE 1051 – 2009. Performance Requirements for Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems

ANSI/ASSE 1061 – 2011. Performance Requirements for Push-Fit Fittings


ASTM B858. Standard Test Method for Ammonia Vapor Test for Determining Susceptibility to Stress Corrosion Cracking in Copper Alloys


1 American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990 <www.asme.org>.


3 American Society for Testing Materials (ASTM) 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 <www.astm.org>.


ASTM D2513 – 06. Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings


ASTM D2683 – 10e. Standard Specification for Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing


Plastic Drain, Waste, and Vent Pipe and Fittings


ASTM D3034 – 09. Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings


ASTM F894 – 07. Standard Specification for Polyethylene (PE) Large Diameter Profile Wall Sewer and Drain Pipe


ASTM F1807 – 11ae13a. Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing


ASTM F1974 – 09. Standard Specification for Metal Insert Fittings for Polyethylene/Aluminum/ Polyethylene and Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene Composite Pressure Pipe


ASTM F2080 – 0912. Standard Specification for Cold-Expansion Fittings with Metal Compression Sleeves for Cross-linked Polyethylene (PEX) Pipe


ASTM F2262 – 09. Standard Specification for Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene Tubing OD Controlled SDR9

ASTM F2306/F2306M – 11. Standard Specification for 12 to 60 in. [300 to 1500 mm] Annular Corrugated Profile-Wall Polyethylene (PE) Pipe and Fittings for Gravity-Flow Storm Sewer and Subsurface Drainage Applications


ASTM F2434 – 09. Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Tubing


ASTM F2623 – 08. Standard Specification for Polyethylene of Raised Temperature (PE-RT) SDR Tubing


ANSI/AWWA C900 – 07. Polyvinyl Chloride (PVC) Pressure Pipe, and Fabricated Fittings, 4 in Through 12 in (100 mm Through 300 mm), for Water Transmission and Distribution

*American Water Works Association (AWWA), 6666 W. Quincy Avenue, Denver, CO 80235 <www.awwa.org>.*
ANSI/AWWA C901 – 08. Polyethylene (PE) Pressure Pipe and Tubing, ⅛ in (13 mm) Through 3 in (76 mm), for Water Service

ANSI/AWWA C904 – 06. Cross-Linked Polyethylene (PEX) Pressure Pipe, 1/2 In. (12mm) Through 3 In. (76 mm), for Water Service

ANSI/AWWA C905 – 10. Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 14 in Through 48 in (350 mm Through 1,200 mm)

ANSI/AWWA C906 – 07. Polyethylene (PE) Pressure Pipe and Fittings, 4 in (100 mm) Through 63 in (1,575 mm), for Water Distribution and Transmission

ANSI/AWWA C907 – 12. Injection-Molded Polyvinyl Chloride (PVC) Pressure Fittings for Water – 4 in Through 12 in (100 mm Through 300 mm)

ANSI/AWWA C909 – 09. Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe, 4 in through 12 in (100 mm through 600 mm), for Water Distribution

ANSI/AWWA C950 – 07. Fiberglass Pressure Pipe

CAN/CSA B125.3 – 05. Plumbing Fittings

CAN/CSA B137.1 – 09. Polyethylene Pipe, Tubing, and Fittings for Cold Water Pressure Services

CAN/CSA B137.3 – 09. Rigid Polyvinyl Chloride (PVC) Pipe for Pressure Applications

CAN/CSA B137.4 – 09. Polyethylene Piping Systems for Gas Services

CAN/CSA B137.5 – 09. Cross-linked Polyethylene (PEX) Tubing Systems for Pressure Applications

CAN/CSA B137.6 – 09. CPVC Pipe, Tubing, and Fittings for Hot and Cold Water Distribution Systems

CAN/CSA B137.8 – 09. Polybutylene (PB) Piping for Pressure Applications

CAN/CSA B137.9 – 09. Polyethylene/Aluminum/Polyethylene Composite Pressure Pipe Systems

CAN/CSA B137.10 – 09. Cross-linked Polyethylene/Aluminum/Crosslinked Polyethylene Composite Pressure Pipe Systems

CAN/CSA B137.11 – 09. Polypropylene (PP-R) Pipe and Fittings for Pressure Applications

CAN/CSA B181.1 – 11. ABS Drain, Waste, and Vent Pipe and Pipe Fittings

CAN/CSA B181.2 – 11. PVC Drain, Waste, and Vent Pipe and Pipe Fittings

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5 Canadian Standards Association (CSA), 5060 Spectrum Way, Suite 100, Mississauga Ontario, Canada L4W 5N6 <www.csa.ca>.
CAN/CSA B181.3 – 11. Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems

CAN/CSA B181.5 – 11. Coextruded Acrylonitrile-butadiene-styrene/Polyvinyl Chloride (ABS/PVC) Drain waste and Vent Pipe

CAN/CSA B182.1 – 11. Plastic Drain and Sewer Pipe and Pipe Fittings

CAN/CSA B182.2 – 11. PVC Sewer Pipe and Fittings (PSM Type)

CAN/CSA C448 Series 02(R2012). Design and Installation of Earth Energy Systems

NSF/ANSI 359. Valves for Cross-linked Polyethylene (PEX) Water Distribution Tubing Systems

TR – 2. PPI PVC Range Composition Listing of Qualified Ingredients (2010-14)

UL 1285 (5th edition). Standard for Pipe and Couplings, Polyvinyl Chloride (PVC), and Oriented Polyvinyl Chloride (PVCO) for Underground Fire Service

UL 1821 Thermoplastic Sprinkler Pipe and Fittings for Fire Protection Service

2.2 Normative references for compounds and other materials


ASTM D3915 – 06. Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds for Plastic Pipe and Fittings Used in Pressure Applications


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6 Plastics Pipe Institute (PPI), 105 Decker Court, Suite 825, Irving, TX 75062 <plasticpipe.org>

7 Underwriters Laboratories (UL), 2600 N.W. Lake Rd., Camas, WA 98607-8542 <www.ul.com>

8 Underwriters Laboratories, 333 Pfingsten Rd., Northbrook, IL 60062 <www.ul.com>

ASTM D4396 – 06. Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds for Plastic Pipe and Fittings Used in Nonpressure Applications


ASTM D6778 – 06. Standard Classification for Polyoxymethylene (POM, Acetal) Molding and Extrusion Materials

2.3 International and other normative references

21 CFR. § Parts 1 – 99. Food and Drugs (Rev. 5/144/10)

21 CFR. § Parts 100 – 169. Food and Drugs (Rev. 5/144/10)

21 CFR. § Parts 170 – 199. Food and Drugs (Rev. 5/144/10)


ASTM D2992 – 06. Standard Practice for Obtaining Hydrostatic or Pressure Design Basis for Fiberglass (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe and Fittings


ASTM F1216 – 09. Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube


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DIN 8075. Polyethylene (PE) pipes – PE 63, PE 80, PE 100, PE-HD – General quality requirements, testing (1999)10


DIN 16962 – 1. Pipe Joints and Elements for Polypropylene (PP) Pressure Pipelines, Types 1 and 2; Bends of Segmental Construction for Butt-welding, Dimensions (1980)10

DIN 16962 – 2. Pipe joint assemblies and fittings for types 1 and 2 polypropylene (PP) pressure pipes; tees and branches produced by segment inserts and necking for butt welding; dimensions (1983)10

DIN 16962 – 3. Pipe Joints and Elements for Polypropylene (PP) Pressure Pipelines, Types 1 and 2; Bends Formed from Pipe for Butt-welding, Dimensions (1980)10

DIN 16962 – 4. Pipe joint assemblies and fittings for types 1 and 2 polypropylene (PP) pressure pipes; adaptors for fusion jointing, flanges and sealing elements; dimensions (1988)10

DIN 16962 – 5. Pipe joints and components of polypropylene (PP) for pipes under pressure, PP-H 100, PP-B 80 and PP-R 80: General quality requirements, testing (2000)10


DIN 16962 – 9. Pipe joint assemblies and fittings for types 1 and 2 polypropylene (PP) pressure pipes; injection moulded reducers and nipples for socket welding; dimensions (1983)10

DIN 16962 – 10. Pipe joint assemblies and fittings for types 1 to 3 polypropylene (PP) pressure pipes; injection-moulded fittings for butt welding; dimensions (1989)10

DIN 16962 – 11. Pipe Joints and Elements for Polypropylene (PP) Pressure Pipelines, Types 1 and 2; Turned and Pressed Reducing Sockets for Butt-welding, Dimensions (1980)10

DIN 16962 – 12. Pipe joints and components of polypropylene (PP) for pipes under pressure, PP-H 100, PP-B 80 and PP-R 80: Flange adapters, flanges, sealing rings for socket welding; dimensions (1999)10

10 Deutsches Institut für Normung e. V. (DIN), Burggrafen-strasse 6, 10787 Berlin, Germany <www.din.de>.

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DIN 16962 – 13. *Pipe joint assemblies and fittings for type 1 and type 2 polypropylene (PP) pressure pipes; pipe couplings; dimensions (1987)*\(^{10}\)

ISO 6509. *Corrosion of metal and alloys – Determination of dezincification resistance of brass*\(^{12}\)

ISO 6957. *Copper Alloys – Ammonia test for stress corrosion resistance*\(^{12}\)


ISO 12162:2009. *Thermoplastics materials for pipes and fittings for pressure applications – Classification, designation and design coefficient*\(^{11}\)

National Institute of Standards and Technology (NIST)\(^{12}\)

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

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

PPI TR – 3. *Policies and Procedures for Developing Hydrostatic Design Basis (HDB), Pressure Design Basis (PDB), Strength Design Basis (SDB), and Minimum Required Strength (MRS) Ratings for Thermoplastic Piping Materials or Pipe (2012)*\(^{6}\)

PPI TR – 4. *PPI Listing of Hydrostatic Design Basis (HDB), Strength Design Basis (SDB), Pressure Design Basis (PDB) and Minimum Required Strength (MRS) Ratings for Thermoplastic Piping Materials or Pipe (2014)*\(^{4}\)

\(^{11}\) International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse Case postale 56, CH-1211, Geneve 20, Switzerland <www.iso.org>.

\(^{12}\) National Institute of Standards and Technology (NIST), 100 Bureau Drive, Stop 1070, Gaithersburg, MD 20899-1070 <www.nist.gov>