Action on NFPA Codes & Standards

NFPA NEWS

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The NFPA *News* is a compilation of codes and standards information and activities. We attempt to cover all important details during the codes and standards cycle process so that the public is aware of what is available and what is needed. We want to make the NFPA *News* an even more valuable tool for you. Please forward your ideas to nfpa_news@nfpa.org or contact Carolyn Cronin at 617-984-7240.

Animal Housing Facilities Committee Restructuring

The Standards Council at its October 2012 meeting reviewed the current structure of the Technical Committee on Animal Housing Facilities and the influx of interested parties that have applied to the Committee were not represented on the Committee. As a result of that review, the Council has determined the current committee structure needs to be reviewed to allow the appointment of additional members with expertise in areas not currently represented on the committee.

All current members and anyone interested in serving on this committee should submit an application. To complete an application form go to www.nfpa.org/150tc. Under the category "apply to a committee", select the link "submit a committee application online". Applications along with a current résumé must be submitted by January 18, 2013.

Comments Sought on Proposed Tentative Interim Amendments

The following Tentative Interim Amendments (TIAs) have been proposed to NFPA. They are being published for public review and comment. Comments should be filed with the Secretary, Standards Council, by the date indicated below, to TIAs_Errata_FIs@nfpa.org.

The proposed TIAs have also been forwarded to the responsible technical committee for processing. The technical committee will consider public comments received by the date indicated below before vote is taken on the proposed TIA. (Please identify the number of the TIA to which the comment is addressed.) Three-fourths of the voting members of the technical committee and/or the correlating committee, if any, must vote in favor of the TIA on both technical merit and emergency nature as calculated in accordance with 3.3.4.3 of the *Regulations Governing the Development of NFPA Standards* to establish a recommendation for approval of the TIA.

The Standards Council will review the technical committee and/or the correlating committee, if any, ballot results, the public comments, and any other information that has been submitted when it considers the issuance of the TIA at the March, 2013 Standards Council meeting. In accordance with 1.6.2(c) of the Regs, a proposed TIA which has been submitted for processing pursuant to 5.1 of the Regs shall be filed no later than 5 days after the notice of the TIA ballot results are published in accordance with 4.2.6.

A TIA is tentative because it has not been processed through the entire codes- and standards-making procedures. It is interim because it is effective only between editions of the document. A TIA automatically becomes a public input of the proponent for the next edition of the document. As such, it then is subject to all of the procedures of the codes- and standards-making process.

NFPA® 59A-2013

Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)

TIA Log No. 1090

Reference: Table 15.6.1 and Table 15.8.4.1 **Comment Closing Date:** February 13, 2013

Submitter: Phani Raj, Technology & Management Systems, Inc.

www.nfpa.org/59A

1. Modify the format of Table 15.6.1 and add descriptive units for probability of failure of piping as follows:

Table 15.6.1 Example Component Failure Database

Component	Annual Probability of Failure
Atmospheric Cryogenic Tanks	
(1) Instantaneous failure of primary container and outer shell, release of entire contents (single containment tank)	5E-07
(2) Instantaneous failure of primary container and outer shell, release of entire contents (double containment tank)	1.25E-08
(3) Instantaneous failure of primary and secondary container, release of entire contents (full containment tank)	1E-08
Pressurized Storage (Containers) — instantaneous release of entire contents	5E-07
Pressure relief valves — outflow at the maximum rate	2E-05
Process equipment	
(1) Pumps — catastrophic failure	1E-04
(2) Compressors with gasket — catastrophic failure	1E-04
(3) Heat exchanger — instantaneous release of entire contents from plate heat exchanger	5E-05
Transfer equipment — rupture of loading/unloading arm	3E-08

Piping — aboveground <u>Annual probability of failur</u>	
(1) Rupture for nominal diameter <75 mm	1E-06
(2) Rupture for 75 mm < nominal diameter < 150 mm	3E-07
(3) Rupture for nominal diameter > 150 mm	1E-07

2. Correct units in Table 15.8.4.1 as follows:

Table 15.8.4.1 Radiant Heat Flux and Thermal Dosage Outside the Plant Boundary

Maximum Heat Flux Level (kW/m ²)	Maximum Modified Dosage Unit $\frac{(kW/m^2 ^{4/3}t)}{([kW/m^2]^{4/3}s)}$	Consequences
5.0	500	At least 10 persons would suffer 2nd degree skin burns on at least 10% of their bodies within 30 seconds of exposure to the fire.
5.0	300	At least one person inside the building would suffer 2nd degree skin burns on at least 10% of the body within 30 seconds of exposure to the fire.
32	N/A	Loss of strength of structural steel exposed to the fire to an extent that its primary load-bearing capacity is reduced significantly over the duration of LNG fire being analyzed.

Submitter's Substantiation: The lack of proper units for probability of failure of aboveground piping makes the risk-based siting analysis impossible. The additional formatting changes clarify that the units of annual probability per meter apply only to piping.

The units in Table 15.8.4.1, as approved by the committee, are technically incorrect.

Emergency Nature: The changes requested will correct errors in the document that were inadvertently introduced in the revision process.

NFPA® 99-2012

Health Care Facilities Code

TIA Log No. 1084

Reference: 5.1.1.6, 5.2.1.2, and 5.3.1.1.2 Comment Closing Date: February 13, 2013 Submitter: James Lathrop, Koffel Associates, Inc.

www.nfpa.org/99

1. Revise 5.1.1.6 to read as follows:

5.1.1.6 Paragraph 5.1.14.4.3 through 5.1.14.4.9 and 5.1.13 through 5.1.15 shall apply to existing health care facilities. The following subsections of this chapter shall apply to the operation, management, and maintenance of Category 1 medical gas and vacuum systems in existing facilities:

(1) 5.1.2

(2) 5.1.3.1

(3) 5.1.3.2

(4) 5.1.3.3.1.7

(5) 5.1.3.3.1.8

(6) 5.1.3.3.4

(7) 5.1.3.6.2

(8) 5.1.3.8.5.2

(9) 5.1.14

(10) 5.1.15

2. Revise 5.2.1.2 to read as follows:

5.2.1.2 Subsection 5.2.13 through 5.2.14 shall apply to existing health care facilities. The following subsections of this chapter shall apply to the operation, management, and maintenance of Category 2 medical gas and vacuum systems in existing health care facilities:

(1) 5.1.3.3.1.7

(2) 5.1.3.3.1.8

(3) 5.1.3.3.4

(4) 5.1.3.6.2

(5) 5.1.3.8.5.2

<u>(6)</u> 5.1.10.11.7.1

(7) 5.2.3.1

(8) 5.2.3.2

(9) 5.2.3.3

(10) 5.2.3.5(2)

(11) 5.2.3.6(2)

(12) 5.2.3.7(2)

<u>(13)</u> 5.2.13

(14) 5.2.14

3. Revise 5.3.1.1.2 to read as follows:

5.3.1.1.2 Paragraph 5.3.12.2 and 5.3.13.4 shall apply to existing health care facilities. The following subsections of this chapter shall apply to the operation, management, and maintenance of Category 3 medical gas and vacuum systems in existing health care facilities:

(1) 5.3.1.5

(2) 5.3.1.6

(3) 5.3.2

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(4) 5.3.6.19.4

(5) 5.3.6.20.3 (6) 5.3.6.20.4 (7) 5.3.6.20.5 (8) 5.3.6.20.6 (9) 5.3.6.20.7 (10) 5.3.6.20.8 (11) 5.3.6.20.9 (12) 5.3.6.21.14 (13) 5.3.6.23.1.5 (14) 5.3.10 (15) 5.3.12 (16) 5.3.13

Submitter's Substantiation: This current language in NFPA 99 incorrectly identifies which portions of the document are to be applied to existing health care facilities. Some of this appears to be a problem with cross references between the 2005 and 2012 edition while others seem to simply be omissions. These changes have passed ballot of the PIP technical committee in the first draft stage in the revision for the 2012 edition.

Emergency Nature: It is important to properly identify which portions of Chapter 5 apply to existing facilities. Some requirements are very important to continually follow in order to ensure the safe use and proper operation of medical gas and vacuum systems. It is also vital to have these references corrected prior to wide spread adoption of the 2012 edition for health care facilities throughout the U.S.

NFPA® 99-2012

Health Care Facilities Code

TIA Log No. 1085 Reference: 7.1

Comment Closing Date: February 13, 2013 Submitter: Chad Beebe, ASHE - AHA

www.nfpa.org/99

1. Revise Section 7.1 as follows:

7.1* Applicability. This chapter shall apply to information technology and communications systems in all <u>new</u> health care facilities that provide service to human beings.

Submitter's Substantiation: The intent of Chapter 7 has always been to apply to installations in new health care facilities. Although Section 1.3 lays the groundwork for applicability of the code, this section, as written, could be interpreted to include both new and existing facilities. This could impose significant price increases on current installations in existing facilities.

Emergency Nature: This section, as written, could be interpreted to include both new and existing facilities. This could impose significant price increases on current installations in existing facilities. It has always been the intent that this Chapter apply to installations in new facilities. It is important to clarify this section of the code prior to wide spread adoption of the code for health care facilities throughout the U.S.

NFPA® 99-2012

Health Care Facilities Code

TIA Log No. 1086

Reference: 7.3.3.1.1, 7.3.3.1.2, and 7.4.3.1.1 Comment Closing Date: February 13, 2013 Submitter: Chad Beebe, ASHE - AHA

www.nfpa.org/99

1. In 7.3.3.1.1, 7.3.3.1.2, and 7.4.3.1.1, replace the term "audiovisual" with "audible and visible" to read as follows:

7.3.3.1.1 General. The nurse call systems shall communicate patient and staff calls for assistance and information in health care facilities. The nurse call systems shall be audiovisual <u>audible</u> and <u>visible</u> type and listed for the purpose.

7.3.3.1.2 Patient Area Call Station. Each patient bed location shall be provided with a calling device. Not more than two calling devices, serving adjacent beds, shall be served by a single audiovisual <u>audible and visible</u> call station providing two-way voice communication.

7.4.3.1.1 General. The nurse call system shall communicate patient and staff calls for assistance and information in health care facilities. The nurse call system shall be the <u>audiovisual audible and visible</u> or visual type (using light and tone signals only to communicate calls) and shall be listed for the purpose.

Submitter's Substantiation: The term "audiovisual" means two way communication to the manufactures. This could be huge problem for many of the smaller, rural, or critical access hospitals that only use a light and chime or tone to communicate. Additionally, there is no need for two-way verbal communication in critical care rooms. I don't think two-way communications were the intent of the task group that wrote this section for the nurse call system.

Emergency Nature: This could be huge problem for many of the smaller, rural or critical access hospitals as it would require them to upgrade to this compatibility as portions of systems are replaced. This needs to be fixed in the 2012 edition so that the federal government can adopt the more current edition without undue hardship on facilities.

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NFPA® 130-2010 and Proposed 2014 Edition

Standard for Fixed Guideway Transit and Passenger Rail Systems

TIA Log No. 1080

Reference: 5.4.10, 6.3.3.2.10, 7.7.10, A.5.4.10.3, A.6.3.3.2.10.2,

and A.7.7.10.2

Comment Closing Date: February 13, 2013

Submitter: Harold Levitt, Port Authority of New York &

New Jersey

www.nfpa.org/130

Proposed language to the 2010 edition.

1. Revise 5.4.10 and add a new 5.4.10.1, 5.4.10.2, and 5.4.10.3 to read as follows:

5.4.10 <u>Fire-Resistive Cables.</u> Fire-resistive cables shall be listed and have a minimum 1-hour fire-resistive rating in accordance with ANSI/UL 2196 and shall be installed per the listing requirements.

<u>5.4.10.1</u> Fire-resistive cables shall be tested by an approved testing laboratory in a totally enclosed furnace using the ASTM E 119 time-temperature curve.

<u>**5.4.10.2**</u> The cables shall demonstrate functionality for no less than 1 hour, as described in the ANSI/UL 2196 test standard.

5.4.10.3* The cables and systems shall comply with the following:

(a) Fire-resistive cables intended for installation in a raceway,
be tested in the type of raceway in which they are intended to
be installed.

(b) Installation instructions that describe the tested assembly and only the components included in the tested assembly are acceptable for installation.

2. Revise 6.3.3.2.10 and add a new 6.3.3.2.10.1 and 6.3.3.2.10.2 to read as follows:

6.3.3.2.10 Fire-resistive cables used for emergency lighting and communication shall be listed and have a minimum 1-hour fire-resistive rating in accordance with ANSI/UL 2196 and shall be installed per the listing requirements. Fire-resistive cables used for emergency lighting and communication shall be tested by an approved testing laboratory in a totally enclosed furnace using the ASTM E 119 time-temperature curve.

<u>6.3.3.2.10.1</u> The cables shall demonstrate functionality for no less than 1 hour, as described in the ANSI/UL 2196 test standard.

6.3.3.2.10.2* The cables and systems shall comply with the following:

(a) Fire-resistive cables intended for installation in a raceway, be tested in the type of raceway in which they are intended to be installed.

(b) Installation instructions that describe the tested assembly and only the components included in the tested assembly are acceptable for installation.

3. Revise 7.7.10 and add a new 7.7.10.1 and 7.7.10.2 to read as follows:

7.7.10 Fire-resistive cables shall be listed and have a minimum

1-hour fire-resistive rating_in accordance with ANSI/UL2196 and shall be installed per the listing requirements. Fire-resistive cables shall be tested by an approved testing laboratory in a totally enclosed furnace using the ASTM E 119 time-temperature curve.

7.7.10.1 The cables shall demonstrate functionality for no less than 1 hour, as described in the ANSI/UL 2196 test standard.

7.7.10.2* The cables and systems shall comply with the following:

(a) Fire-resistive cables intended for installation in a raceway,
be tested in the type of raceway in which they are intended to
be installed.

(b) Installation instructions that describe the tested assembly and only the components included in the tested assembly are acceptable for installation.

4. Add a new A.5.4.10.3, A.6.3.3.2.10.2, and A.7.7.10.2 to read as follows:

A.5.4.10.3 When selecting a fire-resistive cable, it is important to understand how it will be installed and if it was tested as a complete system, including splices. Cables that are exposed (not embedded in concrete) should be protected using either a raceway or an armor/sheath (see 5.4.2). There are two basic configurations of fire-resistive cables:

(1) Cables enclosed by a metallic sheath or armor, such as Type MI or Type MC, are installed without raceways.

(2) Cables that are installed in a raceway, such as Type RHW-2, Type TC, or Type CM, are tested as a complete system.

Regardless of the fire test standard used to evaluate fire-resistive cables that will be installed in a raceway, it is important to consider that the cables are only one part of the system. Other components of the system include but are not limited to the type of raceway, the size of raceway, raceway support, raceway couplings, boxes, conduit bodies, splices where used, vertical supports, grounds, and pulling lubricants. Each cable type should be tested to demonstrate compatibility. Only the specific types of raceways tested should be acceptable for installation. Each cable type that is intended to be installed in raceway should be tested in both a horizontal configuration and a vertical configuration to demonstrate circuit integrity.

A.6.3.3.2.10.2 When selecting a fire-resistive cable, it is important to understand how it will be installed and if it was tested as a complete system, including splices. Cables that are exposed (not embedded in concrete) should be protected using either a raceway or an armor/sheath (see 5.4.2). There are two basic configurations of fire-resistive cables:

(1) Cables enclosed by a metallic sheath or armor, such as Type MI or Type MC, are installed without raceways.

(2) Cables that are installed in a raceway, such as Type RHW-2, Type TC, or Type CM, are tested as a complete system.

Regardless of the fire test standard used to evaluate fire-resistive cables that will be installed in a raceway, it is important to consider that the cables are only one part of the system. Other components of the system include but are not limited to the type of raceway, the size of raceway, raceway support, raceway couplings, boxes, conduit bodies, splices where used, vertical supports, grounds, and

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pulling lubricants. Each cable type should be tested to demonstrate compatibility. Only the specific types of raceways tested should be acceptable for installation. Each cable type that is intended to be installed in raceway should be tested in both a horizontal configuration and a vertical configuration to demonstrate circuit integrity.

A.7.7.10.2 When selecting a fire-resistive cable, it is important to understand how it will be installed and if it was tested as a complete system, including splices. Cables that are exposed (not embedded in concrete) should be protected using either a raceway or an armor/sheath (see 5.4.2). There are two basic configurations of fire-resistive cables:

- (1) Cables enclosed by a metallic sheath or armor, such as Type MI or Type MC, are installed without raceways.
- (2) Cables that are installed in a raceway, such as Type RHW-2, Type TC, or Type CM, are tested as a complete system.

Regardless of the fire test standard used to evaluate fire-resistive cables that will be installed in a raceway, it is important to consider that the cables are only one part of the system. Other components of the system include but are not limited to the type of raceway, the size of raceway, raceway support, raceway couplings, boxes, conduit bodies, splices where used, vertical supports, grounds, and pulling lubricants. Each cable type should be tested to demonstrate compatibility. Only the specific types of raceways tested should be acceptable for installation. Each cable type that is intended to be installed in raceway should be tested in both a horizontal configuration and a vertical configuration to demonstrate circuit integrity.

Proposed language to the proposed 2014 edition.

1. Revise Section 12.5 (added via 130-165 Log #CC15 in the Second Draft) to read as follows:

12.5 Fire-Resistive Cables.

12.5.1 Fire-resistive cables shall be be listed and have a minimum 1-hour fire resistance rating tested by an approved testing laboratory in a totally enclosed furnace using the ASTM E 119 time-temperature curve

<u>12.5.2</u> The cables shall demonstrate functionality for no less than 1 hour, as described in the ANSI/UL 2196 test standard.

12.5.3 The cables and systems shall comply with the following: (1)* Fire-resistive cables intended for installation in a raceway shall be tested in the type of raceway in which they are intended to be installed.

(2) Each fire-resistive cable system have installation instructions that outline the test procedure and only the components stated in the test report are acceptable for actual installations.

A.12.5.3(1) When selecting a fire-resistive cable, it is important to understand how it will be installed and if it was tested as a complete system, including splices. Cables that are exposed (not embedded in concrete) should be protected using either a metallic raceway or an armor/sheath (see 12.4.1). There are two basic configurations of fire-resistive cables.

(1) Cables enclosed by a metallic sheath or armor, such as Type MI

or Type MC, are installed without raceways.

(2) Cables that are installed in a raceway, such as Type RHW-2, Type TC, or Type CM, are tested as a complete system.

Regardless of the fire test standard used to evaluate fire-resistive cables that will be installed in a raceway, it is important to consider that the cables are only one part of the system. Other components of the system include but are not limited to the type of raceway, the size of raceway, raceway support, raceway couplings, boxes, conduit bodies, splices where used, vertical supports, grounds, and pulling lubricants. Each cable type should be tested to demonstrate compatibility. Only the specific types of raceways tested should be acceptable for installation. Each cable type that is intended to be installed in raceway should be tested in both a horizontal configuration and avertical configuration to demonstrate circuit integrity.

Submitter's Substantiation: This correction addresses the recent action of UL pertaining to their UL 2196, *Standard for Safety for Test for Fire Resistive Cables*, 2012. Specifically, as of September 12, 2012, UL has withdrawn all cable certifications (listings) to this test standard. Recent fire testing has demonstrated that hot-dipped galvanized coatings on the interior surface of raceways can cause premature failure of copper fire-resistive cable systems.

NFPA 130, 2010 edition currently allows the use of fire-resistive cable listed in accordance with UL 2196, *Standard for Safety for Test for Fire Resistive Cables*, 2012. Because NFPA 130 had relied upon the UL listing for compliance, this UL action has changed the standard.

Emergency Nature: The 2010 edition of the document contains listing requirements that are no longer available for fire-resistive cables. The proposed revision provides prescriptive requirements for obtaining the equivalent fire resistance without obtaining UL certification (listing). Several projects currently in the design and construction phase are being burdened by this UL action and are seeking the direction of this Technical Committee.

NFPA 502-2011 and Proposed 2014 Edition

Standard for Road Tunnels, Bridges and Other Limited Access Highways

TIA Log No. 1083

Reference: 12.1.2 and A.12.1.2

Comment Closing Date: February 13, 2013 **Submitter:** William Connell, PB Americas, Inc.

www.nfpa.org/502

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Proposed language to the 2011 edition.

1. Revise 12.1.2 and 12.1.2*(1) to read as follows:

12.1.2* Emergency circuits installed in a road tunnel and ancillary areas shall remain functional for a period of not less than 1 hour, for the anticipated fire condition, by meeting one of the following methods:

(1)* A f Fire-resistive cables shall be listed for 2 hours in accor-

dance with ANSI/UL/2196 or other equivalent internationally recognized standards to 950°C (1742°F) when approved by the AHJ. tested by an approved testing laboratory in a totally enclosed furnace using the ASTM E 119 time-temperature curve.

- (a) The cables shall demonstrate functionality for no less than 2 hours as described in the ANSI/UL 2196 test standard
- (b) Testing shall be performed in the type and configuration of raceway in which they are intended to be installed
- (c) Provide documentation to include a full description of the actual test procedure conducted and a list of acceptable components to be used for installation certifying compliance with the test procedure
- 12.1.2(2) text remains unchanged.

Proposed language to the proposed 2014 edition.

- 1. Revise 12.1.2 and 12.1.2(1) (4) to read as follows:
- 12.1.2* Emergency circuits installed in a road tunnel and ancillary areas shall remain functional for a period of not less than 1 hour, for the anticipated fire condition, by meeting one of the following methods:
- (1)* A f_Eire-resistive cables listed for 2 hours in accordance with ANSI/UL/2196 or other equivalent internationally recognized standards to 950°C (1742°F) when approved by the AHJ. tested by an approved testing laboratory in a totally enclosed furnace using the ASTM E 119 time-temperature curve.
 - (a) The cables shall demonstrate functionality for no less than 2 hours as described in the ANSI/UL 2196 test standard
 - (b) Testing shall be performed in the type and configuration of raceway in which they are intended to be installed
 - (c) Provide documentation to include a full description of the actual test procedure conducted and a list of acceptable components to be used for installation certifying compliance with the test procedure
- (2) Circuits embedded in concrete or protected by a 2-hour fire barrier system in accordance with UL 1724. The <u>insulation for</u> cables or conductors shall be thermoset and shall be suitable to maintain functionality at the temperature within the embedded conduit or fire barrier system.
- (3) Routing external to the roadway
- (4) Diversity in system routing as approved (such as separate redundant or multiple circuits separated by a 1-hour fire barrier) so that a single fire or emergency event will not lead to a failure of the system.
- 2. Revise A.12.1.2 and A.12.1.2(1) for both the 2011 and proposed 2014 editions to read as follows:
- **A.12.1.2** The actual duration required for the circuits to be operative will depend upon the duration required for the circuits to be operative for the emergency evacuation and rescue phase and,

in some circumstances, incident management and structural protection. Factors such as the length of the tunnel, evacuation pathways, the use of fixed water-based fire suppression systems, and the proximity of emergency services may influence this period of time.

- A.12.1.2 (1) When selecting a fire-resistive cable, it is important to know how it will be installed and if it was tested as a complete system, including splices. Cables that are exposed (not embedded in concrete) should be protected using either a metallic raceway or an armor/sheath (see 12.3.1). There are two basic configurations of fire-resistive cables:
- (1) Armored cables, such as Type MI or Type MC, are installed without raceways.
- (2) Cables installed in a raceway, such as Type RHW-2, Type TC, or Type CM, are tested as a complete system.

Regardless of the fire test standard used to evaluate fire-resistive cables installed in a raceway, it is important to consider that the cables are only one part of the system. Other components of the system include but are not limited to the type of raceway, the size of raceway, raceway support, raceway couplings, boxes, conduit bodies, splices where used, vertical supports, grounds, and pulling lubricants. Each cable type should be tested to demonstrate compatibility. Recent fire testing has demonstrated that hot-dipped galvanized coatings on the interior surface of raceways can cause premature failure of copper fire-resistive cable systems. Only the specific types of raceways tested should be acceptable for installation. Each cable type intended to be installed in a raceway should be tested in both a horizontal and a vertical configuration to demonstrate circuit integrity.

Submitter's Substantiation: This correction addresses the recent action of UL pertaining to their UL 2196, *Standard for Safety for Test for Fire Resistive Cables*, 2012. Specifically, as of September 12, 2012, UL has withdrawn all cable certifications (listings) to this test standard. NFPA 502 currently allows the use of 2-hour fire-resistive cable listed in accordance with UL 2196, *Standard for Safety for Test for Fire Resistive Cables*, 2012. Because NFPA 502 had relied upon the UL listing for compliance, this UL action has changed the standard.

Emergency Nature: The 2011 edition of the document contains listing requirements that are no longer available for 2-hour fire-resistive cables for emergency circuits. The proposed revision provides prescriptive requirements for obtaining the equivalent fire resistance without obtaining UL certification (listing). Several tunnel projects currently in the design and construction phase are being burdened by this UL action and are seeking the direction of this Technical Committee.

NFPA® 1001-2013

Standard for Fire Fighter Professional Qualifications

TIA Log No. 1087 Reference: 4.1(3)

Comment Closing Date: February 13, 2013

Submitter: Matthew Tobia, Anne Arundel County Fire Department

www.nfpa.org/1001

1. Revise Section 4.1(3) General to read as follows:

- (1) Minimum educational requirements established by the AHJ
- (2) Age requirements established by the AHJ
- (3)* Essential Job Tasks of NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments, Chapter 5, Subsection 5.1.1, as determined by the medical authority of the AHJ. (3)* Medical requirements of NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments.

Submitter's Substantiation:

First: The adopted language in the 2013 edition of NFPA 1001 presents an impossible circumstance for medical authorities to comply with. By requiring medical authorities (presumably physicians or physician extenders (Physician's Assistant or Certified Registered Nurse Practitioner) to certify an individual as being qualified to participate in a training program, they must actually assess an candidate's ability to meet the 13 identified essential job functions as outlined in chapter 5 of NFPA 1582. Whether intentional or not, NFPA 1001 (2013) requires medical authorities to determine if a member can perform and meet all essential job tasks, not if they are medically and/or physically able to meet such tasks. Fire department physicians do not have the capability to do this evaluation. The essential job tasks and descriptions are provided herein for reference.

5.1 Essential Job Tasks and Descriptions.

- **5.1.1** The fire department shall evaluate the following 13 essential job tasks against the types and levels of emergency services provided to the local community by the fire department, the types of structures and occupancies comprising the community, and the configuration of the fire department to determine the essential job tasks of fire department members and candidates:
- (1)* Performing fire-fighting tasks (e.g., hoseline operations, extensive crawling, lifting and carrying heavy objects, ventilating roofs or walls using power or hand tools, forcible entry), rescue operations, and other emergency response actions under stressful conditions while wearing personal protective ensembles and self contained breathing apparatus (SCBA), including working in extremely hot or cold environments for prolonged time periods.
- (2) Wearing an SCBA, which includes a demand valve-type positive-pressure facepiece or HEPA filter masks, which requires the ability to tolerate increased respiratory workloads
- (3) Exposure to toxic fumes, irritants, particulates, biological (infectious) and nonbiological hazards, and/or heated gases, despite the use of personal protective ensembles and SCBA
- (4) Depending on the local jurisdiction, climbing six or more flights of stairs while wearing fire protective ensemble weighing at least

50 lb (22.6 kg) or more and carrying equipment/tools weighing an additional 20 to 40 lb (9 to 18 kg) (5) Wearing fire protective ensemble that is encapsulating and insulated, which will result in significant fluid loss that frequently progresses to clinical dehydration and can elevate core temperature to levels exceeding 102.2°F (39°C)

- (6) Searching, finding, and rescue-dragging or carrying victims ranging from newborns up to adults weighing over 200 lb (90 kg) to safety despite hazardous conditions and low visibility
- (7) Advancing water-filled hoselines up to 21/2 in. (65 mm) in diameter from fire apparatus to occupancy [approximately 150 ft (50 m)], which can involve negotiating multiple flights of stairs, ladders, and other obstacles
- (8) Climbing ladders, operating from heights, walking or crawling in the dark along narrow and uneven surfaces, and operating in proximity to electrical power lines and/or other hazards
- (9) Unpredictable emergency requirements for prolonged periods of extreme physical exertion without benefit of warm-up, scheduled rest periods, meals, access to medication(s), or hydration
- (10) Operating fire apparatus or other vehicles in an emergency mode with emergency lights and sirens
- (11) Critical, time-sensitive, complex problem solving during physical exertion in stressful, hazardous environments, including hot, dark, tightly enclosed spaces, that is further aggravated by fatigue, flashing lights, sirens, and other distractions.
- (12) Ability to communicate (give and comprehend verbal orders) while wearing personal protective ensembles and SCBA under conditions of high background noise, poor visibility, and drenching from hoselines and/or fixed protection systems (sprinklers)
- (13) Functioning as an integral component of a team, where sudden incapacitation of a member can result in mission failure or in risk of injury or death to civilians or other team members

The intent of Chapter 5 is to serve as a reference guideline, outlining the types of activities that a firefighter could be expected to perform. It was never intended to serve as a measurement tool for medical authorities. By referencing this section of NFPA 1582, to the exclusion of all other sections, the NFPA 1001 standard has created an untenable and unworkable condition for medical authorities.

Second: The language places firefighter candidates' lives at risk. Without any science to back up this action by the NFPA 1001 Technical Committee, there now exists the genuine possibility of serious injury or death to firefighter candidates that have not received a physical examination meeting the requirements of NFPA 1582. A recent NIOSH report from July 2009 cites the potentially catastrophic consequences of failing to provide an NFPA 1582 physical prior to allowing the trainee to participate in a training program (http://www.cdc.gov/niosh/fire/reports/face200902.html).

The leading cause of death among firefighters is cardiac-related events and there is ample documented evidence of firefighter candidates dying during their initial training program, having never been assessed for their ability to successfully participate in, or complete, said training. There does not appear to be any rational justification explaining the weakening of the NFPA 1001 standard. In order to prevent similar tragedies from occurring in the future, it

would appear counter-intuitive for the NFPA to allow an individual participating in an NFPA 1001 program to do so without having completed a NFPA 1582 compliant physical. The 13 Essential Job Tasks noted in NFPA 1582 is merely a fire department physician's list to educate them regarding the functions carried out by a firefighter. These tasks are not intended to be used (contrary to the NFPA 1001 (2013) edition) as any type of medical certification or clearance for duty document.

While it could be postulated that NFPA 1582 remains in force, there are training agencies across the Country who are providing NFPA compliant 1001 training. Candidates entering these training programs often arrive to the training program without the benefit of an NFPA 1582 physical. Maintaining the requirement of an NFPA 1582 physical in NFPA 1001 ensures that firefighter candidates participating in such training are physically capable to do so. Agencies including the Maryland Fire Rescue Institute (the nation's largest provider of NBPQ compliant training based upon NFPA standards) require candidates to demonstrate proof of an NFPA 1582 physical in order to participate in applicable training programs. Weakening the NFPA 1001 standard exposes training agencies to a higher level of risk associated with the potential for a training death.

Emergency Nature: The request for a TIA is predicated on the simple idea that more firefighters will die as a result of a training-related death due to the lack of an NFPA 1582 physical unless immediate action is taken. If even a single firefighter's life is saved by this action, the benefits will have eclipsed any risks or costs associated with ordering a change to the standard immediately. Between now and 2018, it is expected that 400 firefighters will lose their lives in the line of duty. 50%, or 200, will die of a cardiac related event. NFPA statistics indicate that approximately 10% of firefighter fatalities will occur during training activities. As such, the immediate relief sought in this TIA has the genuine potential to save a firefighter's life.

NFPA® 1917-2013

Standard for Automotive Ambulances

TIA Log No. 1088

Reference: 4.17, 4.17.1, 4.17.2, and 4.17.3 **Comment Closing Date:** February 13, 2013

Submitter: Dia Gainor, National Association of State EMS Offi-

cials (NASEMSO) www.nfpa.org/1917

1. Revise 4.17, 4.17.1, 4.17.2, and 4.17.3 to read as follows:

4.17 Statement of Exceptions. The entity responsible for final assembly of the ambulance shall deliver with the ambulance either a certification that the ambulance fully complies with all minimum requirements of this standard, or, alternatively, When exceptions to this standard are required by the purchaser, a Statement of Exceptions based on any exceptions to this standard that are required to meet the specifications of the purchaser shall be listed and attached to owner's manual, specifically describing each aspect of the completed ambulance that is not fully compliant with the requirements of this standard at the time of delivery.

4.17.1 The Statement of Exceptions shall contain, for each <u>exception</u> at the time of <u>delivery</u> noncompliant aspect of the ambulance or <u>missing required item</u>, the following information:

(1) A <u>a</u> separate listing of the section(s) of the applicable standard for which compliance is lacking an exception has occurred

(2) A description of the particular aspect of the ambulance that is not in compliance therewith or required equipment that is missing

(3) A description of the further changes or modifications to the delivered ambulance that must be completed to achieve full compliance

(4) Identification of the entity that will be responsible for making the necessary post-delivery changes or modifications or for supplying and installing any missing required equipment to the ambulance to achieve full compliance with this standard

4.17.2 Prior to or at the time of delivery of the ambulance, the Statement of Exceptions shall be signed by an authorized agent of the entity responsible for final assembly of the ambulance and by an authorized agent of the purchasing entity, indicating mutual understanding and agreement between the parties regarding the substance thereof.

4.17.3 An ambulance that is delivered subject to a Statement of Exceptions other than a certification of full compliance shall not be placed in emergency service until the ambulance has been modified as necessary to accomplish full compliance with this standard.

Submitter's Substantiation: The states' EMS offices have the exclusive authority to license EMS agencies and vehicles to function in their respective states, and in turn, the National Association of State EMS Officials (NASEMSO) is the only nationally representative organization of the state EMS offices. NASEMSO has determined that there would be significant complications created related to its members' ability to regulate ambulance vehicle design with the language as currently written. The language marked for deletion poses legal impediments with respect to the state EMS directors' ability to certify ambulances in their respective states.

Specifically, the requirement for a statement of exceptions including a prohibitive provision (4.17.3) is contrary to the legislative mandate of states that set the conditions under which an ambulance may be placed into service. This is a function of the authority of the states and not one that can be agreed to between a purchaser and a manufacturer. We accept that the Statement of Exceptions should be published since that assists state EMS inspectors to determine what, if any, exceptions from this specification exist based on the manufacturer's determination, and that 4.17.2 ensures awareness on the part of the purchaser, but any further conditions or requirements are an impediment to the states' regulatory processes.

Considering the seven states that do not regulate ambulance vehicle design and other states that may incorporate only select components of a specification, other language is marked for deletion or modification because it is either too restrictive or suggestive of actions that may not be required in a given state (e.g., 4.17.1(3))

and (4)). This would prevent state EMS directors from permitting vehicles that will operate safely and successfully as ambulances in their respective states. Furthermore, 4.17.3 may create considerable liability for the ambulance owner and the states. Foreseeable examples of this include the discovery after an incident or upon a state inspection of paperwork associated with the new vehicle that the ambulance purchaser documented that it would modify the vehicle prior to placing it into service when there was no legal obligation to do so.

Approval of this TIA does not negate the need for favorable consideration of the TIA related to 4.12.3.

Emergency Nature: The statement of exceptions, as noted in the 2013 edition of NFPA 1917, would prohibit states from being able to use the standard to purchase ambulances since it does not allow for variability from state to state. The requirement for a Statement of Exceptions, including a prohibitive provision (4.17.3), is contrary to the legislative mandate of states that sets the conditions under which an ambulance may be placed into service. This is a function of the authority of the states and not one that can be agreed to between a purchaser and a manufacturer. We accept that the Statement of Exceptions should be published since that assists state EMS inspectors to determine what, if any, exceptions from this specification exist based on the manufacturer's determination, and that 4.17.2 ensures awareness on the part of the purchaser, but any further conditions or requirements are an impediment to the states' regulatory processes.

NFPA® 1917-2013

Standard for Automotive Ambulances

TIA Log No. 1089 Reference: 4.12.3

Comment Closing Date: February 13, 2013

Submitter: Dia Gainor, National Association of State EMS Offi-

cials (NASEMSO) www.nfpa.org/1917

1. Delete 4.12.3 in its entirety and renumber 4.12.4 and its Annex material:

4.12.3 The maximum top speed of the ambulance shall not exceed either 77 mph (124 km/hr) or the manufacturer's maximum service speed rating for the tires installed on the ambulance, whichever is lower.

Submitter's Substantiation: NASEMSO cannot support or enforce 4.12.3, and the need for this deletion remains even if the TIA related to Section 4.17 is granted.

There are states where the legal speed limit is above 77 mph, including 80 and 85 mph. Further, in some states, an ambulance operating with lights and sirens can legally exceed the posted speed limit by 10 mph. Therefore, while well intentioned for roadways with a posted speed limit of 65 mph or less, a governor set to 77 mph will actually create a safety hazard as a result of ambulances traveling at much slower speeds than the surrounding traffic. Speed should be governed by the states and the owners and operators of the ambulances. Since not every chassis manufacturer makes speed

governors available, NASEMSO is also deeply concerned about the risk aversion expressed by ambulance manufacturers about aftermarket installation and device failure.

Availability of this technology is extremely limited among chassis and aftermarket device manufacturers, and only one brand has been identified that can be set at 77 mph. NASEMSO recognizes the importance of safe ambulance operations and is cognizant of other electronic means of speed monitoring, the annex content on monitoring systems, as well as local EMS agency policies related to the matter.

Emergency Nature: The requirement of a speed limiting device that places a maximum speed limit of 77 mph creates a safety hazard for operators and occupants of ambulances, especially in states that have posted speed limits above 77 mph. In some states, For example, Texas, there is a posted speed limit of 85 mph and an NFPA 1917—compliant ambulance would not be able to meet the posted speed limit, thus creating a safety hazard. This is also true in states where emergency vehicles are allowed to exceed the posted speed limit by 10 mph; with 77 mph being the maximum, in a standard that comprises minimum requirements, the posted speed limit would have to be as low as 67 mph which is not common in some states. This requirement places a restriction upon some states that would prohibit them from purchasing an NFPA 1917—compliant ambulance.

NFPA® 1971-2013

Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting

TIA Log No. 1091 Reference: 7.10.2 and 8.5

Comment Closing Date: February 13, 2013

Submitter: Jeff Stull, International Personnel Protection, Inc., Dan

Melia, FDNY www.nfpa.org/1971

1. Return 7.10.2 and Section 8.5 to the 2007 edition text as follows:

7.10.2 Footwear, with components in place, shall be tested for resistance to flame as specified in Section 8.5, Flame Resistance Test Four, shall not have an afterflame of more than 2.0 seconds, shall not melt or drip, and shall not exhibit any burn-through.

8.5 Flame Resistance Test Four.

8.5.1 Application. This test method shall apply to protective footwear.

8.5.2 Samples.

8.5.2.1 Samples shall be complete footwear.

8.5.2.2 Samples shall be conditioned as specified in 8.1.3.

8.5.3 Specimens. Three complete footwear items shall be tested.

8.5.4 Apparatus.

8.5.4.1 The test apparatus shall consist of a burner, crucible tongs, support stand, utility clamp, stopwatch, butane gas, gas regulator valve system, and measuring scale.

8.5.4.1.1 The burner shall be a high temperature, liquefied petroleum type Fisher burner.

- **8.5.4.1.2** The stopwatch or other device shall measure the burning tie to the nearest 0.1 second.
- **8.5.4.1.3** The butane shall be of commercial grade, at least 99.0 percent pure.
- **8.5.4.1.4** The gas regulator valve system shall consist of a control valve system with a delivery rate designed to furnish gas to the burner under a pressure of 17.3 kPa, ± 1.7 kPa (2.5 psi, ± 0.25 psi), at the reducing valve. The flame height shall be adjusted at the reducing valve producing a pressure at the burner of approximately 0.7 kPa (0.1 psi).
- **8.5.4.2** A freestanding flame height indicator shall be used to assist in adjusting the burner flame height. The indicator shall mark a flame height of 75 mm (3 in.) above the top of the burner.
- **8.5.4.3** A specimen support assembly shall be used to support the footwear specimen above the burner flame.

8.5.5 Procedure.

- **8.5.5.1** The burner shall be ignited and the test flame shall be adjusted to a height of 75 mm (3 in.) with the gas on/off valve fully open and the air supply completely and permanently off, as it is important that the flame height be closely controlled. The 75 mm (3 in.) height shall be obtained by adjusting the orifice in the bottom of the burner so that the top of the flame is level with the marked flame height indicator.
- **8.5.5.2** With the specimen mounted in the support assembly, the burner shall be moved so that the flame contacts the specimen at a distance of 38 mm (11/2 in.) at the angles in the areas shown in Figure 8.5.5.2.
- **8.5.5.3** The burner flame shall be applied to the specimen for 12 seconds. After 12 seconds, the burner shall be removed.
- **8.5.5.4** The afterflame time shall be measured as the time, in seconds, to the nearest 0.2 second that the specimen continues to flame after the burner is removed from the flame.
- **8.5.5.5** Following the flame exposure, the specimen shall be removed and examined for burnthrough. Each layer of the specimen shall be examined for melting or dripping.

See FIGURE 8.5.5.2 Test Areas from 2007 edition.

8.5.6 Report.

- **8.5.6.1** The afterflame time shall be recorded and reported for each specimen. The average afterflame time shall be calculated and reported. The afterflame time shall be recorded and reported to the nearest 0.2 second.
- **8.5.6.2** Observations of burnthrough, melting, or dripping for each specimen shall be recorded and reported.
- **8.5.7 Interpretation.** Pass or fail performance shall be based on any observed burnthrough, melting, or dripping, and the average afterflame time.

Submitter's Substantiation: The test is not well specified enough to ensure that results are reproducible.

The specified amount of fuel to be placed in the pan does not appear to correspond to the required burning time of the fuel.

There is no method for calibrating the exposure or ensuring that it is consistent. This is a serious deviation from all other flame and heat resistance tests that are used in the standard.

The test specifies letting the pan burn freely for one minute fol-

lowing ignition of the fuel in the pan, but also contradictorily instructs the laboratory to position the boot above the pan. The current instructions cannot be followed.

No specification is provided for the shutter. Flames can lap around the shutter or preheat the boot through the shutter affecting the exposure.

The test was never subject to any time of validation process. The stage of development for this test as presented to the Technical Committee was unfinished as evidenced by a videotape of the test, which will be provided separately.

Preliminary testing using this test shows that some boots that are currently certified and for which there are no reported flammability issues would be disqualified through this testing.

Emergency Nature: This TIA seeks to correct errors and omissions that were overlooked during the Fall 2013 revision cycle process of NFPA 1971. Additionally, some parts of this TIA correct circumstances in which the standard could adversely impact a method or product that was inadvertently overlooked in the total revision process.

NFPA® 1971-2013

Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting

TIA Log No. 1092 **Reference:** Various

Comment Closing Date: February 13, 2013

Submitter: Steven Corrado, UL LLC and Pam Kavalesky, Intertek

Testing Services www.nfpa.org/1971

1. Revise 2.3.3 to read as follows:

ASTM F2412, Standard Test Method for Foot Protection, 2005 2011.

- 2. Revise 5.1.7 to read as follows:
- **5.1.7** The following information shall also be printed legibly on each product label with all letters at least 1.5 mm (1/16 in.) in height:
- (1) Manufacturer's name, identification, or designation
- (2) Manufacturer's address
- (3) Country of manufacture
- (4) Manufacturer's element identification number, lot number, or serial number
- (5) Month and year of manufacture, not coded
- (6) Model name, number, or design
- (7) Size or size range
- (8) Principal material(s) of construction include at least the identification of the fiber or material type used in the outer shell, moisture barrier, thermal liner, glove lining, gauntlet, and wristlet
- (9) Where the principal material of construction used in a garment is a component that is listed the component name under which it is listed shall be identified.
- (10) (9) Cleaning precautions

- **5.1.7.1** For garments only, where the principal material of construction is a component that is listed, the component name under which it is listed shall be identified.
- **5.1.7.2** For garments only, where the thermal liner, moisture barrier, and outer shell are separable, each separable layer shall also have a label containing the information required in 5.1.7(4) through 5.1.7(9).
- **5.1.7.3*** For footwear only, principal materials of construction shall include at least the outer shell, moisture barrier, and thermal liner materials. Generic names of materials shall be used. Additional materials that are used throughout the majority of the boot shall also be listed on the label.
- <u>5.1.7.4*</u> For helmets only, principal materials of construction shall include generic terminology for the shell material provided.
- 5.1.7.5* For gloves only, principal materials of construction shall include at least outer shell, moisture barrier, thermal liner, and wristlet materials. Generic names of materials shall be used. The type of leather shall be listed, such as cow leather, elk leather, and so forth. Additional materials that are used throughout the majority of the glove body shall also be listed on the label.
- 3. Delete existing 5.1.8 through 5.1.11.
- 4. Revise Paragraph 7.7.7 to read as follows:
- 7.7.7 The glove interface component composite, including, but not limited to, trim, external labels, and external tags, but excluding hardware and hook and pile fasteners that do not directly contact the wearer's body, shall be tested for resistance to flame as specified in Section 8.4, Flame Resistance Test 3, and shall not have an average char length of more than 100 mm (4 in.), shall not have an average afterflame of more than 2.0 seconds, shall not melt or drip, and shall not have the amount of consumed materials exceed 5 percent.
- 5. Revise Paragraph 7.7.8 to read as follows:
- **7.7.8** The glove extension composite, including, but not limited to, trim, external labels, and external tags, but excluding hardware and hook and pile fasteners that do not directly contact the wearer's body, shall be tested for resistance to flame as specified in Section 8.4, Flame Resistance Test 3, and shall not have an average char length of more than 100 mm (4 in.), shall not have an average afterflame of more than 2.0 seconds, shall not melt or drip, and shall not have the amount of consumed materials exceed 5 percent.
- 6. Revise 7.10.9 to read as follows:
- **7.10.9** Footwear soles and heels shall be tested for resistance to abrasion as specified in Section 8.23 Abrasion Resistance Test, and the relative volume loss shall not be greater than 200 250 mm³.

- 7. Revise 7.13.6 to read as follows:
- **7.13.6** Hoods shall be individually tested for resistance to shrinkage as specified in Section 8.24, Cleaning Shrinkage Resistance Test, and shall not have the measurements made from the top of the hood to the marks at the back and both sides of the hood exhibit shrinkage of more than 5 percent, and shall have the hood opening meet the requirements specified in 6.13.6.
- 8. Revise 8.1.11.4 and add a new Table 8.1.11.4(c) to read as follows:
- **8.1.11.4** The wash cycle procedure and water levels specified in Table 8.1.11.4 (a), and Table 8.1.11.4 (b) and Table 8.1.11.4 (c) shall be followed. In addition, the G force shall not exceed 100 G throughout the wash cycle.

Table 8.1.11.4 (c) Water Level for Gloves and Glove Pouches
Operation Wash Cycle Procedure

		<u>Low Water</u> <u>Level</u>		High Water Level	
		+ 1 cm (3/8 in)		+ 1 cm (3/8 in)	
	cm	in cm in			
Gloves	<u>20</u>	<u>7.9</u>	30.5	<u>12</u>	
Glove Pouches	<u>20</u>	<u>7.9</u>	<u>30.5</u>	<u>12</u>	

- 9. Revise 8.6.16 to read as follows:
- **8.6.16.11** The percent shrinkage of each hood face opening <u>dimension</u> shall be <u>individually</u> calculated, recorded, and reported.
- **8.6.16.12** The percent shrinkage of each of the three dimensions from the top of the hood to the marks along the basic plane shall be <u>individually</u> calculated, recorded, and reported.
- **8.6.16.13*** The average percent shrinkage of all hood face opening dimensions for each all specimens shall be calculated, recorded, and reported.
- **8.6.16.14*** The average percent shrinkage of the three dimensions from the top of the hood to the marks along the basic plane for each <u>all</u> specimens shall be calculated, recorded, and reported.
- **8.6.16.15** Pass or fail performance shall be based <u>separately</u> on the average percent shrinkage of the hood face opening dimensions and the average percent shrinkage of the three dimensions from the top of the hood to the marks along the basic plane for <u>each all</u> specimens. One or more hood specimens failing this test shall constitute failing performance:
- 10. Replace existing 8.24.9.7 through 8.24.9.14 with the following:
- **8.24.9.7** Each of the three dimensions from the top of the hood to the marks along the basic plane before and after laundering shall be recorded and reported.

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- **8.24.9.8** The percent shrinkage of each hood face opening dimension shall be individually calculated, recorded, and reported.
- **8.24.9.9** The percent shrinkage of each of the three dimensions from the top of the hood to the marks along the basic plane shall be individually calculated, recorded, and reported.
- **8.24.9.10*** The average percent shrinkage of all hood face opening dimensions for all specimens shall be calculated, recorded, and reported.
- **8.24.9.11*** The average percent shrinkage of the three dimensions from the top of the hood to the marks along the basic plane for all specimens shall be calculated, recorded, and reported.
- **8.24.9.12** Pass or fail performance shall be based separately on the average percent shrinkage of the hood face opening dimensions and the average percent shrinkage of the three dimensions from the top of the hood to the marks along the basic plane for all specimens.
- 11. Revise Paragraph 8.27.8.2 to read as follows:
- **8.27.8.2** Samples for conditioning shall be in the form of a pouch as described in 8.1.156.
- 12. Revise Paragraph 8.28.8.2 to read as follows:
- **8.28.8.2** Samples for conditioning shall be in the form of a pouch as described in 8.1.156.
- 13. Revise 8.40.4(4)* and add a new 8.40.4(5) to read as follows:
- (4)* Calibration of the tiles shall be checked every 10 tests (50 test runs) or prior to each day of testing, whichever is the less frequent, to ensure that they are not being worn smooth or otherwise damaged.
- (5) If the five consecutive test results of the measurements (for each configuration) show a systematic increase or decrease of more than 10% of the initial reading, then one or more further test runs shall be carried out until a sequence of five are obtained that do not show a systematic increase or decrease of greater than 10%.
- 14. Revise 8.72.5.2 and 8.72.5.4 to read as follows:
- **8.72.5.2** While standing, each test subject shall grasp the cylinder so that the <u>wrist creates a straight line with the hand. The</u> elbow is against the side of the body, <u>creating a right angle</u>, <u>throughout the duration of the test</u> and the arm bend creates a right angle.
- **8.72.5.4** Each test subject shall make five successive attempts to twist the cylinder in the appropriate direction exerting as much force as possible. The range of motion of the subject's arm wrist shall indicate the end of the twisting cycle. The average maximum force over the five attempts shall be the barehanded control value.

- 15. Renumber Annex items as follows:
- A.5.1.9 in the Annex becomes A.5.1.7.3 A.5.1.10 in the Annex becomes A.5.1.7.4 A.5.1.11 in the Annex becomes A.5.1.7.5
- 16. Add new Annex items as follows:
- A.8.6.16.13 This average should be based on a total of 12 values of percentage shrinkage with four values per specimen.
- <u>A.8.6.16.14</u> This average should be based on a total of 9 values of percentage shrinkage with three values per specimen.
- 17. Add new Annex Items to read as follows:
- **A.8.24.9.10** This average should be based on a total of 12 values of percentage shrinkage with four values per specimen.
- <u>A.8.24.9.11</u> This average should be based on a total of 9 values of percentage shrinkage with three values per specimen.

Submitter's Substantiation:

- 1. The ASTM 2412 Standard needs to be updated to the current edition.
- 2, 3, and 15. The specific requirements for glove labels, which included type of fiber or material type, were inadvertently included in the generic list of requirements for labels on all ensemble elements. Since the majority of fabrics and materials used in construction of many of the ensemble elements contain multiple fibers and numerous blends, even attempting to include this level of detail on every product label would cause mass confusion. The issue becomes even more exacerbated by the minimum font sizes required on label text and by a garment specific label requirement, also included in the generic list, which mandates explicit component names as per the certification listing. This change provides the generic requirements for all labels, and then separates the specific ensemble element label requirements into subsets to avoid any interpretation issues.
- 4. The NFPA 1971 proposal (1971-46, Log CP-50) neglected to include the test method reference to Section 8.4 as well as the requirement for char length. NFPA 1971, 2013 edition references several flame resistance tests. It is important the standard references the correct flame resistance test and section number to insure the correct testing procedures are being followed. It was also the technical committee's intent, based on historical data, to have the glove interface component evaluated for char length in addition to afterflame.
- 5. The NFPA 1971 proposal (1971-46, Log CP-50) neglected to include the test method reference to Section 8.4 as well as the requirement for char length. NFPA 1971, 2013 edition references

several flame resistance tests. It is important the standard references the correct flame resistance test and section number to insure the correct testing procedures are being followed. It was also the technical committee's intent, based on historical data, to have the glove extension component evaluated for char length in addition to afterflame.

6. This change brings this requirement in line with EN ISO 20345:2011.

8. The current laundering method described in Section 8.1.11 only accounts for water levels when laundering garments and CBRN Materials. The 2013 edition of NFPA 1971 now requires gloves and glove pouches to be laundered using Section 8.1.11 as a precondition. However a table for gloves and glove pouch water levels were not included. The water levels for the glove and glove pouch wash cycle needs to be specified in NFPA 1971, 2013 edition in order to allow for the front load wash machines to be properly programmed at the testing laboratories. The highest water levels currently in the standard were chosen to account for usage of both 35 lb and 50 lb capacity front-loading machines. The higher levels will also accommodate a full load of gloves/glove pouches and eliminate any risk associated with residual detergent.

7, 9, 10, 16, and 17. Some changes made to the way the measurement of hood shrinkage were specified in cleaning shrinkage as part of the NFPA 1971-2013 revision would prevent any hood from being certified to the new requirements. There was also an inconsistency between how hood shrinkage was evaluated for both thermal and cleaning shrinkage for the interpretation of test results that would lead to inconsistent determinations of compliance among testing laboratories. The proposed changes using the same approach established in the 2007 edition of NFPA 1971 for applying cleaning shrinkage criteria while clarifications have been made for interpretation of permitted shrinkage in both cleaning and thermal shrinkage test methods.

- 11. NFPA 1971, 2013 edition has sections for glove pouch construction, sections 8.1.15 and 8.1.16. Section 8.27.8.2, section for Liquid Penetration Resistance, should reference section 8.1.16 for moisture barrier testing.
- 12. NFPA 1971, 2013 edition has sections for glove pouch construction, sections 8.1.15 and 8.1.16. Section 8.28.8.2, section for Viral Penetration Resistance, should reference section 8.1.16 for moisture barrier testing.
- 13. The ISO 13287 standard does not provide criteria for the evaluation of systematic increase or decrease of values. Also, the current calibration language is not clear.
- 14. The test apparatus will be maxed out if the test subject uses their arm's range of motion to perform this test. In order to achieve more accurate results it is important the test subject use their wrist's range of motion to perform this test.

Emergency Nature: This TIA seeks to correct errors and omissions that were overlooked during the Fall 2013 revision cycle process of NFPA 1971. Additionally, some parts of this TIA correct circumstances in which the standard could adversely impact a method or product that was inadvertently overlooked in the total revision process.

NFPA® 2112-2012

Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire

TIA Log No. 1093

Reference: 7.1.5.1 and 7.1.5.2

Comment Closing Date: February 13, 2013

Submitters: Amanda Newsom, UL LLC and Tricia Hock, Safety

Equipment Institute www.nfpa.org/2112

1. Delete 7.1.5.1 and replace with the following:

7.1.5.1 Garments consisting of separable layers, such as a removable cold weather insulation material layer, that are intended to be worn together or separately shall be tested in all wearable configurations identified by the manufacturer.

7.1.5.1 Where the flame-resistant garment consists of multiple and separable layers intended to be worn separately, both of the following shall apply:

- (a) Specimen garments consisting of the outer layer only shall be tested.
- (b) Specimen garments consisting of the inner layer or layers only shall be tested.
- 2. Add new 7.1.5.2 to read as follows:
- 7.1.5.2 Where the flame-resistant garment consists of multiple layers intended only to be worn together, specimen garments consisting of the outer layer only shall be tested.

Submitter's Substantiation: The current language does not provide requirements for all perceived wearable configurations of garments that consist of multiple layers. This leaves room for interpretation of testing requirements where a garment's finished application was not identified by the standard. The new wording adds this necessary clarification.

Where garments do have removable lining materials, but those lining materials are never intended to be worn without the outer protective layer, the current standard requires redundant testing with little to no benefit of the user. NFPA 2112 has identified TPP, Heat and Thermal Shrinkage and Flame Resistance requirements for fabric materials to identify the minimum testing that would demonstrate a contribution to burn injuries in a flash fire exposure. If the outer layer has been tested and complies with the full scale, manikin test, and the inner layer has been tested and complies with all the fabric tests that have been chosen to identify materials that would

contribute to burn injuries, then adding those two layers together should not negatively impact the performance of that composite on the manikin test. By requiring this redundant testing, manufacturers have chosen to not certify these products and therefore they are encouraging users to wear non-certified configurations of these garments.

Emergency Nature: The proposed TIA intends to correct a circumstance in which the revised document has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process. Products consisting of multiple and separable layers are not being submitted for certification because there is confusion regarding the application of this section which mandates redundant evaluation of each layer of material. This leads to the wearing of non-compliant garments by the users and lessens the influence and credibility of NFPA 2112 in the field.

Call for Nominations for 2013 Standards Council Service Awards

The Standards Council has established a program to recognize committee members for outstanding service to NFPA in the development of codes and standards. The Council's Task Group on Award Selection is now accepting nominations for the following awards:

Standards Medal

The highest award given by the Standards Council, the Standards Medal is given for outstanding contribution to fire safety in the development of standards prepared by NFPA technical committees. When submitting nominations, please consider the following criteria:

- Dedication sincerity to a project
- · Length of service
- Leadership of a project or a technical committee
- Volunteerism beyond normal duties of committee membership
- · Respect and admiration of associates and peers
- Achievement of an outstanding nature

Committee Service Award

This award is given for continuous voluntary service as a technical committee member for a substantial period of time in recognition and appreciation of distinguished service to NFPA in the development of NFPA codes and standards.

Special Achievement Award

This award is presented to recognize the significant contribution of a committee member to a single project that has enhanced the NFPA codes- and standards-making process.

Nomination forms for these awards may be obtained on the NFPA Website at www.nfpa.org/serviceawards or contact Codes and Standards Administration by email at stds_admin@nfpa.org or by mail at NFPA, 1 Batterymarch Park, Quincy, MA 02169-7471. Please submit your nominations by 1/19/2013.

Committee Leadership Conference

The Committee Leadership Conference (CLC) will be held on Sunday, June 9, 2013, during the NFPA Conference and Expo[®] at the McCormick Place Convention Center, Chicago, IL. The registration for the CLC will start at 8:00 a.m. on June 9th.

The Committee Leadership Conference is held at each June Annual Meeting. This Conference is an interactive training program that provides each NFPA Committee officer and member with specific training in carrying out the duties and responsibilities of committee work. This session will be based on the new regulations, *Regulations Governing the Development of NFPA Standards*. The CLC is open to anyone who wishes to attend. Advance registration is required. Please contact the Codes and Standards Administration at 617-984-7246 or by email at stds_admin@nfpa.org.

Standards Forum

The NFPA Standards Forum will be held on Tuesday, June 11, 2013, during the NFPA Conference and Expo® at the McCormick Place Convention Center, Chicago, IL. NFPA has streamlined and simplified the Codes and Standards Process. Similar to last year, at this session technical committee members and interested parties will be able to hear about the latest changes to the *New Regulations Governing the Development of NFPA Standards* and the associated software under development.

Attendees will have a chance to see the Electronic Submission System available on NFPA's website. This system allows the public to electronically submit Public Input (formerly Proposals) and Public Comments (formerly Comments) directly to the document, and after the closing dates, virtually render a "publication ready" document. Technical Committee members will learn the ease of the system's functionality that will ultimately simplify committee meetings.

The Standards Forum is open to any registered conference attendee who wishes to attend.

Committee Calendar

For additional meeting information, please contact the appropriate staff liaison listed on NFPA's Document Information Page (click the document number below and then the Technical Committee tab). If you are interested in attending an NFPA Technical Committee meeting as a guest, please read NFPA's *Regulations Governing the Development of NFPA Standards* (Section 3.3.3.3) for further information.

First Draft Meeting (formerly known as ROP Meeting) Second Draft Meeting (formerly known as ROC Meeting)

January 2013

- 8–10 Fire Service Occupational Safety and Health (1521, 1561 Second Draft), San Diego, CA
- 15–17 Special Operations Protective Clothing & Equipment (1952, 1953 First Draft; 1975 Second Draft), Orlando, FL
- 16–17 Fire Fighter Professional Qualifications (1003 First Draft, 1005 Second Draft), San Diego, CA
- 23–24 Pulverized Fuel Systems, (85 pre-First Draft), Orlando, FL
- Public Fire Educator, Public Information Officer, and Juvenile Firesetter Intervention (1035 First Draft), Atlanta, GA
- 29–31 Water Mist Fire Suppression Systems (750 Second Draft), Palm Beach Gardens, FL

February 2013

- 5–7 Fire Investigations (921 Second Draft), Tempe, AZ
- 6–8 Correlating Committee on Professional Qualifications (1003, 1035, 1091 First Draft and 1005, 1521 Second Draft), Sacramento, CA
- 18–22 National Electrical Code Correlating Committee (70 ROC), Clearwater, FL
- 20 Fluidized Bed Boilers, (85 First Draft), NFPA HQ, Quincy, MA
- 25–26 Technical Search and Rescue (1670 Second Draft),Ft. Lauderdale, FL
- 26–27 Multiple Burner Boilers (85 First Draft), New Orleans, LA
- 26–28 Fire Service Training (13E, 1407, 1408, 1452 First Draft), San Diego, CA
- 28–Mar 1 Heat Recovery Steam Generators (85 First Draft), New Orleans, LA

March 2013

- 7 Single Bed Boilers (85 First Draft), web/teleconference
- 5–7 Data Exchange for the Fire Service (950 First Draft), Seattle, WA
- 12 Stokers (85 First Draft), web/teleconference
- 12–14 Emergency Service Organization Risk Management (1201, 1250 First Draft), San Diego, CA
- 12–14 Premises Security, (730, 731 Second Draft), Tampa, FL
- 18–19 Finishing Processes (33, 34 First Draft), Charleston, South Carolina

- 19–20 Smoke Management Systems (92, 204 First Draft) Linthicum, MD
- 19–21 Electronic Safety Equipment (Draft Development Portable Radios), Ft. Lauderdale, FL

April 2013

- 9–10 Fire Tests (253, 262, 265, 276, 286, 701 First Draft), Rosemont, IL
- 10–11 Fire Department Rescue Tools (1936 First Draft), Charlotte, NC
- 16–18 Pre-Incident Planning (1620 First Draft), San Antonio, TX
- 23–24 Cultural Resources (914 First Draft), Victoria, BC, Canada

June 2013

10–13 NFPA Conference & Expo, Chicago, IL

July 2013

- 9 Sprinkler System Discharge Criteria (13 pre-First Draft) St. Louis MO
- Sprinkler System Installation Criteria (13 pre-First Draft)
 St. Louis, MO
- Joint Meeting: Sprinkler System Discharge Criteria and Sprinkler System Installation Criteria (13 pre-First Draft) St. Louis, MO
- 10–11 Hanging and Bracing of Water-Based Fire Protection Systems (13 pre-First Draft), St. Louis, MO
- 10–11 Residential Sprinkler Systems (13D, 13R pre-First Draft) St. Louis, MO
- 10–11 Private Water Supply Piping Systems (13, 24, and 291 pre-First Draft), St. Louis, MO

August 2013

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- 12–13 Hanging and Bracing of Water-Based Fire Protection Systems (13 First Draft), Nashville, TN
- 14–15 Private Water Supply Piping Systems (13, 24, and 291 First Draft), Nashville, TN
- 20–23 Sprinkler System Installation Criteria (13 First Draft) Nashville, TN
- 25–27 Sprinkler System Discharge Criteria (13 First Draft) Nashville, TN
- 28–30 Residential Sprinkler Systems (13D, 13R First Draft) Nashville, TN

Committees Seeking Members

The **Committee on Aerosol Extinguishing Technology** is seeking members in all interest classifications except Special Experts. This Committee is responsible for NFPA 2010, *Standard for Fixed Aerosol Fire Extinguishing Systems*.

The **Committee on Aerosol Products** is seeking members in all interest classifications except Manufacturers and Special Experts. The Committee is responsible for NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*.

The **Committee on Aircraft Fuel Servicing** is seeking members in all interest classifications. This Committee is responsible for NFPA 407, *Standard for Aircraft Fuel Servicing*.

The **Committee on Aircraft Maintenance Operations** is seeking members in all interest classifications except Special Experts. This Committee is responsible for NFPA 410, *Standard on Aircraft Maintenance*.

The Committee on Airport Facilities is seeking members in all interest classifications except Manufacturer, Special Expert, and User. This Committee is responsible for NFPA 409, Standard on Aircraft Hangars; NFPA 415, Standard on Airport Terminal Buildings, Fuel Ramp Drainage, and Loading Walkways; and NFPA 423, Standard for Construction and Protection of Aircraft Engine Test Facilities.

The **Committee on Animal Housing Facilities** is seeking members in all interest classifications. This Committee is responsible for NFPA 150, *Standard on Fire and Life Safety in Animal Housing Facilities*.

The Correlating Committee on Boiler Combustion System Hazards is seeking members in all interest classifications except Manufacturers. This Correlating Committee oversees all technical committees responsible for NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The Committee on Boiler Combustion System Hazards—Fluidized Bed Boilers is seeking members in all interest classifications except Manufacturers. This Committee is responsible for Chapter 7 in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The Committee on Boiler Combustion System Hazards—Fundamentals is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for Chapters 1, 2, 3 and 4 in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The Committee on Boiler Combustion System Hazards—Heat Recovery Steam Generators is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for Chapter 8 in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The Committee on Boiler Combustion System Hazards—Pulverized Fuel Systems is seeking members in all interest classifications except Special Experts, Manufacturers and Users. This Committee is responsible for Chapter 9 in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The Committee on Boiler Combustion System Hazards—Single Burner Boilers is seeking members in all interest classifications except Manufacturers. This Committee is responsible for Chapter 5 in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The Committee on Boiler Combustion System Hazards—Stoker Operations is seeking members in all interest classifications except Special Experts and Users. This Committee is responsible for stoker material, Chapter 10 in NFPA 85, *Boiler and Combustion Systems Hazards Code*.

The Committee on Building Code—Board and Care Facilities is seeking members in all interest classifications except Enforcers and Special Experts. This Committee is responsible for Chapter 26 in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Building Construction is seeking members in the following interest classifications: Enforcing Authorities, Research/Testing and Users. This Committee is responsible for Chapter 7, Sections 8.3, 8.4 and Annex D in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Building Systems is seeking members in all interest classifications except Special Experts. This Committee is responsible for Chapter 12, Chapters 49-54 and Annex B in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Detention and Correctional Occupancies is seeking members in all interest classifications except Manufacturers. This Committee is responsible for Chapter 21 in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Educational and Day-Care Occupancies is seeking members in all interest classifications except Enforcing Authorities and Special Experts. This Committee is responsible for Chapters 17 and 18 in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Furnishings and Contents is seeking members in all interest classifications except Special Experts. This Committee is responsible for Chapter 10 in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Industrial, Storage, and Miscellaneous Occupancies is seeking members in all interest classifications except Manufactures, Special Experts and Users. This Committee is responsible for Chapters 29-31 and 33-34 in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Structures, Construction and Materials is seeking members in all interest classifications except Manufacturers. This Committee is responsible for Chapter 32 and Chapters 25-48 in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Chimneys, Fireplaces, and Venting Systems for Heat-Producing Appliances is seeking members in all interest classifications except Manufacturer and Special Experts. This Committee is responsible for NFPA 211, Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances.

The Committee on Classification and Properties of Hazardous Chemical Data is seeking members in all interest classifications except Special Experts. This Committee is responsible for NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response.

The Committee on Confined Space Safe Work Practices is seeking members in all interest classifications except Users. Manufacturers are especially in need.

The Committee on Construction and Demolition is seeking members in all interest classifications except Enforcing Authorities and Special Experts. The Committee is responsible for NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations.

The Committee on Data Exchange for the Fire Service is seeking members in all interest classifications except Users. This committee is responsible for NFPA 950, Standard for Data Development and Exchange for the Fire Service.

The Correlating Committee on Combustible Dusts is seeking members in all interest classifications except Manufacturers and Special Experts. This correlating committee oversees the technical committee on Fundamentals of Combustible Dusts and the technical committees for the following documents; NFPA 61 Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities; NFPA 91, Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids; NFPA 484, Standard for Combustible Metals; NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids; NFPA 655, Standard for Prevention of Sulfur Fires and Explosions; and NFPA 664, Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities.

The Committee on Fundamentals of Combustible Dusts is seeking members in the Enforcer interest classifications.

The Committee on Electrical Equipment in Chemical Atmospheres is seeking members in all interest classifications except Special Experts and Users. This Committee is responsible for NFPA 496, Standard for Purged and Pressurized Enclosures for Electrical Equipment; NFPA 497, Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas; and NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas.

The Committee on Electrical Equipment Evaluation is seeking members in all interest classifications except Research/Testing. This Committee is responsible for NFPA 790, Standard for Competency of Third-Party Field Evaluation Bodies, and NFPA 791, Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluation.

The Committee on Electronic Computer Systems is seeking members in all interest classifications. The Committee is responsible for NFPA 75, Standard for the Protection of Information Technology Equipment.

The Committee on Emergency Medical Services is seeking individuals in all interest classifications. This Committee is responsible for NFPA 450, *Guide for Emergency Medical Services and Systems*.

The Committee on Emergency Power Supplies is seeking members in all interest classifications except Users. This Committee is responsible for NFPA 110, Standard for Emergency and Standby Power Systems, and NFPA 111, Standard on Stored Electrical Energy Emergency and Standby Power Systems.

The Committee on Emergency Services Organization Risk Management is seeking individuals in all classifications except Enforcing Authorities and Special Experts. This Committee is responsible for NFPA 1201, Standard for Providing Fire and Emergency Services to the Public, and NFPA 1250, Recommended Practice in Fire and Emergency Service Organization Risk Management.

The **Committee on Explosives** is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for NFPA 495, *Explosive Materials Code and* NFPA 498, *Standard for Safe Havens* and *Interchange Lots for Vehicles Transporting Explosives*.

The Committee on Explosion Protection Systems is seeking members in all interest classifications except Manufacturer, Special Expert, and User. This Committee is responsible for NFPA 67, Guideline on Explosion Protection for Gaseous Mixtures in Pipe Systems; NFPA 68, Standard on Explosion Protection By Deflagration Venting; and NFPA 69, Standard on Explosion Prevention Systems.

The Committee on Exposure Fire Protection is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for NFPA 80A, Recommended Practice for Protection of Buildings from Exterior Fire Exposures.

The Committee on Finishing Processes is seeking members in the classification of Enforcing Authority. This Committee is responsible for NFPA 33, Standard for Spray Application Using Flammable or Combustible Materials and NFPA 34, Standard for Dipping, Coating, and Printing Processes Using Flammable or Combustible Liquids.

The Committee on Fire and Emergency Service Organization and Deployment—Career is seeking members in the classification of Enforcing Authority. This Committee is responsible for NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.

The Committee on Fire and Emergency Service Organization and Deployment—Volunteer is seeking members in all interest classifications except Enforcing Authorities and Users. This Committee is responsible for NFPA 1720, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments.

The Correlating Committee on Fire and Emergency Services **Protective Clothing and Equipment** is seeking members in all interest classifications except Manufacturers and Research/Testing. This Correlating Committee oversees the technical committees for the following documents; NFPA 1800, Standard on Electronic Safety Equipment for Emergency Services (proposed); NFPA 1801, Standard on Thermal Imagers for the Fire Service; NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting; NFPA 1852, Standard on Selection, Care, and Maintenance of Open-Circuit Self-Contained Breathing Apparatus (SCBA); NFPA 1855, Standard for Selection, Care, and Maintenance on Protective Ensembles for Technical Rescue Incidents; NFPA 1951, Standard on Protective Ensembles for Technical Rescue Incidents; NFPA 1952, Standard on Surface Water Operations Protective Clothing and Equipment; NFPA 1953, Standard on Protective Ensembles for Contaminated Water Diving (proposed); NFPA 1971, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting; NFPA 1975, Standard on Station/Work Uniforms for Emergency Services; NFPA 1977, Standard on Protective Clothing and Equipment for Wildland Fire Fighting, NFPA 1981, Standard on Protective Clothing and Equipment for Wildland Fire Fighting; NFPA 1982, Standard on Personal Alert Safety Systems (PASS); NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Services; NFPA 1984, Standard on Respirators for Wildland Fire-Fighting Operations; NFPA 1989, Standard on Breathing Air Quality for Emergency Services Respiratory Protection; NFPA 1991, Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies; NFPA 1992, Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies; NFPA 1994, Standard on Protective Ensembles for First Responders to CBRN Terrorism Incidents; and NFPA 1999, Standard on Protective Clothing for Emergency Medical Operations.

The Committee on Fire and Emergency Services Protective Clothing and Equipment—Electronic Safety Equipment is seeking members in all interest classifications except Manufacturers. This Committee is responsible for NFPA 1800, Standard on Electronic Safety Equipment for Emergency Services (Proposed); NFPA 1801, Standard on Thermal Imagers for the Fire Service; and NFPA 1982, Standard on Personal Alert Safety Systems (PASS).

The Committee on Fire and Emergency Services Protective Clothing and Equipment—Emergency Medical Services Protective Clothing and Equipment is seeking members in all interest classifications except Manufacturers. This Committee is responsible for NFPA 1999, Standard on Protective Clothing for Emergency Medical Operations.

The Committee on Fire and Emergency Services Protective Clothing and Equipment—Special Operations Protective Clothing and Equipment is seeking members in all interest classifications except Manufacturers and Users. This Committee is particularly seeking members with expertise in contaminated water operations protective clothing and equipment. This Committee is responsible for NFPA 1951; Standard on Protective Ensemble for Technical Rescue Incidents; NFPA 1952, Standard on Surface Water Operations Protective Clothing and Equipment; NFPA 1975, Standard on Station/Work Uniforms for Fire and Emergency Services; and NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Services.

The Committee on Wildland Fire Fighting Protective Clothing and Equipment is seeking members in all interest classifications. This Committee is responsible for NFPA 1977, Standard on Protective Clothing and Equipment for Wildland Fire Fighting.

The Committee on Fire Department Ground Ladders is seeking members in all interest classifications except Users. This Committee is responsible for NFPA 1931, Standard for Manufacturer's Design of Fire Department Ground Ladders, and NFPA 1932, Standard on Use, Maintenance, and Service Testing of In-Service Fire Department Ground Ladders

The **Committee on Fire Department Rescue Tools** is seeking members in all interest classifications except Manufacturers and Users. This Committee is responsible for NFPA 1936, *Standard on Powered Rescue Tools*.

The Committee on Fire Hose is seeking members from all interest classifications except Manufacturers. This Committee is responsible for NFPA 1961, Standard on Fire Hose; NFPA 1962, Standard for the Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose; NFPA 1963, Standard for Fire Hose Connections; NFPA 1964, Standard for Spray Nozzles, and NFPA 1965, Standard for Fire Hose Appliances.

The **Committee on Fire Reporting** is seeking members in all interest classifications except enforcers. This Committee is responsible for NFPA 901, *Standard Classifications for Incident Reporting and Fire Protection Data*.

The Committee on Fire Safety and Emergency Symbols is seeking members in all interest classifications except Special Experts and Manufacturers. This Committee is responsible for NFPA 170, Standard for Fire Safety and Emergency Symbols.

The Committee on Fire Tests is seeking members in all interest classifications except Manufacturers, Research/Testing and Special Experts. This Committee is responsible for NFPA 252, Standard Methods of Fire Tests of Door Assemblies; NFPA 253, Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source; NFPA 257, Standard on Fire Test for Window and Glass Block Assemblies; NFPA 259, Standard Test Method for Potential Heat of Building Materials; NFPA 260, Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture; NFPA 261, Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes; NFPA 262, Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces; NFPA 265, Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Coverings on Full Height Panels and Walls; NFPA 268, Standard Test Method for Determining Ignitibility of Exterior Wall Assemblies Using a Radiant Heat Energy Source; NFPA 269, Standard Test Method for Developing Toxic Potency Data for Use in Fire Hazard Modeling; NFPA 270, Standard Test Method for Measurement of Smoke Obscuration Using a Conical Radiant Source in a Single Closed Chamber; NFPA 273, Standard Method of Test for Determining the Degrees of Combustibility of Building Materials (Proposed); NFPA 274, Standard Test Method to Evaluate Fire Performance Characteristics of Pipe Insulation; NFPA 275, Standard Method of Fire Tests for the Evaluation of Thermal Barriers Used Over Foam Plastic Insulation; NFPA 276, Standard Method of Fire Tests for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Components; NFPA 284, Standard Test Method for Mattresses for Correctional Occupancies (Proposed); NFPA 285, Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components; NFPA 286, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth; NFPA 287, Standard Test Methods for Measurement of Flammability of Materials in Cleanrooms Using a Fire Propagation Apparatus (FPA); NFPA 288, Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal Fire Resistance-Rated Assemblies; NFPA 289, Standard Method of Fire Test for Individual Fuel Packages; NFPA 290, Standard for Fire Testing of Passive Protection Materials for Use on LP-Gas Containers; NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films; and NFPA 705, Recommended Practice for a Field Flame Test for Textiles and Films.

The Correlating Committee on Flammable and Combustible Liquids is seeking members in all classifications and is particularly interested in Manufacturers of containers and tanks. This Correlating Committee is responsible for NFPA 30, Flammable and Combustible Liquids Code.

The Committee on Flammable and Combustible Liquids-Operations is seeking members in the Enforcer classification only. This Committee is responsible for Chapters 17, 18, 19, 20, 28, and 29 of NFPA 30, Flammable and Combustible Liquids Code.

The Committee on Flash Fire Protective Garments is seeking members in all interest classifications except Manufacturers and Users. This Committee is responsible for NFPA 2112, Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire, and NFPA 2113, Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire.

The **Committee on Fluid Heaters** is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for NFPA 87, *Recommended Practice for Fluid Heaters*.

The **Committee on Foam** is seeking members in the Enforcer classification only. This Committee is responsible for NFPA 11, *Standard for Low-, Medium-, and High-Expansion Foam*.

The Committee on Forest and Rural Fire Protection is seeking members in all interest classifications except Special Experts. This Committee is responsible for NFPA 1141, Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural and Suburban Areas; NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting; NFPA 1143, Standard for Wildland Fire Management; NFPA 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fire; NFPA 1145, Guide for the Use of Class A Foams in Manual Structural Fire Fighting; and NFPA 1150, Standard on Foam Chemicals for Fires in Class A Fuels.

The Committee on Garages and Parking Structures is seeking members in all interest classifications except Manufacturers, Special Experts, and Users. This Committee is responsible for NFPA 88A, Standard for Parking Structures.

The **Committee on Gas Hazards** is seeking members in all interest classifications. This Committee is responsible for NFPA 306, *Standard for the Control of Gas Hazards on Vessels*.

The Committee on Gas Process Safety is seeking members in all interest classifications except Special Expert. This Committee is responsible for NFPA 56 (PS), Standard for Fire and Explosion Prevention During Cleaning and Purging of Flammable Gas Piping Systems.

The Committee on Gaseous Fire Extinguishing Systems is not seeking new members at this time, but will consider applications for members in the Enforcer classification that do not represent the US Federal government. This Committee is responsible for NFPA 12, Standard on Carbon Dioxide Extinguishing Systems; NFPA

12A, Standard on Halon 1301 Fire Extinguishing Systems; and NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems.

The Committee on Hazard and Risk of Contents and Furnishings is seeking members in all interest classifications except Research/Testing Laboratories, Manufacturers and Special Experts. This Committee is responsible for NFPA 555, Guide on Methods for Evaluating Potential for Room Flashover; NFPA 556, Guide on Methods for Evaluating Fire Hazard to Occupants of Passenger Road Vehicles; and NFPA 557, Standard for Determination of Fire Load for Use in Structural Fire Protection Design.

The Correlating Committee on Health Care Facilities is seeking members for all interest classifications except Special Experts and Users. This Correlating Committee is responsible for overseeing all Technical Committees for NFPA 99, *Health Care Facilities Code*.

The Committee on Health Care Facilities—Electrical Systems is seeking members for all interest classifications. This Committee is responsible for Chapters 6 and 7 in NFPA 99, *Health Care Facilities Code*.

The Committee on Health Care Facilities—Emergency Management and Security is seeking members for all interest classifications except Special Experts and Users. This Committee is responsible for Chapters 12 and 13 in NFPA 99, *Health Care Facilities Code*.

The Committee on Health Care Facilities—Fundamentals is seeking members for all interest classifications. This Committee is responsible for Chapters 1, 2, 3, 4 and 15 in NFPA 99, *Health Care Facilities Code*.

The Committee on Health Care Facilities—Hyperbaric and Hypobaric Facilities is seeking members for all interest classifications except Users. This Committee is responsible for Chapter 14 in NFPA 99, Health Care Facilities Code, and NFPA 99B, Standard for Hypobaric Facilities.

The Committee on Health Care Facilities—Mechanical Systems is seeking members for all interest classifications except Users and Manufacturers. This Committee is responsible for Chapters 8 and 9 in NFPA 99, *Health Care Facilities Code*.

The Committee on Health Care Facilities—Medical Equipment is seeking members for all interest classifications. This Committee is responsible for Chapters 10 and 11 in NFPA 99, *Health Care Facilities Code*.

The Committee on Health Care Facilities—Piping Systems is seeking members for all interest classifications. This Committee is responsible for Chapter 5 in NFPA 99, *Health Care Facilities Code*.

The **Committee on Helicopter Facilities** is seeking members in all interest classifications. This Committee is responsible for NFPA 418, *Standard for Heliports*.

The Committee on Incinerators and Waste Handling Systems is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for NFPA 82, Standard on Incinerators and Waste and Linen Handling Systems and Equipment.

The Committee on Industrial Trucks is seeking members in all interest classifications except Manufacturers. This Committee is responsible for NFPA 505, Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operations.

The Committee on Internal Combustion Engines is seeking members in the interest classifications of Enforcer, Insurer, and User. This Committee is responsible for NFPA 37, Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines.

The **Committee on Laser Fire Protection** is seeking members in all interest classifications except Special Experts. This Committee is responsible for NFPA 115, *Standard for Laser Fire Protection*.

The Committee on Liquid Fuel Burning Equipment is seeking members in the interest classifications of Insurer and User. This Committee is responsible for NFPA 31, *Standard for the Installation of Oil-Burning Equipment*.

The Committee on Loss Prevention Procedures and Practices is seeking members in all interest classifications except Special Experts. This Committee is responsible for NFPA 600, *Standard on Industrial Fire Brigades*, and NFPA 601, *Standard for Security Services in Fire Loss Prevention*.

The Committee on LP-Gases at Utility Gas Plants is seeking members in all interest classifications except Users. This Committee is responsible for NFPA 59, *Utility LP-Gas Plant Code*.

The Committee on Manufacture of Organic Coatings is seeking members in all interest classifications except Manufacturer and Special Expert. This Committee is responsible for NFPA 35, *Standard for the Manufacture of Organic Coatings*.

The Committee on Manufactured Housing is seeking members in all interest classifications except Enforcing Authorities and Manufacturers. This Committee is responsible for NFPA 501, Standard on Manufactured Housing; NFPA 501A, Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities; and NFPA 225, Model Manufactured Home Installation Standard.

The **Committee on Marinas and Boatyards** is seeking members in all interest classifications except Special Experts. This Committee is responsible for NFPA 303, *Fire Protection Standard for Marinas and Boatyards*.

The **Committee on Marine Fire-Fighting Vessels** is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for NFPA 1925, *Standard on Marine Fire-Fighting Vessels*.

The **Committee on Marine Terminals** is seeking members in all interest classifications except Special Experts and Insurance. This Committee is responsible for NFPA 307, *Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves*.

The **Committee on Merchant Vessels** is seeking members in all interest classifications except for Special Experts. This Committee is responsible for NFPA 301, *Code for Safety to Life from Fire on Merchant Vessels*.

The Committee on Mining Facilities is seeking members in all interest classifications, including Special Experts and Manufacturers of mining equipment. This Committee is responsible for NFPA 120, Standard for Fire Prevention and Control in Coal Mines, and NFPA 122, Standard for Fire Prevention and Control in Metal/Nonmetal Mining and Metal Mineral Processing Facilities.

The Committee on Motion Picture and Television Industry is seeking members in all interest classifications except Special Experts and Users. This Committee is responsible for NFPA 140, Standard on Motion Picture and Television Production Studio Soundstages, Approved Production Facilities, and Production Locations.

The **Committee on Motor Craft** is seeking members in all interest classifications except for Special Experts. With the recent notice of proposed rulemaking (NPRM) entitled "Inspection of Towing Vessels" (published in the Federal Register on August 11, 2011), the Committee is looking for representatives from the towing vessel industry. This Committee is responsible for NFPA 302, *Fire Protection Standard for Pleasure and Commercial Motor Craft*.

The Committee on Oxygen Enriched Atmospheres is seeking members in all interest classifications except for Special Experts and Users. This Committee is responsible for NFPA 53, Recommended Practice on Materials, Equipment and Systems Used in Oxygen-Enriched Atmospheres.

The Committee on Fire Prevention Organization and Deployment is seeking members in all interest classifications except Enforcing Authorities. This Committee is responsible for NFPA 1730, Standard on Organization and Deployment of Code Enforcement, Plan Review, Fire Investigation, and Public Education Operations to the Public.

The **Committee on Portable Fire Extinguishers** is seeking members in all interest classifications. This Committee is responsible for NFPA 10, *Standard for Portable Fire Extinguishers*.

The Correlating Committee on Professional Qualifications is seeking members in all interest classifications except Enforcing Authorities, Labor, and Special Experts. This Correlating Committee oversees the Technical Committees responsible for NFPA 1000, Standard for Fire Service Professional Qualifications Accreditation and Certification Systems; NFPA 1001, Standard for Fire Fighter Professional Qualifications; NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications; NFPA 1003, Standard for Airport Fire Fighter Professional Qualifications; NFPA 1005, Standard for Professional Qualifications for Marine Fire Fighting for Land-Based Fire Fighters; NFPA 1006, Standard for Technical Rescuer Professional Qualifications; NFPA 1021, Standard for Fire Officer Professional Qualifications; NFPA 1026, Standard for Incident Management Personnel Professional Qualifications; NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner; NFPA 1033, Standard for Professional Qualifications for Fire Investigator; NFPA 1035, Standard for Professional Qualifications for Fire and Life Safety Educator, Public Information Officer, and Juvenile Firesetter Intervention Specialist; NFPA 1037, Standard for Professional Qualifications for Fire Marshal; NFPA 1041, Standard for Fire Service Instructor Professional Qualifications; NFPA 1051, Standard for Wildland Fire Fighter Professional Qualifications; NFPA 1061, Standard for Professional Qualifications for Public Safety Telecommunicator; NFPA 1071, Standard for Emergency Vehicle Technician Professional Qualifications; NFPA 1081, Standard for Industrial Fire Brigade Member Professional Qualifications; and NFPA 1091, Standard for Traffic Control Incident Management Professional Qualifications (proposed).

The Committee on Professional Qualifications—Accreditation and Certification to Fire Service Professional Qualifications is seeking members in all interest classifications except Special Experts. This Committee is responsible for NFPA 1000, Standard for Fire Service Professional Qualifications Accreditation and Certification Systems.

The Committee on Professional Qualifications—Emergency Vehicle Mechanic Technicians Professional Qualifications is seeking members in all interest classifications. This Committee is responsible for NFPA 1071, Standard for Emergency Vehicle Technician Professional Qualifications.

The Committee on Professional Qualifications—Fire Inspector Professional Qualifications is seeking members in all interest classifications except Users. This Committee is responsible for NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner.

The Committee on Professional Qualifications—Fire Investigator Professional Qualifications is seeking members in all interest classifications except Users and Special Experts. This Committee is responsible for NFPA 1033, Standard for Professional Qualifications for Fire Investigator.

The Committee on Professional Qualifications—Fire Marshal Professional Qualifications is seeking members in all interest classifications except Users, Consumers, and Special Experts. This Committee is responsible for NFPA 1037, Standard for Professional Qualifications for Fire Marshal.

The Committee on Professional Qualifications—Fire Service Instructor Professional Qualifications is seeking members in all interest classifications except Users and Special Experts. This Committee is responsible for NFPA 1041, Standard for Fire Service Instructor Professional Qualifications.

The Committee on Professional Qualifications—Incident Management Professional Qualifications is seeking members in all interest classifications except Users. This Committee is responsible for NFPA 1026, Standard for Incident Management Personnel Professional Qualifications

The Committee on Professional Qualifications—Industrial Fire Brigades Professional Qualifications is seeking members in all interest classifications except Users and Special Experts. This Committee is responsible for NFPA 1081, Standard for Industrial Fire Brigade Member Professional Qualifications.

The Committee on Professional Qualifications—Public Fire Educator Professional Qualifications is seeking members in all interest classifications except Users and Special Experts. This Committee is responsible for NFPA 1035, Standard for Professional Qualifications for Fire and Life Safety Educator, Public Information Officer, and Juvenile Firesetter Intervention Specialist.

The Committee on Professional Qualifications—Public Safety Telecommunicator Professional Qualifications is seeking members in all interest classifications except Users. This Committee is responsible for NFPA 1061, Standard for Professional Qualifications for Public Safety Telecommunicator.

The Committee on Professional Qualifications—Rescue Technician Professional Qualifications is seeking members in all classifications except Labor, Users, and Special Experts. This Committee is responsible for NFPA 1006, *Standard for Technical Rescue Professional Qualifications*.

The Committee on Professional Qualifications—Wildfire Suppression Professional Qualifications is seeking members in all classifications except Special Experts. This Committee is responsible for NFPA 1051, Standard for Wildland Fire Fighter Professional Qualifications.

The Committee on Public Emergency Service Communication is seeking members all interest classifications except Users and Special Experts. This Committee is responsible for NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.

The Committee on Recreational Vehicles is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for chapters in NFPA 1192, Standard on Recreational Vehicles, and NFPA 1194, Standard for Recreational Vehicle Parks and Campgrounds.

The Committee on Road Tunnel and Highway Fire Protection is seeking members in all interest classifications except Special Experts. This Committee is responsible for NFPA 502, Standard for Road Tunnels, Bridges, and Other Limited Access Highways.

The Committee on Safety to Life—Alternative Approaches to Life Safety is seeking members in all interest classifications except Special Experts and Users. This Committee is responsible for Chapters in NFPA 101A, Guide on Alternative Approaches to Life Safety.

The Committee on Safety to Life—Board and Care Facilities is seeking members in all interest classifications except Enforcers and Special Experts. This Committee is responsible for Chapters 32 and 33 in NFPA 101[®], Life Safety Code[®].

The Committee on Safety to Life—Detention and Correctional Occupancies is seeking members in all interest classifications except Manufacturers. This Committee is responsible for Chapters 22 and 23 in NFPA 101®, Life Safety Code®.

The Committee on Safety to Life—Educational and Day Care Occupancies is seeking members in all interest classifications except Enforcing Authorities and Special Experts. This Committee is responsible for Chapters 14-17 in NFPA 101®, Life Safety Code®.

The Committee on Safety to Life—Furnishings and Contents is seeking members in all interest classifications except Special Experts. This Committee is response for Chapter 10 in the NFPA 101[®], Life Safety Code[®].

The Committee on Safety to Life—Industrial, Storage and Miscellaneous Occupancies is seeking members in all interest classifications except Manufacturers, Special Experts and Users. This Committee is responsible for Chapters 11, 40 and 42 in NFPA 101®, Life Safety Code®.

The Committee on Shipbuilding, Repair, and Lay-Up is seeking members in all interest classifications except Insurance. This Committee is responsible for NFPA 312, Standard for Fire Protection of Vessels During Construction, Conversion, Repair, and Lay-Up.

The Correlating Committee on Signaling Systems is seeking members in all classifications except Special Experts. This Correlating Committee oversees the Technical Committees responsible for NFPA 72[®], National Fire Alarm and Signaling Code.

The Committee on Signaling Systems—Notification Appliances for Fire Alarm Systems is seeking members in all classifications except Manufacturers and Special Experts. This Committee is responsible for Chapter 18 and Annex F in NFPA 72®, National Fire Alarm and Signaling Code.

The Committee on Signaling Systems—Public Fire Reporting Systems is seeking members in all classifications except Manufacturers, Special Experts, Installers/Maintainers and Users. This Committee is responsible for Chapter 27 in NFPA 72®, National Fire Alarm and Signaling Code.

The Committee on Signaling Systems—Supervising Station Fire alarm and Signaling Systems is seeking members in all classifications except Manufacturers. This Committee is responsible for Chapter 26 in NFPA 72®, National Fire Alarm and Signaling Code.

The Committee on Smoke Management Systems is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for Chapters in NFPA 204, Standard for Smoke and Heat Venting, and NFPA 92, Standard for Smoke Management Systems.

The **Committee on Solvent Extraction Plants** is seeking members in all interest classifications except Special Expert and User. This Committee is responsible for NFPA 36, *Standard for Solvent Extraction Plants*.

The **Committee on Static Electricity** is seeking members in the interest classifications of Enforcing Authorities, Insurer, and Research/ Testing. This Committee is responsible for NFPA 77, *Recommended Practice on Static Electricity*.

The **Committee on Subterranean Spaces** is seeking members in all classifications except Special Experts and Users. This Committee is responsible for NFPA 520, *Standard on Subterranean Spaces*.

The Committee on Tank Leakage and Repair Safeguards is seeking members in the interest classifications of Insurer, Installer/Maintainer, and Manufacturer. This Committee is responsible for NFPA 326, Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair, and NFPA 329, Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases.

The **Committee on Telecommunications** is seeking members in all interest classifications. The Committee is responsible for NFPA 76, *Standard for the Fire Protection of Telecommunications Facilities*.

The Committee on Textile and Garment Care Processes is seeking members in all interest classifications except Manufacturers. This Committee is responsible for NFPA 32, *Standard for Drycleaning Plants*.

The Committee on Transportation of Flammable Liquids is seeking members in all interest classifications. This Committee is responsible for NFPA 385, Standard for Tank Vehicles for Flammable and Combustible Liquids.

The Committee on Vehicular Alternative Fuel Systems is seeking members in the interest classifications of Enforcing Authorities, Users and Insurance. This Committee is responsible for NFPA 52, *Vehicular Gaseous Fuel Systems Code*.

The Committee on Wastewater Treatment Plants is seeking members in all interest classifications except Special Experts and Manufacturers. This Committee is responsible for NFPA 820, Standard for Fire Protection in Wastewater Treatment and Collection Facilities.

The Committee on Water Additives for Fire Control and Vapor Mitigation is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for NFPA 18, Standard on Wetting Agents, and NFPA 18A, Standard on Water Additives for Fire Control and Vapor Mitigation.

The **Committee on Water-Cooling Towers** is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for NFPA 214, *Standard on Water-Cooling Towers*.

The **Committee on Water Tanks** is seeking members in all interest classifications except Manufacturers and Special Experts. This Committee is responsible for NFPA 22, *Standard for Water Tanks for Private Fire Protection*.

The Committee on Wood and Cellulosic Materials Processing is seeking members in all interest classifications, particularly Enforcing Authorities. This Committee is responsible for NFPA 664, Standard for the Prevention of Fire and Explosions in Wood Processing and Woodworking Facilities.

To apply for membership on an NFPA Technical Committee, visit the Document Information Page for the relevant NFPA code(s) or standard(s) for which the Technical Committee is responsible.

On the document's information page, choose the "Technical Committee" tab and select the link "Submit a Committee application online". You will be asked to sign-in or create a free online account with NFPA before using this application system.

Committees Soliciting Public Input (formerly Proposals)

The committees for the following documents are planning to begin preparation of their reports. In accordance with the New *Regulations Governing the Development of NFPA Standards* (Regs for Fall 2013 and All Subsequent Revision Cycles), committees are now accepting Public Input for recommendations on content for the documents listed below. Public Input received by 5:00 p.m. ET on the closing date indicated will be acted on by the committee and that action will be published in the committee's report. Submit Public Input electronically via our new online electronic submission system. For instructions on how to use the electronic submission system, please go to www.nfpa.org/publicinput. Public Input may also be submitted on Public Input forms which are available on the NFPA website on the document's information page. (NOTE: For information on specific committee meeting dates, contact Codes and Standards Administration, NFPA.) Copies of new document drafts are available by email at stds_admin@nfpa.org or from Codes and Standards Administration, NFPA, 1 Batterymarch Park, Quincy, MA 02169-7471, or they may be downloaded from NFPA's website at http://www.nfpa.org/codelist. If you need a current edition of a document, please write to NFPA, Fulfillment Center, 11 Tracy Drive, Avon, MA 02322, or call 800-344-3555.

† Change in proposal closing date or cycle

P* Indicates proposed document

Document No.		Public Input	Meeting
Edition	Title	Closing Date	Reporting
NFPA 13†-2013	Standard for the Installation of Sprinkler Systems	5/31/2013	A2015
NFPA 13D†-2013	Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings		
	and Manufactured Homes	5/31/2013	A2015
NFPA 13R†-2013	Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancie	s 5/31/2013	A2015
NFPA 15-2012	Standard for Water Spray Fixed Systems for Fire Protection	7/7/2014	A2016
NFPA 18-2011	Standard on Wetting Agents	1/3/2014	F2015
NFPA 18A-2011	Standard on Water Additives for Fire Control and Vapor Mitigation	1/3/2014	F2015
NFPA 20-2013	Standard for the Installation of Stationary Pumps for Fire Protection	7/8/2013	A2015
NFPA 24†-2013	Standard for the Installation of Private Fire Service Mains and Their Appurtenances	5/31/2013	A2015
NFPA 32-2011	Standard for Drycleaning Plants	1/3/2014	F2015
NFPA 35-2011	Standard for the Manufacture of Organic Coatings	1/3/2014	F2015
NFPA 40-2011	Standard for the Storage and Handling of Cellulose Nitrate Film	7/8/2013	A2015
NFPA 51-2013	Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding,		
	Cutting, and Allied Processes	7/6/2015	A2017
NFPA 51A-2012	Standard for Acetylene Cylinder Charging Plants	7/7/2014	A2016
NFPA 53-2011	Recommended Practice on Materials, Equipment, and Systems Used in Oxygen-		
	Enriched Atmospheres	1/3/2014	F2015
NFPA 55-2013	Compressed Gases and Cryogenic Fluids Code	7/8/2013	A2015
NFPA 59A-2013	Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)	7/8/2013	A2015
NFPA 61-2013	Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food		
	Processing Facilities	7/6/2015	A2017
NFPA 72†-2013	National Fire Alarm and Signaling Code	5/20/2013	A2015
NFPA 73-2011	Standard for Electrical Inspections for Existing Dwellings	7/8/2013	A2015
NFPA 75-2013	Standard for the Fire Protection of Information Technology Equipment	1/3/2014	F2015
NFPA 76-2012	Standard for the Fire Protection of Telecommunications Facilities	1/3/2014	F2015
NFPA 80-2013	Standard for Fire Doors and Other Opening Protectives	7/8/2013	A2015
NFPA 80A-2012	Recommended Practice for Protection of Buildings from Exterior Fire Exposures	7/7/2014	A2016
NFPA 101A-2013	Guide on Alternative Approaches to Life Safety	7/8/2013	A2015
NFPA 102-2011	Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane		
	Structures	1/3/2014	F2015
NFPA 105-2013	Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives	s 7/8/2013	A2015
NFPA 110-2013	Standard for Emergency and Standby Power Systems	7/8/2013	A2015
NFPA 111-2013	Standard on Stored Electrical Energy Emergency and Standby Power Systems	7/8/2013	A2015
NFPA 115-2012	Standard for Laser Fire Protection	1/3/2014	F2015
NFPA 150-2013	Standard on Fire and Life Safety in Animal Housing Facilities	7/8/2013	A2015
NFPA 160-2011	Standard for the Use of Flame Effects Before an Audience	7/8/2013	A2015
NFPA 214-2011	Standard on Water-Cooling Towers	1/3/2014	F2015
NFPA 214-2011	Standard on Water-Cooling Towers	1/3/2014	F2015

NFPA 232-2012	Standard for the Protection of Records	7/7/2014	A2016
NFPA 252-2012	Standard Methods of Fire Tests of Door Assemblies	1/5/2015	F2016
NFPA 257-2012	Standard on Fire Test for Window and Glass Block Assemblies	1/5/2015	F2016
NFPA 268-2012	Standard Test Method for Determining Ignitibility of Exterior Wall Assemblies Using a		
	Radiant Heat Energy Source	1/5/2015	F2016
NFPA 269-2012	Standard Test Method for Developing Toxic Potency Data for Use in Fire Hazard		
	Modeling	1/5/2015	F2016
NFPA 275-2013	Standard Method of Fire Tests for the Evaluation of Thermal Barriers	1/5/2015	F2016
NFPA 285-2012	Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of	1/5/2015	F2016
NEDA 207 2012	Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components	1/5/2015	F2016
NFPA 287-2012	Standard Test Methods for Measurement of Flammability of Materials in Cleanrooms	1/5/2015	F2016
NFPA 288-2012	Using a Fire Propagation Apparatus (FPA) Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in	1/3/2013	Γ2010
NFFA 200-2012	Horizontal Fire Resistance-Rated Assemblies	1/5/2015	F2016
NFPA 291† -2013	Recommended Practice for Fire Flow Testing and Marking of Hydrants	5/31/2013	A2015
NFPA 301-2013	Code for Safety to Life from Fire on Merchant Vessels	7/6/2015	A2017
NFPA 303-2011	Fire Protection Standard for Marinas and Boatyards	7/8/2013	A2017
NFPA 307-2011	Standard for the Construction and Fire Protection of Marine Terminals, Piers, and	770/2015	112013
14171307 2011	Wharves	7/8/2013	A2015
NFPA 312-2011	Standard for Fire Protection of Vessels During Construction, Conversion, Repair, and	77072013	112015
111111111111111111111111111111111111111	Lay-Up	7/8/2013	A2015
NFPA 385-2012	Standard for Tank Vehicles for Flammable and Combustible Liquids	1/5/2015	F2016
NFPA 400-2013	Hazardous Materials Code 7/8/2013 A2015		
NFPA 402-2013	Guide for Aircraft Rescue and Fire-Fighting Operations	7/6/2015	A2017
NFPA 407-2012	Standard for Aircraft Fuel Servicing	7/7/2014	A2016
NFPA 409-2011	Standard on Aircraft Hangars	7/8/2013	A2015
NFPA 414-2012	Standard for Aircraft Rescue and Fire-Fighting Vehicles	7/7/2014	A2016
NFPA 415-2013	Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkway	s7/8/2013	A2015
NFPA 418-2011	Standard for Heliports	1/3/2014	F2015
NFPA 423-2010	Standard for Construction and Protection of Aircraft Engine Test Facilities	7/8/2013	A2015
NFPA 424-2013	Guide for Airport/Community Emergency Planning	7/6/2015	A2017
NFPA 450-2013	Guide for Emergency Medical Services and Systems	7/7/2014	A2016
NFPA 472-2013	Standard for Competence of Responders to Hazardous Materials/Weapons of Mass		
	Destruction Incidents	7/6/2015	A2017
NFPA 473-2013	Standard for Competencies for EMS Personnel Responding to Hazardous Materials/		
	Weapons of Mass Destruction Incidents	7/6/2015	A2017
NFPA 475-P*	Recommended Practice for Responding to Hazardous Materials Incidents/Weapons of	1.5.001.5	F2046
NEDA 407 2012	Mass Destruction	1/5/2015	F2016
NFPA 497-2012	Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors		
	and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process	1/2/2014	F2015
NEDA 400 2012	Areas Recommended Practice for the Classification of Combustible Dusts and of Hazardous	1/3/2014	F2015
NFPA 499-2013	(Classified) Locations for Electrical Installations in Chemical Process Areas	7/7/2014	A2016
NFPA 550-2012	Guide to the Fire Safety Concepts Tree	1/5/2015	F2016
NFPA 555-2013	Guide on Methods for Evaluating Potential for Room Flashover	7/7/2014	A2016
NFPA 556-2011	Guide on Methods for Evaluating Fire Hazard to Occupants of Passenger Road Vehicles	7/8/2013	A2015
NFPA 654-2013	Standard for the Prevention of Fire and Dust Explosions from the Manufacturing,	77072015	112013
1411110312013	Processing, and Handling of Combustible Particulate Solids	7/6/2015	A2017
NFPA 655-2012	Standard for Prevention of Sulfur Fires and Explosions	1/5/2015	F2016
NFPA 664-2012	Standard for the Prevention of Fires and Explosions in Wood Processing and	-,-,	
	Woodworking Facilities	7/7/2014	A2016
NFPA 704-2012	Standard System for the Identification of the Hazards of Materials for Emergency		
	Response	7/7/2014	A2016
NFPA 820-2012	Standard for Fire Protection in Wastewater Treatment and Collection Facilities	7/8/2013	A2015
NFPA 901-2011	Standard Classifications for Incident Reporting and Fire Protection Data	1/3/2014	F2015
NFPA 951-P*	Guide to Building and Utilizing Data Information	1/3/2014	F2015

NEDA 1000 0011			
NFPA 1000-2011	Standard for Fire Service Professional Qualifications Accreditation and Certification	1/5/2015	F2016
NEDA 1027 2012	Systems St. J. J. G. D. G. J. G. J. G. F. M. J. J.	1/5/2015	F2016
NFPA 1037-2012	Standard for Professional Qualifications for Fire Marshal	1/5/2015	F2016
NFPA 1051-2012	Standard for Wildland Fire Fighter Professional Qualifications	1/5/2015	F2016
NFPA 1071-2011	Standard for Emergency Vehicle Technician Professional Qualifications	7/8/2013	A2015
NFPA 1072-P*	Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response	1 /5 /2015	E2016
NEDA 1122 2012	Personnel Professional Qualifications	1/5/2015	F2016
NFPA 1122-2013	Code for Model Rocketry	7/6/2015	A2017
NFPA 1124-2013	Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and	7/7/2014	A 2016
NEDA 1125 2012	Pyrotechnic Articles	7/7/2014	A2016
NFPA 1125-2012	Code for the Manufacture of Model Rocket and High Power Rocket Motors	7/7/2014	A2016
NFPA 1126-2011	Standard for the Use of Pyrotechnics Before a Proximate Audience	7/8/2013	A2015
NFPA 1127-2013	Code for High Power Rocketry	7/6/2015	A2017
1128PYR-2013	Standard Method of Fire Test for Flame Breaks	7/7/2014	A2016
1129PYR-2013	Standard Method of Fire Test for Covered Fuse on Consumer Fireworks	7/7/2014	A2016
NFPA 1141-2012	Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural,		
	and Suburban Areas	7/7/2014	A2016
NFPA 1142-2012	Standard on Water Supplies for Suburban and Rural Fire Fighting	7/7/2014	A2016
NFPA 1144-2013	Standard for Reducing Structure Ignition Hazards from Wildland Fire	7/6/2015	A2017
NFPA 1145-2011	Guide for the Use of Class A Foams in Manual Structural Fire Fighting	7/8/2013	A2015
NFPA 1221-2013	Standard for the Installation, Maintenance, and Use of Emergency Services		
	Communications Systems	7/8/2013	A2015
NFPA 1401-2012	Recommended Practice for Fire Service Training Reports and Records	1/5/2015	F2016
NFPA 1402-2012	Guide to Building Fire Service Training Centers	1/5/2015	F2016
NFPA 1403-2012	Standard on Live Fire Training Evolutions	1/5/2015	F2016
NFPA 1405-2011	Guide for Land-Based Fire Departments that Respond to Marine Vessel Fires	1/3/2014	F2015
NFPA 1500-2013	Standard on Fire Department Occupational Safety and Health Program	7/6/2015	A2017
NFPA 1582-2013	Standard on Comprehensive Occupational Medical Program for Fire Departments	7/6/2015	A2017
	Departments	7/8/2013	A2015
NFPA 1801-2013	Standard on Thermal Imagers for the Fire Service	7/6/2015	A2017
NFPA 1901-2009	Standard for Automotive Fire Apparatus	7/8/2013	A2015
NFPA 1906-2012	Standard for Wildland Fire Apparatus	7/8/2013	A2015
NFPA 1911-2012	Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service		
	Automotive Fire Apparatus	1/5/2015	F2016
NFPA 1912-2011	Standard for Fire Apparatus Refurbishing	1/3/2014	F2015
NFPA 1917-2013	Standard for Automotive Ambulances	7/8/2013	A2015
NFPA 1951-2013	Standard on Protective Ensembles for Technical Rescue Incidents	7/6/2015	A2017
NFPA 1961-2013	Standard on Fire Hose	7/6/2015	A2017
NFPA 1971-2013	Standard on Protective Ensembles for Structural Fire Fighting and Proximity		
	Fire Fighting	7/6/2015	A2017
NFPA 1977-2011	Standard on Protective Clothing and Equipment for Wildland Fire Fighting	1/3/2014	F2015
NFPA 1983-2012	Standard on Life Safety Rope and Equipment for Emergency Services	1/5/2015	F2016
NFPA 1984-2011	Standard on Respirators for Wildland Fire-Fighting Operations	1/3/2014	F2015
NFPA 1991-2005	Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies	1/3/2014	F2015
NFPA 1992-2012	Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials		
	Emergencies	1/5/2015	F2016
NFPA 1994-2012	Standard on Protective Ensembles for First Responders to CBRN Terrorism Incidents	1/5/2015	F2016
NFPA 2112-2012	Standard on Florective Engineers for First Responders to EDITY Terrorism medicins Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against		0.10
	Flash Fire	7/7/2014	A2016
			010