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

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Earlier Closing Dates for Paper Submission of Input and Comments

As NFPA continues to move forward with implementation of the Standards Development Process, many of the new benefits of online submission process continue to take hold. When Public Input/Comments are submitted online the proposed changes are integrated in-line on the draft document. Once the closing date has passed online submissions allow the Committee Members to see all of the proposed changes integrated into one complete document virtually immediately, maximize the amount of time each Committee Member has to review all of the proposed changes and prepare for any upcoming committee meeting. However, while we want to provide as much extra time as possible to our Committee Members, we also want to consider the needs of those who still want to submit their Public Input/Comments on the "paper forms" via e-mail, fax or mail. Beginning with the Fall 2014 submittals of Public Comments, we have implemented an earlier closing date for "paper submissions" of Public Input/Comments. The earlier closing date will allow the necessary time to key and proof any proposed change to ensure the changes are presented for Committee consideration at the same time as the changes submitted online.

PAPER SUBMISSION CLOSING DATES. The closing date for paper submissions, (this includes forms sent via e-mail, fax or mail), for the Fall 2014 comments will be October 11, 2013 and the closing date for the electronic submission system will be November 15, 2013. All revised schedules can be located on the respective document information page or www.nfpa.org/schedules.

Please be advised, that it is anticipated that in the future, "paper submissions" will not be accepted so please take this opportunity to try out the new system – we think you'll really like it! As always we are here to help you participate in the NFPA process. If you have any questions or concerns please contact us at 617-984-7240 or via email at standardsdev support@nfpa.org.

For additional information on NFPA Standards Development Process, please visit NFPA's website at www.nfpa.org/newprocess.

Comments Sought on a 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 s 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 July/August, 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 37-2010

Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines

TIA Log No. 1101 **Reference:** 9.3.3

Comment Closing Date: June 14, 2013

Submitter: Clifford C. Roberts, American International Group,

Inc.

www.nfpa.org/37

1. Add a new subsection 9.3.3 to read as follows:

9.3.3 The combustion gas turbine starting sequence shall include a purge cycle that will result in a nonignitible atmosphere in the turbine and its exhaust system prior to the start of the ignition sequence and the introduction of fuel.

Submitter's Substantiation: The purpose of this Tentative Interim Amendment (TIA) is to reinstate an important safety provision of earlier editions of NFPA 37 that was inadvertently deleted in the processing of the current 2010 edition. This requirement appears in the prior (2006) edition of NFPA 37 as Subsection 9.3.2.

Technical Validity: Proposal 37-20 (Log #CP19) in the Fall 2009 *Report on Proposals* (ROP) proposed a rewrite of Chapter 9 of NFPA 37. Proposal 37-20 was accepted by the Technical Committee on Internal Combustion Engines and the text being proposed for reinstatement by this TIA appears in the proposal as Subsection 9.3.2. Comment 37-7 (Log #6) proposed amendments to the rewrite of Chapter 9 in the form of a new rewrite of the text beginning with Subsection 9.2.1 and extending to the end of the chapter. This comment also was accepted.

Unfortunately, the text of Subsection 9.3.2 from the 2006 edition was not included in the text of the public comment and, therefore, does not appear in the text accepted therein. A poll of the Technical Committee members disclosed that it was never anyone's intent to delete this provision and all agreed the text needs to be reinstated.

This TIA reinstates the provision, numbered accordingly.

Emergency Nature: Failure to properly purge the exhaust system of a gas turbine can result in a significant quantity of fuel remaining in the system. History has shown that this residual fuel can ignite explosively during turbine light off, resulting in significant damage to the system, including catastrophic rupture of the exhaust system with attendant release of projectiles that can injure persons in the area and damage other equipment in the area."

Determination of emergency nature meets the conditions stated in Paragraph 5.3(a) of the *Regulations Governing the Development of NFPA Standards*: "The NFPA Standard contains an error or omission that was overlooked during a regular revision process."

NFPA® 37-2010 and Proposed 2014 Edition

Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines

TIA Log No. 1102 Reference: 6.6.3

Comment Closing Date: June 14, 2013

Submitter: D. McMenamin, Verizon Wireless Corp.

www.nfpa.org/37

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1. Replace the current text of subsection 6.6.3 of both the 2010 and 2014 editions of NFPA 37 with the following:

- **6.6.3** Piping for fuel tanks, other than engine-mounted tanks, shall be in accordance with the provisions of 6.6.3.1 through 6.6.3.3, except as provided for in 6.6.3.4 Chapter 27 of NFPA 30, Flammable and Combustible Liquids Code.
- **6.6.3.1** Piping for fuel tanks shall meet the applicable requirements of Chapters 21 and 27 of NFPA 30, Flammable and Combustible Liquids Code. The fill pipe shall terminate outside the building at a point at least 600 mm (24 in.) from any building opening at the same or lower level.
- 6.6.3.2 Tanks shall be filled by a closed piping system.
- 6.6.3.3 The fill pipe for each tank shall be provided on an exterior wall of the room or structure enclosing the tank at a point at least 600 mm (24 in.) from any building opening at the same or lower level.
- **6.6.3.4** A fill pipe terminating in accordance with 6.6.3.3 shall not be required for tanks that are filled manually at the fill connection of the tank, provided that the tank and its fill connection are located within the spill containment required by 6.3.2.4, 6.3.5.3, or 6.3.6.3 and the filling operation is constantly attended.

Submitter's Substantiation: In sites with indoor engines, authorities having jurisdiction, citing the International Mechanical Code (IMC), have required carriers to provide exterior containment diesel fuel stations and remote fuel fill alarm panels. The problem is that on crowded communications sites, insufficient clearances are available to meet NFPA 37 as it is written. Today, installations include both remote fuel fill stations (mounted on the exterior wall

of the shelters) and internal fill connections. In practice, most fuel providers are unable to meet the requirements for camlock connections (vapor-tight connections), pumps, and associated accessories necessary to fuel the tanks from the exterior connections. So, in practice, internal connections are the ones most commonly used to fill the tanks and the exterior fuel station goes unused. Class II fuels are stable, the fuel tanks at such sites are relatively small and the telephone industry has an impeccable record for fire safety and so this initiative bears more rewards than risk.

Technical Validity: Communications sites, such as cellular telephone tower sites and public safety communications systems, are arranged on small plots of land where a tower is a virtual 'hotel' for the antennas of numerous communications carriers. Often, the communications systems are housed in unoccupied industrial occupancies (precast shelter buildings) that have been delivered and installed on that site. Due to the small size of the shelter, it is not feasible to comply with the current provisions of Subsection 6.6.3 of NFPA 37, because there is no place to install a remote fuel fill that is far enough away from building openings at the same or lower level. See the included photos.





Left: A 2-room shelter about to be delivered. Note that there is no place to install a fuel fill that can meet the 24" clearance requirement as is covered in (current) 6.6.3.1. Right: a group of shelters placed in close proximity to each other.

Due to the limited space that multiple carriers share on a very small property, it is impractical to install the fuel fill at any distance from the shelter. Because many cell sites are on mountain tops or other off-road areas, the relatively small trucks needed to access such locations are not equipped with Camlocks, pumps, or other nozzles to achieve liquid/vapor tight connections. The shelters used for

such applications already have concrete containments in the engine areas sufficient to contain spills. There is, to our knowledge, no history of fires in cell site shelters relative to diesel fuel spills. While refueling spills do occasionally occur, the existing containment and relatively small quantities involved are easily cleaned up. The majority of existing installations utilize an internal fill connection, which has worked in practice for many years.

While no U.S. code or other regulation requires standby engine generators at cell sites, many telecommunications carriers provide them voluntarily. Such generators typically are in the 15 to 60 KW size and provide power to maintain a level of reliability necessary for public safety and competitive customer service. Although many carriers use outdoor engine modules, these assemblies are not as reliable as indoor units, because weather and rodent damage problems are inherent to such units.

Cell phones are how most people reach 911 services today and also are the secondary medium for emergency responders communicating among themselves. Additionally, the primary radio systems for first responders are dependent on repeater or 'Trunked Radio' systems whose antennas are collocated on towers with cellular or other systems. Emergency planners encourage citizens to prepare for evacuation emergencies with advice similar to South Carolina's evacuation plan: "Motorists are encouraged to have a full tank of gas when they leave, bringing food items with them *and cellular phones*." (emphasis added) Coping with disasters or weather severity is when the cellular and emergency responder systems are needed most and yet are times when commercial power is least reliable.

The standby diesel engines provided for communications sites employ relatively small, welded steel secondary containment-type belly tanks complying with ANSI/UL 142, Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids, for Class II fuel oil (diesel fuel). The shelters used for such purposes are unoccupied except during periodic maintenance activities and are not considered "important buildings" as defined in NFPA 30. Further, in NFPA 76, Standard for the Fire Protection of Telecommunications Facilities, these buildings are considered 'redundant and replaceable'.

Emergency Nature: Given the conditions indicated herein and the contribution of standby generators to the reliability of the telecommunications system and, therefore by extension, public safety, it is vital that a standard-recognized method of fueling small diesel generators for communications equipment shelters be established.

Determination of emergency nature meets the conditions stated in Paragraph 5.3(f) of the *Regulations Governing the Development of NFPA Standards*: "The proposed TIA intends to correct a circumstance in which the revised NFPA Standard has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process or was without adequate technical (safety) justification for the action."

NFPA 70®-Proposed 2014

National Electrical Code®

TIA Log No. 1097 Reference: 445.20

Comment Closing Date: June 14, 2013 Submitters: Joseph Harding, PGMA

www.nfpa.org/70

1. Revise 445.20 to read as follows:

445.20 Ground-Fault Circuit Interrupter Protection for Receptacles on 15 kW or Smaller, Portable Generators. All 125-volt, single-phase, 15-and 20 ampere receptacle outlets; that are a part of a 15 kW or smaller; portable generator; either shall have ground-fault circuit interrupter protection for personnel integral to the generator or receptacle, or shall not be available for use when the 125/250 volt locking-type receptacle is in use. If the generator does not have a 125/250 volt locking-type receptacle or was manufactured or remanufactured prior to January 1, 2015, this requirement shall not apply.

Submitter's Substantiation: On behalf of the Portable Generator Manufacturers' Association, I am proposing a Tentative Interim Amendment (TIA) for NEC 2014.

This proposed TIA is directed towards a new section for NEC 2014, Section 445.20. This new section originated as Proposal 13-19 during the proposal phase, and was modified by Comment 13-16 during the comment phase.

The new Section 445.20 attempts to address a theoretical electrical shock hazard associated with the use of 15kW or smaller portable generators. Given the structure and application of the NEC, as Section 445.20 is written, it would apply to the use of any 15 kW or smaller portable generator -- regardless of its date of manufacture -- under circumstances covered by the NEC. This (presumably unintended) retroactive application of the NEC effectively would ban the use of millions of portable generators that have been, and continue to be, used safely. To retroactively apply the NEC in this manner is uncharacteristic, and is an unfair, not to mention unnecessary, burden on consumers, trades people and society as a whole, particularly given the complete lack of historical electrical shock incident data to support the requirement in the first instance.

The proposed TIA, if accepted, would not be the first time that a new NEC section has (a) expressly indicated that it should not be applied retroactively and (b) provided a lead time for design compliance. Rather, a precedent for the proposed TIA was set during the NEC 2011 code making cycle when Proposal 3-140 for Section 590.6 was accepted in principle by Code-Making Panel 3. Specifically, Proposal 3-140 (and what eventually became Section 590.6(A)(3)) provided an alternative means of compliance for generators manufactured prior to the effective date of the 2011 NEC.¹

1 Section 590.6(A)(3) states "(3) Receptacles on 15 kW or less Portable Generators. All 125-volt and 125/250-volt, single-phase, 15-, 20-, and 30-ampere receptacle outlets that are a part of a 15 kW or smaller portable generator shall have listed ground-fault circuit interrupter protection for personnel. Listed cord sets or devices incorporating listed ground-fault circuit-interrupter protection for personnel identified for portable use shall be permitted for use with_15kW or less portable generators manufactured or remanufactured prior to January 1, 2011."

It is noteworthy that Code-Making Panel 3 recognized the problem surrounding retroactive applicability and therefore modified the original proposal to add an effectivity date. The last paragraph of the Panel Statement from Code-Making Panel 3 stated:

"The revisions to the wording also clarified the requirements for GFCI protection on 15 kW or less portable generators, with information added, that will ensure that this requirement does not apply to manufactured or remanufactured generators prior to January 1, 2011."

Like Proposal 3-140, the proposed TIA makes clear that the new section should not be retroactively applied. The proposed TIA suggests a slightly longer lead time than that which Code-Making Panel 3 allowed when Proposal 3-140 was accepted in principle, but there is good reason for a longer lead time in this instance. The addition of Section 445.20 will require all generators that feature a 125/250 volt locking-type receptacle, regardless of intended use or applicability to have GFCI protection on the 125 volt 15/20 amp outlets. This will require manufacturers to redesign a wide range of existing product. This broad scale design change merits a longer lead time (of an additional year) than that provided in Proposal 3-140.

Emergency Nature: PGMA and its members have determined that this proposed TIA is of an emergency nature requiring prompt action in accordance with 5.3 of the NFPA Regulations Governing Committee Projects, for the following reasons:

- (a) The document contains an error or an omission that was overlooked during
- a regular revision process; and
- (f) 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, or was without adequate technical (safety) justification for the action.

While your organization is reviewing the proposed TIA, we also encourage several grammatical corrections to Section 445.20, specifically that the three (3) commas identified below be removed. Not only are these commas unnecessary, they may lead to incorrect interpretations by those who rely on the code.

NFPA 99-2012 and Proposed 2015 Edition

Health Care Facilities Code

TIA Log No. 1104

Reference: 10.2.3.6(5) and A.10.2.3.6(5)
Comment Closing Date: June 14, 2013
Submitter: Harvey Kostinsky, ECRI Institute

www.nfpa.org/99

- ${\it 1. Delete\ entire\ subsection\ 10.2.3.6(5)\ as\ follows:}$
- (5) *Means are employed to ensure that additional devices or nonmedical equipment cannot be connected to the multiple outlet extension cord after leakage currents have been verified as safe.

2. Delete corresponding Annex A material A.10.2.3.6(5) as follows:

A.10.2.3.6(5) Power taps used in conjunction with an isolated power system are not subject to this requirement.

Submitter's Substantiation: The Technical Committee accepted a public comment (NFPA 99 HEA-MED A11 ROC; 99-307 Log #272 HEA-MED) which would have deleted 10.2.3.6 (5), but another public comment 99-308 Log #64 HEA-MED on that section was Accepted in Principal and resulted in adding annex material A.10.2.3.6 (5) to that section. (Both items reported in the NFPA 99 Report on Comments A2011.) NFPA, when compiling the revised version of the document, did not incorporate the first committee action and implemented the second action, without determining the position of the committee on this issue.

Technical background: Both of the ROC proposals were based on the recognition that it is impractical to completely eliminate the use in hospitals of multiple outlet extension cords that allow clinicians and staff to plug and unplug devices as needed. The situation in the OR was adeptly explained in ROC 99-308 Log #64, "It is near impossible to plug all electrical devices used in an operating room to a wall receptacle. The cord length on equipment are not long enough to reach the wall and even if it did it would restrict safe movement around the OR table." The problem, however, exists not just in the OR. For example, it is often necessary to use three or more infusion pumps, in addition to other devices, on one patient in a patient room. There may not be an adequate number of outlets nearby and running multiple cords, perhaps with extension cords, can hamper access to the patient and present a trip hazard. Instead, having an appropriate quality and properly maintained multiple outlet extension cord mounted on an IV pole, allows a safe method of powering whatever number of IV pumps is needed for a patient. The Committee action to accept proposal 99-307 Log #272 would have allowed this type of use of multiple outlet extension cords and eliminated any need for further exceptions or annex material. Furthermore, the use of isolated power, currently mentioned in the annex material, does not address concerns related to touch (leakage) current values that are addressed in the main text to which the annex comment is attached. Isolated power does not limit equipment touch currents to values required within the main document.

Emergency Nature: Uncorrected, the present requirements pose an unreasonable burden on hospitals and clinicians and restricts safe access to patients not only in the operating room, but also in other patient care areas. Furthermore, as accrediting bodies, such as The Joint Commission (TJC) and the U.S. Centers for Medicare & Medicaid Services (CMMS) incorporate these requirements into their assessments and survey processes, it becomes increasingly difficult to reverse these decisions and facilities are forced to implement alternative practices that may be either unnecessarily expensive (e.g., renovations to increase outlet numbers and accessibility throughout the hospital) or less safe (e.g., use of more single outlet extension cords running greater distances to access multiple wall outlets). Hospitals have already approached ECRI Institute regarding this problem, and it is therefore not just a theoretical concern, but one which facilities are being forced to address now.

This TIA would address at least three of the factors to be considered when assessing the emergency nature of a TIA proposal (REG-ULATIONS GOVERNING COMMITTEE PROJECTS, http://www.nfpa.org/assets/files/PDF/CodesStandards/Directory/Regs-GovCommProjects 2012.pdf)

- (b) The document contains a conflict within the document or with another NFPA document. This factor applies, because, as discussed in the technical background above, the Annex reference to isolated power is not related to the associated main document text.
- (d) The proposed TIA intends to offer to the public a benefit that would lessen a recognized (known) hazard or ameliorate a continuing dangerous condition or situation. Adherence to the requirements may hinder access to the patient and pose a trip hazard.
- (f) 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, or was without adequate technical (safety) justification for the action. As discussed above, the current situation is the result of NFPA procedures in place at the time (and since corrected) that allowed for decisions to be made based on a procedural mishap without addressing technical considerations.

NFPA 1951-2013

Standard on Protective Ensembles for Technical Rescue Incidents

TIA Log No. 1098 Reference: Various

Comment Closing Date: June 14, 2013

Submitters: Dean Cox, Fairfax (VA) County Fire and Rescue Department and Jeremy Metz, West Metro (CO) Fire Rescue www.nfpa.org/1951

- 1. Revise 2.3.3 to read as follows:
- **2.3.3** ASTM F 2412, Standard Test Method s for Foot Protection, 2005 2011.
- 2. Add the two new paragraphs below to follow 6.1.3.3.3. Renumber existing paragraphs 6.1.3.3.4 and 6.1.3.3.5 as 6.1.3.3.6 and 6.1.3.3.7 respectively. Change Annex item A.6.1.3.3.5 to A.6.1.3.3.7. Change Table 6.1.3.3.5 to Table 6.1.3.3.7.
- <u>6.1.3.3.4</u> The location of the wrist crease shall be determined by first placing the glove on a measurement board palm down and securing (locking) the fingertips down onto the board.
- **6.1.3.3.5** A 1 lb weight shall be attached to the end of the glove body or gauntlet glove interface component. The weight shall not be attached to a knitted wristlet glove interface component. The weight shall be applied evenly across the glove.
- 3. Add the two new paragraphs below to follow 6.2.3.3.3. Renumber existing paragraphs 6.2.3.3.4, 6.2.3.3.5, 6.2.3.3.6, 6.2.3.3.7 and 6.2.3.3.8 as 6.2.3.3.6, 6.2.3.3.7, 6.2.3.3.8, 6.2.3.3.9 and 6.2.3.3.10 respectively. Change Annex item A.6.2.3.3.5 to A.6.2.3.3.7.
- **6.2.3.3.4** The location of the wrist crease shall be determined by first placing the glove on a measurement board palm down and securing (locking) the fingertips down onto the board.
- <u>6.2.3.3.5</u> A 1 lb weight shall be attached to the end of the glove body or gauntlet glove interface component. The weight shall not be attached to a knitted wristlet glove interface component. The weight shall be applied evenly across the glove.

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- 4. Revise 7.1.3.5 to read as follows:
- **7.1.3.5** Gloves shall be tested for grip as specified in Section 8.29, Grip Test, and shall not have a drop of <u>force of more</u> than 30 percent <u>from the peak pull force value in any 0.2 second interval</u>.
- 5. Revise 7.1.4.5 to read as follows:
- **7.1.4.5** Footwear soles and heels shall be tested for abrasion resistance as specified in Section 8.34, Abrasion Resistance Test 3, and the relative volume loss shall not be greater than $\frac{200}{250}$ mm³ (0.01 0.02 in.³).
- 6. Revise 7.2.3.5 to read as follows:
- **7.2.3.5** Gloves shall be tested for grip as specified in Section 8.29, Grip Test, and shall not have a drop of <u>force of more</u> than 30 percent <u>from the peak pull force value in any 0.2 second interval.</u>
- 7. Revise 7.2.4.5 to read as follows:
- **7.2.4.5** Footwear soles and heels shall be tested for abrasion resistance as specified in Section 8.34, Abrasion Resistance Test 3, and the relative volume loss shall not be greater than $\frac{200}{250}$ mm³ (0.01 0.02 in.³).
- 8. Revise 7.3.4.5 to read as follows:
- **7.3.4.5** Gloves shall be tested for grip as specified in Section 8.29, Grip Test, and shall not have a drop of <u>force of more than</u> 30 percent <u>from the peak pull force value in any 0.2 second interval.</u>
- 9. Revise 7.3.5.5 to read as follows:
- **7.3.5.5** Footwear soles and heels shall be tested for abrasion resistance as specified in Section 8.34, Abrasion Resistance Test 3, and the relative volume loss shall not be greater than $\frac{200}{250}$ mm³ (0.01 0.02 in.³).
- 10. Revise 7.3.5.10 to read as follows:
- **7.3.5.10** Footwear shall be individually tested for flame resistance as specified in Section 8.32, Flame Resistance Test 4, and shall not have an afterflame of more than 25 seconds, shall not melt or drip, and shall not exhibit any burn-through.
- 11. Revise 8.1.9.5 to read as follows:
- **8.1.9.5** The wash cycle procedure in Table 8.1.9.5 (a) through Table 8.1.9.5 (c) shall be followed.

Add two tables 8.1.9.5 (b) and 8.1.9.5 (c) to follow existing Table 8.1.9.5. Renumber Table 8.1.9.5 as Table 8.1.9.5 (a).

Table 8.1.9.5 (b)

Water Level for Whole Garments and CBRN Materials Operation Wash Cycle Procedure

	Low Water Level ±1 cm (3/8) in.)		High Water Level ±1 cm (3/8 in.)	
Number of Garments	<u>cm</u>	<u>in.</u>	<u>cm</u>	<u>in.</u>
1 to 3	<u>15</u>	<u>5.9</u>	<u>25.5</u>	<u>10</u>
<u>4 to 6</u>	<u>17.5</u>	<u>6.9</u>	<u>28</u>	<u>11</u>
7 or more	<u>20</u>	<u>7.9</u>	<u>30.5</u>	<u>12</u>

Table 8.1.9.5 (c)

Water Level for Gloves and Glove Pouches Operation Wash Cycle <u>Procedure</u>

		<u>Water</u> vel	High W Leve	
	<u>+ 1</u>	cm	<u>+ 1 c</u>	<u>m</u>
	(3/8	<u>3 in)</u>	(3/8 i	<u>n)</u>
	<u>cm</u>	in	<u>cm</u>	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>

- 12. Revise 8.1.9.14 to read as follows:
- **8.1.9.14** Gloves and glove pouches shall be tumbled for 60 minutes and shall be removed immediately at the end of the drying cycle. At the conclusion of the final drying cycle, the gloves or glove pouches shall be permitted to be dried on a forced air nontumble drying mechanism operated at $10^{\circ}\text{C} \pm 2^{\circ}\text{C}$ ($50^{\circ}\text{F} \pm 3^{\circ}\text{F}$) above current room temperature until completely dry.
- 13. Revise 8.2.2.2 to read as follows:
- **8.2.2.2** Samples shall be conditioned as specified in 8.2.8, 8.2.9, or 8.2.10, except CBRN garment and material samples shall be conditioned as specified in 8.2.8, 8.2.9, or 8.2.10 8.1.9 followed by 8.1.2. 14. Revise 8.2.9.1 to read as follows:
- **8.2.9.1** Samples for conditioning shall be in the form of a pouch as described in 8.2.9.4-8.1.14.
- 15. Revise 8.4.2.2 to read as follows:

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8.4.2.2 Samples shall be conditioned as specified in 8.1.2. Other samples shall be conditioned as specified in 8.1.9 <u>8.1.3</u> followed by conditioning as specified in 8.1.2, except CBRN garment and material samples shall be conditioned as specified in 8.1.9 followed by 8.1.2.

- 16. Revise 8.5.11.4 to read as follows:
- **8.5.11.4** Sample helmets shall be positioned according to the HPI as described in 8.1.132 on the thermal headform conforming to the dimensions in Figure 8.5.11.4.
- 17. Revise 8.5.2.2 to read as follows:
- **8.5.2.2** Samples shall be conditioned as specified in 8.1.3 followed by conditioning as specified in 8.1.2, except CBRN garment and material samples and glove samples shall be conditioned as specified in 8.1.9 followed by conditioning as specified in 8.1.2.
- 18. Revise the following subsections to read as follows:
- **8.7.2.2** Samples shall be conditioned as specified in 8.1.3 followed by conditioning as specified in 8.1.2, except CBRN garment and material samples shall be conditioned as specified in 8.1.9 followed by conditioning as specified in 8.1.2.
- **8.8.2.2** Samples shall be conditioned as specified in 8.1.3 followed by conditioning as specified in 8.1.2, except CBRN garment and material samples shall be conditioned as specified in 8.1.9 followed by conditioning as specified in 8.1.2.
- **8.9.2.2** Samples shall be conditioned as specified in 8.1.3 followed by conditioning as specified in 8.1.2, except CBRN garment and material samples shall be conditioned as specified in 8.1.9 followed by conditioning as specified in 8.1.2.
- 19. Revise 8.11.7.1 to read as follows:
- **8.11.7.1** Specimens shall be representative of the glove body composite construction at the glove areas A-P, B-P, D-P, E-P, F-P, G-P, H-P, I-P, A-B, B-B, D-B, E-B, F-B, G-B, H-B, I-B as described in 8.1.143 and shall not include seams. Samples and specimens shall be permitted to be materials representative of those used in the construction of the glove.
- 20. Revise 8.13.2.2 and 8.16.2.2 to read as follows:
- **8.13.2.2** Samples shall be conditioned as specified in 8.1.3 followed by conditioning as specified in 8.1.2, except CBRN garment and material samples shall be conditioned as specified in 8.1.9 followed by conditioning as specified in 8.1.2.
- **8.16.2.2** Garment materials samples shall be conditioned as specified in 8.1.3 followed by conditioning as specified in 8.1.2, except CBRN garment and material samples shall be conditioned as specified in 8.1.9 followed by conditioning as specified in 8.1.2. 21. Revise 8.16.8.1 to read as follows:
- **8.16.8.1** Samples for conditioning shall be in the form of a pouch as described in 8.1.14 8.1.15.
- 22. Revise 8.17.2.2 to read as follows:
- **8.17.2.2** Garment materials samples shall be conditioned as specified in 8.1.3 followed by conditioning as specified in 8.1.2, except CBRN garment and material samples shall be conditioned as specified in 8.1.9 followed by conditioning as specified in 8.1.2.

- 23. Revise 8.17.8.1 to read as follows:
- **8.17.8.1** Samples for conditioning shall be in the form of a pouch as described in 8.1.14 8.1.15.
- 24. Revise 8.19.5.1to read as follows:
- **8.19.5.1** Specimen helmets shall be positioned on the headform according to the HPI as described in 8.1.12. Where the crown clearance of the helmet is adjustable, the helmet shall be mounted with the least amount of clearance. Where an internal faceshield is an integral part of the structural integrity of the helmet, it shall be deployed as far as possible without interfering with the test equipment. Helmets shall be subjected to the environmental conditions specified in 8.1.2, 8.1.4, 8.1.5, and 8.1.6 prior to each impact and within the specified time after being removed from conditioning.
- 25. Revise 8.20.5.1 to read as follows:
- **8.20.5.1** The environmentally conditioned helmet shall be positioned according to the HPI as described in 8.1.132 on the test headform and secured by the helmet retention system or by other means that will not interfere with the test. Where the crown clearance of the helmet is adjustable, the helmet shall be mounted with the least amount of clearance. The helmet shall be positioned so that the penetration striker shall impact perpendicular to the helmet. The helmet shall be adjusted to a size sufficient to properly fit on the headform with the horizontal center plane parallel and within 5 degrees of the reference plane. The front-to-back centerline of the shell shall be within 13 mm (0.5 in.) of the midsagittal plane of the headform. Where an internal faceshield is an integral part of the structural integrity of the helmet, it shall be deployed as far as possible without interfering with the test equipment.
- 26. Revise 8.21.5.1.1 to read as follows:
- **8.21.5.1.1** The helmet shall be positioned according to the HPI as described in 8.1.132 on the ISO size J headform specified in Figure 8.23.4.1. Where the crown clearance of the helmet is adjustable, the helmet shall be mounted with the most amount of clearance.
- 27. Revise 8.25.7.2 to read as follows:
- **8.25.7.2** Specimens shall be representative of glove body composite construction at glove areas A-P, B-P, D-P, E-P, F-P, G-P, H-P, I-P as described in 8.1.14<u>3</u>.
- 28. Revise 8.26.7.2 to read as follows:
- **8.26.7.2** Specimens shall be representative of glove body composite construction at glove areas A-P, B-P, D-P, E-P, F-P, G-P, H-P, I-P, A-B, B-B, D-B, E-B, F-B, G-B, H-B, I-B as described in 8.1.143.
- 29. Revise 8.27.7.2 to read as follows:
- **8.27.7.2** Specimens shall be representative of glove body composite construction at glove areas A-P, B-P, D-P, E-P, F-P, G-P, H-P, I-P as described in 8.1.143. All variations in composite construction and the order of layering of composite materials shall constitute a new composite and shall be tested separately.
- 30. Revise 8.29.3.5, 8.29.4, and 8.29.5.5 to read as follows:

8.29.3.5 Specimen glove pairs shall be tested after being <u>wet</u> conditioned for wet conditions as specified in 8.1.7.

8.29.4 Apparatus. The apparatus shall consist of a pulling device that is a 31.7 mm (1½ in.) diameter fiberglass pole attached to an overhead calibrated force measuring device in such a fashion that pulls on the pole will be perpendicular to the ground and downward in direction. This pole shall be used until surface degradation occurs. The force measuring system shall provide a graphical plot of force-vs-time.

8.29.5.4 The test subject and the test subject's hand shall be positioned as shown in Figure 8.29.5.4(a) then make three pulls on the pulling device with gloves, with peak and Figure 8.29.5.4(b), and as described below minimum pull force values measured.

8.29.5.4.1 The test subject shall stand facing the pole with feet shoulder width apart.

8.29.5.4.2 While wearing specimen gloves, the test subject shall grasp the pole with the bottom of the bottom hand at a height equal to the height of the subject.

8.29.5.4.3 The hands shall be stacked on each other and the thumbs shall not overlap the fingers.

8.29.5.4.4 The body shall be distanced from the pole so that the forearms are approaching vertical and in plane with the pole.

<u>8.29.5.4.5</u> The elbows shall be shoulder width apart, rotated neither fully in (arms parallel to the pole) nor fully out (arms perpendicular to the pole).



Figure 8.29.5.4(a) Position of test subject body, arms and hands with respect to pole. Photo Courtesy Intertek Testing Services, Used by Permission.



Figure 8.29.5.4(b) Close-up of position of test subject hands on pole. Photo Courtesy Intertek Testing Services, Used by Permission.

8.29.5.5 The test subject shall pull the pole with as much pulling force as possible in a smooth, steady, swift, and non-jerking action for 5 +1/-0 seconds. The test subject shall minimize forward or backward movement during the pull as much as possible. The test subject shall not bend the knees or pull down with body weight during the pull. The test subject shall continue to pull until the test facilitator instructs the test subject to end the pull at 5 +1/-0 seconds Pulls shall be performed as described in 8.29.5.5.1 through 8.29.5.5.6.

31. Delete existing subsections 8.29.5.5.1 through 8.29.5.5.6 and add a new subsection 8.29.5.6 to read as follows:

8.29.5.5.1 The test subject shall stand with feet together, firmly planted on the ground, and knees slightly bent.

8.29.5.5.2 The stand shall be adjusted such that the cushioned bar is touching the test subject's chest. The stand shall prevent the test subject's forward movement during the pull.

8.29.5.5.3 The test subject shall extend the arms in front of the body at shoulder height to grab the pulling device for pulling vertically down from the ceiling. The test subject shall stand in a comfortable pulling position with the arms bent at an angle of approximately 90 degrees, and in any case, the arms shall not be completely extended or touching the body.

8.29.5.5.4 The test subject shall grasp the pulling device with hands next to each other. Thumbs shall not overlap the fingers.

8.29.5.5.5 The test subject shall pull the rope or pole with as much pulling force as possible in a smooth, steady, swift, and non-jerking action. The test subject shall not bend the knees further or pull down with body weight during the pull.

8.29.5.5.6 The test subject shall continuously pull on the pulling device for a minimum of 5 seconds, +1/-0 seconds. The test subject shall continue to pull until the test facilitator observes a peak pulling force and instructs the test subject to end the pull.

8.29.5.6 The test subject shall repeat the pull described above for a total of three pulls.

- 32. Revise 8.29.6.1 through 8.29.6.3 to read as follows:
- **8.29.6.1** The peak pull force value for each individual pull shall be recorded and reported. Any drop in force of greater than 30% in any 0.2 second interval, as measured in the graphical plot of force yersus time, shall be recorded and reported.
- **8.29.6.2** The minimum pull force value occurring after the peak pull force value shall be recorded and reported.
- **8.29.6.3** The percentage drop between the peak pull force value and the minimum pull force value shall be calculated, recorded, and reported.
- 33. Revise 8.29.7.1 to read as follows:
- **8.29.7.1** The individual percentage drop between the peak pull force value and the minimum pull force value shall be used to determine pass or fail performance. Any drop in force of greater than 30% in any 0.2 second interval shall constitute failing performance.
- 34. Revise text as follows:
- **8.45.5.2** While standing, each test subject shall grasp the cylinder so that the elbow is against the side of the body throughout the duration of the test and the arm bend creates a right angle.
- **8.45.5.4** 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.

Submitter's Substantiation:

- 1. The ASTM F 2412 standard needs to be updated to the current edition.
- 2. These added paragraphs clarify the logical sequence of this section.
- 3. These added paragraphs clarify the logical sequence of this section
- 4, 6, 8, 30, 31, 32, 33 As currently written in the 2013 edition, more information is needed to fully explain how the pulls are to be performed, and also how the graphic results are to be interpreted. After interlaboratory coordination it was determined that the additional language is necessary to perform consistent testing and to ensure a consistent level of compliant products is available to users.

The test method as currently written does not provide sufficient detail in order for the test to be consistently applied in the evaluation of glove grip and requires interpretation of the testing laboratory to determine the appropriate body and hand position, which have a significant impact on the test results. Specific changes have been proposed in the position of the test subject's body and hands that alter the original instructions for performing the test. The additional details are intended to ensure that laboratories performing this test conduct the test in exactly the same way. Photographs of the proper positioning of the test subject body and hands with respect to the pole are included in the proposed modifications to provide a clear interpretation for running this part of the test.

In addition, it is proposed to base the performance of glove grip on a change in the measured force relative to the time interval in which that change occurs. Consequently, the criteria in paragraphs 7.1.3.5, 7.2.3.5 and 7.3.4.5 have been modified. This modification was necessary because the degree of test subject hand slipping on the pole can occur at varying rates (force over time) leading to widely different application of the test results and potential failure of gloves that are considered to have acceptable performance.

These changes were developed as the result of a meeting between Intertek Testing Services, the North Carolina State University Textile Protection and Comfort Center, and Underwriters' Laboratories, where these organizations worked together to determine how to consistently run the test method and achieve better precision in test results. The involvement of these organizations and their work on this test method were pursuant to a recommendation made by the Technical Committee on Structural and Proximity Fire Fighting Protective Clothing during a committee teleconference held December 2012 where specific problems with the test method and its application in NFPA 1971 were identified.

- 5, 7, 9. These changes bring the requirements in line with EN ISO 20345:2011.
- 10. This change brings all the footwear flame requirements in line together.
- 11. The water levels for garment, materials and gloves needs to be specified in order to allow for the front load wash machines to be properly programmed at the testing laboratories.
- 12. This change is adding a tolerance and provides the temperature conversion.
- 13, 15, 18, 20, 22. These changes clarify the requirements for CBRN laundering and reference the correct section for pouch conditioning
- 14. This change references the correct section for pouch construc-
- 16, 19, 26, 27, 28, 29 These changes reference the correct sections in the standard related to glove test areas and the helmet positioning index.
- 17. This change references the correct laundry preconditioning for glove samples.
- 21, 23 These changes reference the correct pouch construction section for moisture barrier with seams.
- 24, 25. These changes clarify the deployment of the internal faceshield when it is an integral part of the structural integrity of the helmet.
- 34. 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 1951. 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 1951-2013

Standard on Protective Ensembles for Technical Rescue Incidents

TIA Log No. 1099 **Reference:** 8.2.5(1)

Comment Closing Date: June 14, 2013

Submitters: Dean Cox, Fairfax (VA) County Fire and Rescue Department and Jeremy Metz, West Metro (CO) Fire Rescue

www.nfpa.org/1951

1. Revise 8.2.5(1) as follows:

- **8.2.5 Procedure.** Thermal protective performance testing shall be performed in accordance with ASTM F 2700, *Standard Test Method for Unsteady-State Heat Transfer Evaluation of Flame Resistant Materials for Clothing with Continuous Heating*, with the following modifications:
- (1) The contact spaced configuration shall be used for testing of all material specimens.
- (2) The heat transfer performance value calculations using the heat flux in calories/cm²/sec shall be reported as the TPP rating.

Submitter's Substantiation: In ROP 1951-2 Log #CP7 FAE-SCE, the TPP test was altered to switch from the spaced to the contact configuration. This change to the test method moved the sensor from 0.25 inches away from the sample to contacting the sample during the test. This change in test procedure results in a lower heat transfer performance or TPP value due to the location of the sensor.

In previous editions of NFPA 1951, only the spaced configuration was tested, and from a safety perspective, no justification has been given for this particular change. The purpose of the original accepted committee proposal was to use ASTM test method F2700 in order to correct known deficiencies with the previous method. The substantiation for the changes in the committee proposal does not address switching from the spaced to the contact configuration.

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, or was without adequate technical (safety) justification for the action. As stated above, there is no technical justification in the ROP for altering the conduct of the test from the spaced to the contact configuration. This unintended change has resulted in an adverse impact on products in that currently compliant products can no longer be certified.

NFPA 1971-2013

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

TIA Log No. 1100 Reference: Various

Comment Closing Date: June 14, 2013

Submitters: Steven Corrado, UL and Pam Kavalesky, Intertek

www.nfpa.org/1971

- 1. Revise 7.7.22 to read as follows:
- **7.7.22** Gloves shall be tested for grip as specified in Section 8.38, Grip Test, and shall not have a drop of <u>force of</u> more than 30 percent from the peak pull force value in any 0.2 second interval.
- 2. Revise Section 8.38 to read as follows:
- **8.38.2.1** Samples for conditioning shall be whole gloves pairs.
- **8.38.3.4** Specimen glove pairs shall be tested after being <u>wet</u> conditioned for wet conditions as specified in 8.1.9.
- **8.38.4.1 Pulling Device.** The pulling device shall be a 3.2 cm (1½ in.) diameter fiberglass pole attached to an overhead calibrated force measuring device in such a fashion that pulls on the pole will be perpendicular to the ground and downward in direction. This pole shall be used until surface degradation occurs. The force measuring system shall provide a graphical plot of force-vs-time.
- **8.38.5.1** Test subjects shall be selected so that their hand dimensions are as close as possible to the middle of the range for hand length and hand circumference as specified in Table 6.7.6.1 (ab) and Table 6.7.6.1(d) for size small and size large gloves. At least three test subjects shall be selected for both size small and size large.
- **8.38.5.4** The test subject and the test subject's hand shall be positioned as shown in Figure 8.38.5.4(a) and Figure 8.38.5.4(b), and as described below: shall then make three pulls on the pulling device with gloves with peak and minimum pull force values measured. Pulls shall be performed as described 8.38.5.4.1 through 8.38.5.4.6. The test subject shall extend the arms in front of the body at shoulder height to grab the pulling device for pulling vertically down from the ceiling.



Figure 8.38.5.4 (a) Position of test subject body, arms, and hands with respect to pole. Photo Courtesy Intertek Testing Services, Used by Permission.



Figure 8.38.5.4 (b) Close-up of position of test subject hands on pole. Photo Courtesy Intertek Testing Services, Used by Permission.

8.38.5.4.1 The test subject shall stand <u>facing the pole with feet shoulder width apart.</u> with feet together, firmly planted on the ground, and knees slightly bent.

8.38.5.4.2 While wearing specimen gloves, the test subject shall grasp the pole with the bottom of the bottom hand at a height equal to the height of the subject. The stand shall be adjusted such that the cushioned bar is touching the test subject's chest. The stand shall prevent the test subject's forward movement during the pull.

8.38.5.4.3 The <u>hands shall be stacked on each other and the thumbs shall not overlap the fingers</u>, test subject shall stand in a comfortable pulling position with the arms bent at an angle of approximately 90 degrees and, in any case, the arms shall not be completely extended or touching the body.

8.38.5.4.4 The body shall be distanced from the pole so that the forearms are approaching vertical and in plane with the pole. test subject shall grasp the pulling device with hands next to each other. Thumbs shall not overlap the fingers.

8.38.5.4.5 The elbows shall be shoulder width apart, rotated neither fully in (arms parallel to the pole) nor fully out (arms perpendicular to the pole), test subject shall pull the rope or pole with as much pulling force as possible in a smooth, steady, swift, and non-jerking action. The test subject shall not bend the knees further or pull down with body weight during the pull.

8.38.5.4.6 The test subject shall continuously pull on the pulling device for a minimum of 5 seconds, +1/-0 seconds. The test subject shall continue to pull until the test facilitator observes a peak pulling force and instructs the test subject to end the pull.

8.38.5.5 The test subject shall pull the pole with as much pulling force as possible in a smooth, steady, swift, and non-jerking action for 5 +1/-0 seconds. The test subject shall minimize forward or backward movement during the pull as much as possible. The test subject shall not bend the knees or pull down with body weight during the pull. The test subject shall continue to pull until the test facilitator instructs the test subject to end the pull at 5 +1/-0 seconds.

8.38.5.6 The test subject shall repeat the pull described above for a total of three pulls.

8.38.6.1 The peak pull force value for each individual pull shall be recorded and reported. Any drop in force of greater than 30% in

any 0.2-second interval, as measured in the graphical plot of force-vs-time, shall be recorded and reported.

8.38.6.2 The minimum pull force value occurring after the peak pull force value shall be recorded and reported.

8.38.6.3 The percentage drop between the peak pull force value and the minimum pull force value shall be calculated, recorded, and reported.

8.38.7.1 The individual percentage drop between the peak pull force value and the minimum pull force value shall be used to determine pass or fail performance. Any drop in force of greater than 30% in any 0.2-second interval shall constitute failing performance.

Submitter's Substantiation: As currently written, more information is needed to fully explain how the pulls are to be performed, and also how the graphic results are to be interpreted. This is necessary to ensure consistent testing is performed.

The test method as currently written does not provide sufficient detail in order for the test to be consistently applied in the evaluation of glove grip and requires interpretation of the testing laboratory to determine the appropriate body and hand position, which have a significant impact on the test results. Specific changes have been proposed in the position of the test subject's body and hands that alter the original instructions for performing the test. The additional details are intended to ensure that laboratories performing this test conduct the test in exactly the same way. Photographs of the proper positioning of the test subject body and hands with respect to the pole are included in the proposed modifications to provide a clear interpretation for running this part of the test.

In addition, it is proposed to base the performance of glove grip on a change in the measured force relative to the time interval in which that change occurs. Consequently, the criteria in paragraph 7.7.22 have been modified. This modification was necessary because the degree of test subject hand slipping on the pole can occur at varying rates (force over time) leading to widely different application of the test results and potential failure of gloves that are considered to have acceptable performance.

These changes were developed as the result of a meeting between Intertek Testing Services, the North Carolina State University Textile Protection and Comfort Center, and Underwriters' Laboratories, where these organizations worked together to determine how to consistently run the test method and achieve better precision in test results. The involvement of these organizations and their work on this test method were pursuant to a recommendation made by the Technical Committee on Structural and Proximity Fire Fighting Protective Clothing during a committee teleconference held December 2012 where specific problems with the test method and its application in NFPA 1971 were identified.

Emergency Nature: The document contains an error or an omission that was overlooked during a regular revision process. After interlaboratory coordination it was determined that the additional language is necessary to perform consistent testing and to ensure a consistent level of compliant product available to users.

May 2013

11

NFPA 2112®-2012

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

TIA Log No. 1105 **Reference:** Various

Comment Closing Date: June 14, 2013

Submitter: Jeffrey O. Stull, International Personnel Protection, Inc.

www.nfpa.org/2112

- 1. Revise 3.3.6, A.3.3.6, and 3.3.20, and add a new A.3.3.20 to read as follows:
- **3.3.6* Cold Weather Insulation Material.** A fabric that consists of one or more nonseparable layers that is used for protection in a low-temperature environment. A cold weather insulation material is not an interlining (see interlining).
- **A.3.3.6 Cold Weather Insulation Material.** Examples of insulation materials <u>are include</u> textile battings(s) alone or batting(s) that are attached to a face cloth. For example, an insulation material consisting of two layers are considered nonseparable by the attachment that combines the two layers. The insulation material may or may not have a face cloth. Cold weather insulation materials generally are provided within the garment such that their area of coverage coincides with the majority of garment area covering the wearer's body.

Cold weather insulation material as defined in this standard does not preclude the use of intermediate layers for additional protection against thermal hazards.

- **3.3.20* Interlining.** Any textile that is incorporated into any garment as a layer between outer and inner layers that only covers a small portion of the overall garment. [1975, 2009]
- **A.3.3.20 Interlining.** The outer and inner layers are compliant to the fabric requirements of this standard. Examples of an interlining are a fabric layer used to stiffen the waist band in a pair of pants or a facing fabric used inside the closure flap of a coverall. Interlining materials do not come in contact with the wearer's skin or underclothing.
- 2. Revise subsections 5.1.2, 5.1.9(7), and 5.1.12, and add a new 5.1.13 to read as follows:
- **5.1.2** At least one product label shall be conspicuously located inside each flame-resistant garment. when the item is properly assembled with all layers and components in place.
- **5.1.9**(7) Fiber content <u>for each primary fabric layer including cold</u> weather insulation materials, but excluding interlinings and labels.
- **5.1.12** Garments with multiple layers, including an outer layer and removable cold weather insulation layer, shall specify the certified wearable configurations on the label configuration and include a warning on the label stating that all layers must be properly secured and worn in accordance with the manufacturer's instructions.
- 5.1.13 For garments with multiple layers that include an outer layer and a removable cold weather insulation layer, a label shall be conspicuously attached to the removable insulation layer that states "DO NOT WEAR THIS LINER BY ITSELF. FOR COMPLIANCE WITH THE FLASH FIRE REQUIREMENTS OF NFPA 2112, THE COMPLETE GARMENT MUST BE WORN. FOR

COMPLIANCE INFORMATION, SEE THE PRODUCT LABEL ON OUTER GARMENT."

- 3. Add new Section 6.4 and subsections 6.4.1, and A.6.4.1 to read as follows:
- **6.4** Use of a Liner for Cold Weather Insulation. Garments shall be permitted to include liners in their construction including cold weather insulation materials where the liner is either integral to the garment or removable.
- **6.4.1*** Where garments incorporate a cold weather insulation material as part of a removable lining system, the garment shall be designed such that the removable liner consisting of the cold weather insulation material cannot be independently worn.
- A.6.4.1 Removable liners are permitted to be worn separately if the liner material(s) independently meet the appropriate fabric requirements in Chapter 7 including 7.1.1 for heat transfer performance and 7.1.5 for overall flash fire performance. If the liner contains cold weather insulation materials that are not evaluated to 7.1.1 and 7.1.5 and do not pass the thermal shrinkage resistance requirement in 7.1.3, then the manufacturer must label the liner as specified in 5.1.13 and provide a design that does not allow separate wearing of the liner without the outer layer. This may be demonstrated by the absence of a means of closure for the closure area of shirts, pants, and coveralls.
- 4. Add new subsections 7.1.1.1 and 7.1.1.2 to read as follows:
- **7.1.1.1** Where the flame-resistant garment consists of multiple and separable layers intended to be worn separately, the outer layer and the inner layer or layers shall be separately tested.
- 7.1.1.2 Where the flame-resistant garment consists of multiple layers intended only to be worn together, only the outer layer shall be tested.
- 5. Revise subsections 7.1.2 and 7.1.3 to read as follows:
- **7.1.2** Fabric, cold weather insulation material, and reflective striping utilized in the construction of flame-resistant garments shall be tested for flame resistance as specified in Section 8.3, and shall have a char length of not more than 100 mm (4 in.) and an afterflame of not more than 2 seconds, and shall not melt and drip.
- **7.1.3** Fabric utilized in the construction of flame-resistant garments, excluding manufacturer's labels, <u>interlinings</u>, and <u>cold</u> weather <u>insulation materials</u>, shall be individually tested for thermal shrinkage resistance as specified in Section 8.4, and shall not shrink more than 10 percent in any direction.
- 6. Delete existing subsection 7.1.3.1 as follows:
- **7.1.3.1** Cold weather insulation materials utilized in the construction of flame-resistant garments shall be tested in accordance with Section 8.4 and shall not shrink more than 20 percent in any direction.
- 7. Revise subsection 7.1.4 to read as follows:
- **7.1.4** Fabric, <u>cold weather insulation materials</u>, other textile materials, and reflective striping other than those items described in

- 7.1.4.1 and 7.1.4.2, used in the construction of flame-resistant garments shall be individually tested for heat resistance in their original form as specified in Section 8.4, and shall not melt and drip, separate, or ignite.
- 8. Add a new subsection 8.3.1.7 to read as follows:
- **8.3.1.7** Modifications to this test method for testing cold weather insulation materials shall be as specified in 8.3.13.
- 9. Revise subsections 8.3.3.1, 8.3.3.2, and 8.3.3.3 to read as follows
- **8.3.3.1** For fabrics and cold weather insulation materials that are designated on the flame-resistant garment label to be washed, specimens shall be tested before and after 100 cycles of washing and drying as specified in 8.1.3.
- **8.3.3.2** For fabrics and cold weather insulation materials that are designated on the flame-resistant garment label to be dry-cleaned, specimens shall be tested before and after 100 cycles of dry cleaning as specified in 8.1.4.
- **8.3.3.3** For fabrics and cold weather insulation materials that are designated on the flame-resistant garment label to be either washed or dry-cleaned, specimens shall be tested before and after 100 cycles of washing and drying as specified in 8.1.3, or after 100 cycles of dry cleaning as specified in 8.1.4.
- 10. Add new subsections to 8.3.13 to read as follows:

8.3.13 Specific Requirements for Testing Cold Weather Insulation Materials.

- **8.3.13.1** Samples for wash or dry-clean conditioning shall be prepared by cutting a 66-cm x 66-cm (26-in. x 26-in.) panel of the cold weather insulation material. A similar-sized piece of 200-g/m² to 270-g/m² (6.0-oz/yd²-to 8.0-oz/yd²) flame-resistant fabric meeting all requirements of this standard shall be sewn around the perimeter of the cold weather insulation material such that the batting side is covered by the fabric.
- **8.3.13.2** Following wash or dry-clean conditioning, 5 specimens measuring 75 mm x 300 mm (3 in. x 12 in.) from each of the warp and filling direction shall be removed from the cold weather insulation material layer of the conditioned panels.
- **8.3.13.3** If applicable, all specimens shall be prepared for testing by trimming the scrim material, batting, or other layer(s) away from the face cloth by 50 mm \pm 3 mm (2.0 in. \pm 1/8 in.) such that the face cloth can be folded back covering the scrim, batting, or other layer(s) by 50 mm \pm 3 mm (2.0 in. \pm 1/8 in.); the folded specimen shall be secured in the specimen holder.
- **8.3.13.4** Testing shall be performed as described in 8.3.2 through 8.3.7.
- 11. Revise subsection 8.4.1 and add new subsections 8.4.1.1through 8.4.1.5 to read as follows:
- **8.4.1** Application. The heat and thermal shrinkage resistance test method shall apply to flame resistant garment fabrics, components, and hardware.
- **8.4.1.1** This test method shall apply to flame-resistant garment fab-

- rics, components, hardware, and cold weather insulation materials.
- **8.4.1.2** Modifications to this test method for testing flame-resistant garment textile materials shall be as specified in 8.4.8.
- **8.4.1.3** Modifications to this test method for testing other flameresistant garment materials, including reflective striping, shall be as specified in 8.4.9.
- **8.4.1.4** Modifications to this test method for testing hardware shall be as specified in 8.4.10.
- **8.4.1.5** Modifications to this test method for testing cold weather insulation materials shall be as specified in 8.4.11.
- 12. Revise subsections 8.4.2.1 and 8.4.3.1 through 8.4.3.3 to read as follows:
- **8.4.2.1** Only heat resistance testing shall be conducted on not fewer than three specimens for each hardware item, label material, and other flame-resistant garment fabrics, and cold weather insulation materials not listed in 8.4.2.2 and 8.4.2.3.
- **8.4.3.1** For fabrics and cold weather insulation materials that are designated on the flame-resistant garment label to be washed, specimens shall be tested before and after three cycles of washing and drying as specified in 8.1.3.
- **8.4.3.2** For fabrics and cold weather insulation materials that are designated on the flame-resistant garment label to be dry-cleaned, specimens shall be tested before and after three cycles of dry-cleaning as specified in 8.1.4.
- **8.4.3.3** For fabrics and cold weather insulation materials that are designated on the flame-resistant garment label to be either washed or dry-cleaned, specimens shall be tested before and after three cycles of washing and drying as specified in 8.1.3, after three cycles of dry-cleaning as specified in 8.1.4.
- 13. Delete existing subsection 8.4.8.2 and renumber 8.4.8.3 to 8.4.8.2 to read as follows:
- **8.4.8.2** Measurements of cold weather insulation material thermal shrinkage shall be made on the side of the fabric facing the wearer as used in the construction of the garment.
- **8.4.8.3 8.4.8.2** Testing shall be performed in accordance with 8.4.2 through 8.4.7.
- 14. Add new subsection 8.4.11 to read as follows:

8.4.11 Specific Requirements for Testing Cold Weather Insulation Materials.

- **8.4.11.1** Samples for wash or dry-clean conditioning shall be prepared by cutting a 50-cm \times 20-cm (20-in. \times 8-in.) panel of the cold weather insulation material. A similar-sized cloth piece of 200-g/m² to 270-g/m² (6.0-oz/yd² to 8.0-oz/yd²) flame-resistant fabric meeting all requirements of this standard shall be sewn around the perimeter of the cold weather insulation material such that the batting side is covered by the fabric .
- **8.4.11.2** Following wash or dry-clean conditioning, 3 specimens measuring $152 \text{ mm} \times 152 \text{ mm}$ (6 in. × 6 in.) shall be removed from

the cold weather insulation material layer of the conditioned panel.

8.4.11.3 Testing shall be performed in accordance with 8.4.2 through 8.4.7, and thermal shrinkage shall not be measured.

Submitter's Substantiation: The current criteria in NFPA 2112-2012 are not workable to support the inclusion of cold weather insulation materials that provide safe and effective protection of flame resistant garments used for protection of workers against accident flash fires. Changes were made to the 2012 edition of NFPA 2112 without the benefit of a full validation effort. An effort intended to meet this purpose has now been completed by a task group under the direction of the Technical Committee where several prospective cold weather insulation materials were evaluated using existing and proposed test methods that included both current and modified flame resistance and heat/thermal shrinkage resistance testing. Additional evaluations were carried out using full scale manikin testing with garments incorporating the selected cold weather insulation materials in jackets of a simple design to assess effects of simulated flash fires on the clothing and insulation materials.

This effort produced the following two primary findings:

1. One of the cold weather insulation materials included in the investigation exhibited average afterflame times in excess of the 2-second requirement using the current flame resistance test procedures. When tested according to the proposed modified flame resistance test procedures, afterflame times were compliant or near compliant. In addition, the manikin-based testing for the same fabric exhibiting extended afterflame times, showed no unusual burning behavior during manikin testing of full garments where the liner consisted of the cold weather insulation material or showed shrinkage that differed radically from garments using materials that qualify to current NFPA 2112 performance criteria. Based on these findings, the modified flame resistance testing can be utilized for the evaluation of cold weather insulation materials.

It was observed that after flame times were observed to be generally shorter when a 50 mm folded edge was used as compared to a 25 mm folded edge. It was also rationalized that more consistent results would be provided with the 50 mm folded edge for the modified flame test because the specimen is positioned 19 mm into a 38 mm high flame leaving only a 6 mm space between the top of the flame and the beginning of the unprotected (by the folded edge) batting. It was therefore reasoned and consistent with the observed test results that the modified flame resistance test should use a 50 mm folded edge.

Specific changes to NFPA 2112 have been proposed in proposed modifications shown in Section 8.3.

2. Certain cold weather insulation materials exhibited significant distortion in heat/thermal shrinkage resistance testing and thermal shrinkage. Yet, these same materials when employed in the form of a liner in a flame resistant jacket utilizing a lightweight shell material did not show significant differences in their shrinkage (of the liner) with materials that would otherwise pass the NFPA 2112-2013 thermal shrinkage resistance criteria. This further included testing with the jacket samples inverted (turned inside out) representing a "worst case"

exposure and wearing configuration where no adverse safety issues were observed. From these results, the exemption of cold weather insulation materials from the thermal shrinkage resistance requirement can be justified. Specific changes to NFPA 2112 implementing these modifications are provided as in paragraphs 7.1.3, 7.1.3.1 (deletion), 7.1.4, and Section 8.4.

It is important to point out that the cold weather insulation material is required to meet a heat resistance requirement and is always covered by an outer (shell) material (paragraph 7.1.4). If it is not, it would not qualify as a cold weather insulation material. It is also important to point out that while these changes were based on testing that did not show any safety of the protective garment to be compromised when presented to a simulated flash fire, conditions may exist for which cold weather insulation materials (and other garment materials) will fail to provide intended levels of protection. The following substantiations are proposed for the additional changes in this amendment to address cold weather insulation material definitions, labeling, design criteria, performance criteria, and test methods:

- A clarification was added to the definition of cold weather insulation material to indicate that the material is not an interlining. Additional language was also added to distinguish an interlining that is not tested for heat resistance or thermal shrinkage resistance from a cold weather insulation material, which is tested for heat resistance but not thermal shrinkage resistance (paragraphs 3.3.6, 3.3.20, A.3.3.6, and A.3.3.20).
- Additional labeling language was added to require the identification of the cold weather insulation material fiber content, the inclusion of a warning that garments with cold weather insulation materials must be properly secured and that a separate label must be provided on the liner if detachable, that indicates that the liner must not be worn by itself. These changes are covered in paragraph 5.1.2, 5.1.9, 5.1.12, and 5.1.13).
- Design criteria were added to permit garment with sewn-in or detachable liners that utilize cold weather insulation materials but that manufacturers must design removable liners so that the liner cannot be worn without the outer layer (paragraphs 6.4 and A.6.4).
- Changes were made in the performance criteria to clarify to which requirements cold weather insulation materials are tested (paragraphs 7.1.2, 7.1.3, and 7.1.4).
- A clarification was provided to specify that the cold weather insulation material is not tested for thermal protective performance (paragraphs 7.1.1.1 and 7.1.1.2).
- Specific procedures were added to address the modified testing of the cold weather insulation material as specified in U.S. Air Force purchase description NCTRF PD N2-01-3A, *Batting, Quilted, Aramid*, involving the removal of 50 mm of batting and folding of the face cloth over the remaining batting, as supported by the test information provided above (paragraph 8.3.1.7 and Section 8.3.13). Additional instructions were provided for preparing samples for conditioning by sewing a layer of flame resistant fabric to the cold weather insulation material prior to laundering with its removal following laundering or dry cleaning (paragraphs 8.3.13.1 and 8.3.13.2).

• Modifications for the heat and thermal shrinkage resistance test method were made to clarify that the cold weather insulation materials are not evaluated for thermal shrinkage resistance as supported by the test information above (paragraphs 8.4.1.1 through 8.4.1.5, paragraph 8.4.2.1, and section 8.4.11). Additional instructions were provided for preparing samples for conditioning by sewing a layer of flame resistant fabric to the cold weather insulation material prior to laundering with its removal following laundering or dry cleaning (paragraphs 8.4.3.1 through 8.4.3.3).

For supporting documentation see the doc info pages at www. nfpa.org/2112. and click on proposed TIA 1105

Emergency Nature: The proposed TIA intends to correct a circumstance in which the revised NFPA Standard has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process or was without adequate technical (safety) justification for the action. As currently written, NFPA 2112 includes criteria that create a bias against cold weather insulation materials that is inconsistent with their use and in consistent with demonstrated levels of safety.

The OSHA interpretation of March 2010 encouraging employers to provide their employees with garments certified to a consensus standard like NFPA 2112 has created a need and demand for outerwear garments for cold weather protection that are certified to the NFPA 2112 standard. The current edition of the NFPA 2112 standard does not provide clear methods to properly test and certify garments that incorporate insulation for additional protection from cold weather.

Errata Issued

The following errata have been issued. Copies of these errata are available on the NFPA website on the Document Information Page listed under "List of NFPA codes & standards". Electronic products and pamphlet reprints may have this errata incorporated.

NFPA 70® -Proposed 2014 National Electrical Code® (Report on Comments) www.nfpa.org/70

The National Electrical Code Technical Correlating Committee notes the following errors in the Report on Comments (ROC) on NFPA 70[®], *National Electrical Code*[®].

1. The text in the Correlating Committee Action on Comment 2-82 is an error and should read as follows:

Reference: 2-82 (Log #1480) CC Action

TCC Action: The Correlating Committee understands that the Panel Statement to Comment 2-67 was intended to state: "The proposed informational note states a requirement which is not permitted in Informational notes." See Correlating Com-

mittee action on Comment 2-84.

2. The Correlating Committee Action on Comment 2-84 was inadvertently omitted and should've been published as follows:

Reference: 2-84 (Log #1000) CC Action

TCC Action: Based upon the Panel Actions on Proposal 2-178a and Comments 2-82 and Comments 2-84, the Correlating Committee understands that the final text of 210.52(G) reads as follows:

- (G) Basement, Garages, and Accessory Buildings. For a one-family dwelling, at least one receptacle outlet shall be installed in the areas specified in 210.52(G)(1) through (3). These receptacles shall be in addition to receptacles required for specific equipment.
- (1) Garages. In each attached garage and in each detached garage with electric power. The branch circuit supplying this receptacle(s) shall not supply outlets outside of the garage. At least one receptacle outlet shall be installed for each car space.
- (2) Accessory Buildings. In each accessory building with electric power.
- (3) Basements. In each separate unfinished portion of a basement.
- 3. The Correlating Committee Action on Comment 16-37 inadvertently changed the technical requirements of the section and should be deleted in its entirety:

Reference: 16-37 (Log #333) CC Action

TCC Action: The Correlating Committee directs that the proposed revision be revised as follows in accordance with the NEC Style Manual:

770.179(F) Field-Assembled Optical Fiber Cables. Field-assembled optical fiber cable shall comply with 770.179(F)(1) or (2). (1) Marking and Listing of Combination of Jacket and Optical Fibers. The specific combination of jacket and optical fibers intended to be installed as a field-assembled optical fiber cable shall be listed in accordance with 770.179(A), (B), or (D) and shall be marked in accordance with table 770.179

- (a) The jacket of a field-assembled optical fiber cable shall have a surface marking indicating the specific optical fibers with which it is listed for use.
- (b) The optical fibers shall have a permanent marking, such as a marker tape, indicating the jacket with which they are listed for use.
- (2) Listing of Jacket Without Fibers. The jacket without fibers shall meet the listing requirements for communications raceways in 800.182(A), (B), or (C) in accordance with the cable marking:
- 4. The Panel Meeting Action explanatory text in Comment 17-37 is being deleted as the action on this Comment is "Accept".

Reference: 17-37 (Log #1513) Panel Meeting Action

Panel Meeting Action: Accept

Revise 680.25 to read:

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Exception: An existing feeder within a one-family dwelling unit or two-family dwelling unit between an existing remote panelboard and service equipment shall be permitted to run in flexible metal conduit or an approved cable assembly that includes an insulated equipment grounding conductor within its outer sheath. The equipment grounding conductor shall comply with 250.24(A)(5).

(2) Aluminum Conduit. Aluminum conduit shall not be permitted in the pool area where subject to corrosion. (B) Grounding. An equipment grounding conductor shall be installed with the feeder conductors between the grounding terminal of the pool equipment panelboard and the grounding terminal of the applicable service equipment or source of a separately derived system. For other than (I) existing feeders covered in 680.25(A). exception, or (2) feeders to separate buildings that do not utilize an insulated equipment grounding conductor in accordance with 680.25(8)(2), this equipment grounding conductor shall be insulated. (1) Size. This conductor shall be sized in accordance with 250.122 but not smaller than 12 AWG. On separately derived systems, this conductor shall be sized in accordance with 250.30(A)(3) but not smaller than 8 AWG. (2) Separate Buildings. A feeder to a separate building or structure shall be permitted to supply swimming pool equipment branch circuits, or feeders supplying swimming pool equipment branch circuits, if the grounding arrangements in the separate building meet the requirements in 250.32(8). Where installed in other than existing feeders covered in 680.25(A), Exception, a separate equipment grounding conductor shall he an insulated conductor.

Issue Date: April 10, 2013 Reissued Date: April 25, 2013

NFPA 1951-2013

Standard on Protective Ensembles for Technical Rescue Incidents

Reference: Various Errata No.: 1951-13-1 www.nfpa.org

The Technical Committee on Special Operations Protective Clothing and Equipment notes the following errors in the 2013 edition of NFPA 1951, *Standard on Protective Ensembles for Technical Rescue Incidents*.

1. Delete 8.5.13.13.1 as follows:

8.5.13.13.1 The container shall be filled with tap water to a height within 25 mm (1 in.) of the footwear height as determined in 6.2.4.4.

2. Delete 8.32.4.2 and 8.32.4.3 as follows:

8.32.4.2 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.

8.32.4.3 A specimen support assembly shall be used to support the footwear specimen above the burner flame.

3. Revise 8.32.5.5 (1) to read as follows:

8.32.5.5 (1) The toe shall be at a $\underline{7.5}$ degree, ± -1 $\underline{2.5}$ degree angle above the heel.

Issue Date: May 1, 2013

NFPA 1730 Available for Electronic Submission of Public Input

NFPA 1730, Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations to the Public, which was approved at the March 2013 Standards Council meeting to enter Annual 2015 (with a later closing date of September 9, 2013), is now available for electronic submission of Public Input (e-PI).

NFPA Conference and Expo, Chicago, June 9-15

Online registration is now available for 2013 NFPA Conference & Expo in Chicago. Technical Committee members receive a discount on a full conference registration. This includes the General Session, all Education Sessions, Association Technical Meeting and the Expo.

New option this year for more flexible scheduling!

If you decide that you do not need the 150 sessions+ and seminars and all the other good stuff, then we have a 2-day Association Technical Meeting Only registration option. You can check out the exhibits and attend the Association Technical Meeting both days or pick the day that is relevant to you. You do not have to pick which day to attend the Association Technical Meeting. We hope you enjoy this added flexibility for your busy schedule while in Chicago!

Association Technical Meeting Only Wednesday, June 12 and/or Thursday, June 13 \$200.00 – flat fee

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. To reserve a seat, please contact the Codes and Standards Administration at 617-984-7240 or by email at stds_admin@nfpa.org.

May 2013

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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.

Association Technical Meeting Schedule and Motions Committee Report Now Available

The Report of the Motions Committee identifies Certified Amending Motions for documents in the Annual 2013 revision cycle that may be considered at the 2013 Association Technical Meeting in Chiacago, IL on June 12-13, 2013.

The following is a list of documents (with Certified Amending Motions) in the order in which they will be presented at the Association Technical Meeting:

Wednesday, June 12, Starting at 2:00 PM

NFPA 1061	Standard for Professional Qualifications for
	Public Safety Telecommunicator
NFPA 1851	Standard on Selection, Care, and Maintenance
	of Protective Ensembles for Structural Fire
	Fighting and Proximity Fire Fighting
NFPA 801	Standard for Fire Protection for Facilities
	Handling Radioactive Materials
NFPA 1123	Code for Fireworks Display
NFPA 96	Standard for Ventilation Control and Fire
	Protection of Commercial Cooking Operations
NFPA 58	Liquefied Petroleum Gas Code
NFPA 1123 NFPA 96	Fighting and Proximity Fire Fighting Standard for Fire Protection for Facilities Handling Radioactive Materials Code for Fireworks Display Standard for Ventilation Control and Fire Protection of Commercial Cooking Operation

Thursday, June 13, Starting at 8:00 AM

NFPA 70

1111110	Transfer Erectives Code
NFPA 502	Standard for Road Tunnels, Bridges, and Other
	Limited Access Highways
NFPA 130	Standard for Fixed Guideway Transit and
	Passenger Rail Systems
NFPA 25	Standard for the Inspection, Testing, and
	Maintenance of Water-Based Fire Protection
	Systems

National Electrical Code®

NFPA News in Brief

Latest News directly impacting NFPA's Codes and Standards.

NFPA Offers Free Access to Codes and Standards

As part of its commitment to enhancing public safety, NFPA makes its codes and standards available for free online review. On-demand review of NFPA's consensus documents conveniently places important safety information on the desktops of traditional users as well as others who have a keen interest. Even though NFPA owns those copyrights, we have offered free access to all of our codes and standards on our web site for the past 10 years.

Free Guide to Understanding, Implementing NFPA Standards

NFPA and the National Volunteer Fire Council have teamed up to develop a free guide to assist fire departments in understanding and implementing NFPA standards. "Understanding and Implementing Standards" examines three major NFPA standards (1500, 1720, and 1851) relating to safety and health and offers clarification, identifies manageable steps, and highlights available resources to help departments reach their safety goals. Information regarding the standards making process is also provided. Learn more at www.nfpa.org/standardsguide.

Don Bliss Named NFPA Vice President of Field Operations

In his new position, Don will oversee NFPA's International Division, Government Affairs Division and NFPA's Regional Operations. Don previously served on the NFPA Standards Council and as the president and chief operating officer for the not-for-profit National Infrastructure Institute in Portsmouth, NH. **Read more**

March Standards Council Meeting Minutes Now Available

The NFPA Standards Council met on March 6-7, 2013 at San Jaun, PR. The minutes are now posted on NFPA's website at http://www. nfpa.org/SC. Copies of Standard Council minutes, decisions and agendas from any Council meetings can also be obtained by email at stds admin@nfpa.org, or write to Codes and Standards Administration, NFPA, 1 Batterymarch Park, Quincy, MA 02169-7471.

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)

May 20	13
8–9	Aircraft Rescue and Fire Fighting (405, 408, 422 First
	Draft Meeting), Coconut Grove, FL
9	Loss Prevention Procedures and Practices (600, 601 First
	Draft), Linthicum Heights, MD
13	Subterranean Structures (520 First Draft), Telephone /
	Web Conference
13	Fire and Emergency Services Protective Clothing and
	Equipment Correlating Committee (1975 Second Draft)
	Telephone / Web Conference
13-14	Fire Safety and Emergency Symbols (170 First Draft)
	Austin, TX
14–15	Carbon Monoxide Detection (720 Second Draft),
	Newport, RI
20	Building Construction (220, 221, 5000 Second Draft)
	San Diego, CA
20	Building Systems (5000 Second Draft), San Diego, CA
20-21	Means of Egress (101, 5000 Second Draft),
	San Diego, CA
21	Building Service & Fire Protection Equipment (101, 5000
	Second Draft), San Diego, CA
21	Fire Protection Features (101, 5000 Second Draft),
	San Diego, CA
21	Structures, Construction & Materials
	(703, 5000 Second Draft), San Diego, CA
21–22	Electrical Systems, (99 Second Draft),
	New Orleans, LA
21-23	Electric Generating Plants (850, 851, 853 First Draft),

NFPA HQ, Quincy, MA

22-23	Foam (11 First Draft), Atlanta, GA
22-23	Mining Facilities (120, 122 First Draft), Schaumburg, IL
22-23	Fundamentals (101, 5000 Second Draft), San Diego, CA
23	Furnishings and Contents (101, 5000 Second Draft)
	San Diego, CA
23-24	Hyperbaric and Hypobaric Facilities (99 Second Draft),

New Orleans, LA

June 201	3
3	Fundamentals (99 Second Draft), Ft. Lauderdale, FL
4	Electrical Equipment Evaluation (790, 791 Second Draft),
	web/teleconference
4–5	Piping Systems (99 Second Draft), Ft. Lauderdale, FL
4-7	Hydrogen Technology (2 First Draft), NFPA HQ,
	Quincy, MA
10-13	NFPA Conference & Expo, Chicago, IL
17-18	Combustible Metals and Metal Dusts (484 Second Draft)
	Quincy, MA, NFPA Headquarters
18-19	National Fuel Gas Code (54 Second Draft), Portland, ME
18-19	Tank Storage and Piping Systems (30 Second Draft),
	San Antonio, TX
20	Fundamentals (30 Second Draft), San Antonio, TX
20	Combined meeting: Fundamentals and Storage and Ware
	housing of Containers and Portable Tanks (30 Second
	Draft), San Antonio, TX
21	Storage and Warehousing of Containers and Portable
	Tanks (30 Second Draft), San Antonio, TX
24	Assembly Occupancies (101, 5000 Second Draft)
	San Diego, CA
24	Residential Occupancies (101, 5000 Second Draft)
	San Diego, CA
24-25	Public Emergency Reporting Systems (72 First Draft),
	St. Louis, MO
24-25	Initiating Devices for Fire Alarm and Signaling Systems
	(72 First Draft), St. Louis, MO
24–26	Supervising Station Fire Alarm and Signaling Systems
	(72 First Draft), St. Louis, MO
24–28	Electrical Safety in the Workplace (70E Second Draft)
	Savannah, GA
25	Educational and Day-Care Occupancies
	(101, 5000 Second Draft), San Diego, CA
25	Board and Care Facilities (101, 5000 Second Draft)
	San Diego, CA
26	Industrial and Storage and Miscellaneous Occupancies
	(101, 5000 Second Draft), San Diego, CA
26	Health Care Occupancies (101, 5000 Second Draft)
	San Diego, CA
26	Correlating Committee on Boiler Combustion
	Systems Hazards (85 CC First Draft), NFPA HQ,
	Quincy, MA
26	Boiler Combustion System Hazards Correlating
	Committee (85 First Draft), NFPA HQ, Quincy, MA
26–28	Notification Appliances for Fire Alarm and Signaling
	Systems (72 First Draft), St. Louis, MO

May 2013 18

Alarm Systems (72 First Draft)

Single- and Multiple-Station Alarms and Household Fire

26-28

27	Mercantile and Business Occupancies
	(101, 5000 Second Draft), San Diego, CA

July 2013

- Detention and Correctional Occupancies (101, 5000 Second Draft), web/teleconference
- 8–12 Electrical Equipment of Industrial Machinery (79 Second Draft), Portland, ME
- Sprinkler System Discharge Criteria (13 pre-First Draft)
 St. Louis, MO
- 9 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
- 29-Aug 1 Standards Council, NFPA HQ, Quincy, MA
- 30–Aug 1 Commissioning and Integrated Testing (3 and 4 Second Draft), Indianapolis, IN

August 2013

- 7–8 LP-Gases at Utility Gas Plants (59 Second Draft), Denver, CO
- 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 Alternative Approaches to Life Safety (101A First Draft), Baltimore-Washington Intl Airport area
- 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

September 2013

- 5–6 Electrical Systems Maintenance (73 First Draft), New Orleans, LA
- 9–11 Protected Premises Fire Alarm and Signaling Systems (72 First Draft), St. Louis, MO
- 9–11 Emergency Communication Systems (72 First Draft) St. Louis, MO
- 9–12 Fire Department Apparatus (1901, 1906 First Draft), San Diego, CA
- 10–12 Wastewater Treatment Plants (820 First Draft),

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- 11–13 Fundamentals of Fire Alarm and Signaling Systems (72 First Draft), St. Louis, MO
- 11–13 Testing and Maintenance of Fire Alarm and Signaling Systems (72 First Draft), St. Louis, MO
- 24-25 Aerolsol Products (30B Second Draft), Northbrook, IL

October 2013

- Health Care Facilities Correlating Committee (99 Second Draft), Aurora, CO
- 22-23 NFPA Standards Council, San Diego, CA
- 24–25 Fire Code (1 Second Draft), Austin, TX

November 2013

- 5–7 Hazardous Chemicals (40, 400 First Draft), Herndon, VA
- 13–14 Fire Doors and Windows (80, 105 First Draft), Pittsburg, PA
- 19–21 Fire Prevention Organization and Deployment (1730 First Draft), San Antonio, TX

Committees Seeking Members

The Committee on Aerosol Extinguishing Technology is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, and User. This Committee is responsible for NFPA 2010, Standard for Fixed Aerosol Fire Extinguishing Systems.

The **Committee on Aerosol Products** is seeking members in the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Consumer, Enforcer, Labor, and User. The Committee is responsible for NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*.

The Committee on Air Conditioning is seeking members in the interest classifications of Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and User. This Committee is responsible for NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems and NFPA 90B, Standard for the Installation of Warm Air Heating and Air-Conditioning Systems.

The Committee on Aircraft Fuel Servicing is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert, and User. This Committee is responsible for NFPA 407, Standard for Aircraft Fuel Servicing.

The Committee on Aircraft Maintenance Operations is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and Manufacturer. This Committee is responsible for NFPA 410, *Standard on Aircraft Maintenance*.

The Committee on Animal Housing Facilities is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and Manufacturer. This Committee is responsible for NFPA 150, Standard on Fire and Life Safety in Animal Housing Facilities.

The Committee on Boiler Combustion System Hazards—Fluidized Bed Boilers is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Special Expert, and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, and Labor. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and Manufacturer. This Committee is responsible for stoker material, Chapter 10 in NFPA 85, Boiler and Combustion Systems Hazards Code.

The Committee on Building Code—Assembly Occupancies is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, and Manufacturer. This Committee is responsible for Chapter 16 in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Board and Care Facilities is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer, and User. 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 interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and User. This Committee is responsible for Chapter 7, Sections 8.3, 8.4 and Annex D in NFPA 5000®, Building Construction and Safety Code®; NFPA 220, Standard on Types of Building Construction; and NFPA 221, Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls.

The Committee on Building Code—Building Systems is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. This Committee is responsible for Chapter 12, Chapters 49-54 and Annex B in NFPA 5000®, Building Construction and Safety Code® and NFPA 900, Building Energy Code.

The Committee on Building Code—Detention and Correctional Occupancies is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Special Expert and User.. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. This Committee is responsible for Chapters 29-31 and 33-34 in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Means of Egress is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, and Labor. This Committee is responsible for Chapter 11 in NFPA 5000®, Building Construction and Safety Code®.

The Committee on Building Code—Structures, Construction and Materials is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. This Committee is responsible for NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response.

The Committee on Construction and Demolition is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer and User. The Committee is responsible for NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations.

The Correlating Committee on Combustible Dusts is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 652, Standard on Combustible Dusts; 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 interest classifications of Enforcer. This Committee is responsible for NFPA 652, Standard on Combustible Dusts

The Committee on Combustible Dusts—Wood and Cellulosic Materials Processing is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Consumer, Enforcer, Labor, Special Expert and User. This Committee is responsible for NFPA 664, Standard for the Prevention of Fire and Explosions in Wood Processing and Woodworking Facilities.

The Committee on Common Mass Evacuation Planning is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, and User. This Committee is responsible for developing a Standard to establish a common set of criteria for mass evacuation plans hereinafter referred to as the plan.

The Committee on Data Exchange for the Fire Service is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Laborand Manufacturer. This committee is responsible for NFPA 950, Standard for Data Development and Exchange for the Fire Service.

The Committee on Electrical Equipment in Chemical Atmospheres is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and Manufacturer. 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 the interest classifications of Installer/Maintainer, Applied Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classification of Enforcer. The Committee is responsible for NFPA 75, *Standard for the Protection of Information Technology Equipment*.

The Committee on Emergency Medical Services is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. This Committee is responsible for NFPA 450, *Guide for Emergency Medical Services and Systems*.

The Committee on Emergency Power Supplies is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, and Special Expert. 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 members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer, and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, and Labor. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and User. 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 interest classification of Enforcer. 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 interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Manufacturer and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer, and Special Expert. 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 the interest classifications of Installer/Maintainer, Insurance, Consumer, Enforcer, Labor, Special Expert and User. 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—Emergency Medical Services Protective Clothing and Equipment is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and Special Expert. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, and Special Expert. This Committee is responsible for NFPA 1936, Standard on Powered Rescue Tools.

The Committee on Fire Doors and Windows is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer and Labor. This Committee is responsible for NFPA 80 Standard for Fire Doors and Other Opening Protectives and NFPA 105 Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives.

The Committee on Fire Hose is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. This Committee is responsible for NFPA 170, Standard for Fire Safety and Emergency Symbols.

The Committee on Fire Tests is seeking members in the interest classifications of Installer/Maintainer, Insurance, Consumer, Enforcer, Labor and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. The Committee 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 interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Consumer, Enforcer, Labor and Special Expert. This Committee is responsible for Chapters 17, 18, 19, 20, 28, and 29 of NFPA 30, Flammable and Combustible Liquids Code.

The Committee on Flammable and Combustible Liquids-Storage and Warehousing of Containers and Portable Tanks is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Consumer, Enforcer and Labor. This Committee is responsible for Chapters 9-16 of NFPA 30, Flammable and Combustible Liquids Code.

The Committee on Flash Fire Protective Garments is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Special Expert. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. 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 the interest classifications of Installer/Maintainer and Applied Research/Testing Laboratory. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. This Committee is responsible for NFPA 88A, *Standard for Parking Structures*.

The **Committee on Gas Hazards** is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer and Labor. 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 Handling and Conveying of Dusts, Vapors and Gases is seeking members in the interest classifications of Enforcer. This Committee is responsible for NFPA 91, Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids; NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids; and NFPA 655, Standard for Prevention of Sulfur Fires and Explosions.

The Committee on Hazard and Risk of Contents and Furnishings is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. 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 in the interest classifications of Installer/Maintainer,

Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. 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 in the interest classifications of Enforcer and Labor. 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 in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. 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 in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. 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 in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Special Expert. 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 in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer and Labor. 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 in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer and Labor. This Committee is responsible for Chapter 5 in NFPA 99, *Health Care Facilities Code*.

The **Committee on Helicopter Facilities** is seeking members in the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. This Committee is responsible for NFPA 418, *Standard for Heliports*.

The Committee on Incinerators and Waste Handling Systems is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. 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 the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. 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 Consumer, 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and Special Expert. This Committee is responsible for NFPA 59, *Utility LP-Gas Plant Code*.

The Committee on Manufacture of Organic Coatings is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. This Committee is responsible for NFPA 35, Standard for the Manufacture of Organic Coatings.

The Committee on Manufactured Housing is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer and Labor. This Committee is responsible for NFPA 1925, *Standard on Marine Fire-Fighting Vessels*.

The Committee on Marine Terminals is seeking members in the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Consumer, Enforcer, Labor, Manufacturer and User. 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 the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. 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 the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Special Expert. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Consumer, Enforcer, Labor and User. 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 Ovens and Furnaces is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Consumer, Enforcer, Labor and User. This Committee is responsible for NFPA 86, Standard for Ovens and Furnaces.

The Committee on Oxygen Enriched Atmospheres is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. This Committee is responsible for NFPA 53, Recommended Practice on Materials, Equipment and Systems Used in Oxygen-Enriched Atmospheres.

The Correlating Committee on Professional Qualifications is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer and Special Expert. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor and Manufacturer. This Committee is responsible for NFPA 1000, Standard for Fire Service Professional Qualifications Accreditation and Certification Systems.

The Committee on Professional Qualifications—Emergency Vehicle Technicians Professional Qualifications is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and Special Expert. This Committee is responsible for NFPA 1071, Standard for Emergency Vehicle Technician Professional Qualifications.

The Committee on Professional Qualifications—Fire Inspector and Plans Examiner Professional Qualifications is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and Special Expert. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. 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 the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and Special Expert. 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 the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. 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 the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and Special Expert. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer and Manufacturer. This Committee is responsible for NFPA 1006, *Standard for Technical Rescue Professional Qualifications*.

The Committee on Professional Qualifications—Wildland Fire Fighting Personell Professional Qualifications is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. This Committee is responsible for NFPA 1051, Standard for Wildland Fire Fighter Professional Qualifications.

The Committee on Public Emergency Service Communication is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and Special Expert. This Committee is responsible for NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.

The Committee on Record Protection is seeking members in the interest classifications of Installer/Maintainer, Applied Research/ Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. This Committee is responsible for NFPA 232, Standard for the Protection of Records.

The Committee on Recreational Vehicles is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor and Manufacturer. This Committee is responsible for Chapters in NFPA 101A, Guide on Alternative Approaches to Life Safety.

The Committee on Safety to Life—Assembly Occupancies is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer and Special Expert. This Committee is responsible for Chapters 12 and 13 of NFPA 101®, Life Safety Code® and NFPA 102, Standard for Grandstands, Folding and Telescopic Seating, Tents and Membrane Structures.

The Committee on Safety to Life—Board and Care Facilities is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer and User. This Committee is responsible for Chapters 14-17 in NFPA 101®, Life Safety Code®.

The Committee on Safety to Life—Interior Finish and Contents is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer and Labor. This Committee is responsible for Chapters 11, 40 and 42 in NFPA 101®, Life Safety Code®.

The Committee on Safety to Life—Means of Egress is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. This Committee is responsible for Chapters 7 and Annex A and B in NFPA 101®, Life Safety Code®.

The Committee on Shipbuilding, Repair, and Lay-Up is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. This Correlating Committee oversees the Technical Committees responsible for NFPA 72®, National Fire Alarm and Signaling Code.

The Committee on Signaling Systems—Carbon Monoxide Detection is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. This Committee is responsible for NFPA 720, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment.

The Committee on Signaling Systems—Emergency Communication Systems is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer and Labor. This Committee is responsible for Chapter 24 in NFPA 72®, National Fire Alarm and Signaling Code.

The Committee on Signaling Systems—Initiating Devices for Fire alarm and Signaling Systems is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. This Committee is responsible for Chapter 29 in NFPA 72®, National Fire Alarm and Signaling Code.

The Committee on Signaling Systems—Single and Multiple Station Alarms and household Fire Alarm Systems is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. This Committee is responsible for Chapter 29 in NFPA 72®, National Fire Alarm and Signaling Code.

The Committee on Signaling Systems—Notification Appliances for Fire Alarm Systems is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. This Committee is responsible for Chapter 18 and Annex F in NFPA 72[®], National Fire Alarm and Signaling Code.

The Committee on Signaling Systems—Protected Premises Fire alarm and Signaling Systems is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. This Committee is responsible for Chapter 12, 21, 23 and Annex C in NFPA 72®, National Fire Alarm and Signaling Code.

The Committee on Signaling Systems—Public Fire Reporting Systems is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, 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 Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and Manufacturer. This Committee is responsible for NFPA 77, Recommended Practice on Static Electricity.

The Committee on Subterranean Spaces is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. 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 Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Labor, Manufacturer and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Consumer, Enforcer, Labor, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer, Special Expert and User. This Committee is responsible for NFPA 32, Standard for Drycleaning Plants.

The Committee on Transportation of Flammable Liquids is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Manufacturer and User. 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 Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. This Committee is responsible for NFPA 52, Vehicular Gaseous Fuel Systems Code.

The Committee on Wastewater Treatment Plants is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor, Special Expert and User. 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 the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. This Committee is responsible for NFPA 214, *Standard on Water- Cooling Towers*.

The **Committee on Water Tanks** is seeking members in the interest classifications of Installer/Maintainer, Applied Research/Testing Laboratory, Insurance, Consumer, Enforcer, Labor and User. This Committee is responsible for NFPA 22, *Standard for Water Tanks for Private Fire Protection*.

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 10-2013	Standard for Portable Fire Extinguishers	1/3/2014	F2015
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 14-2013	Standard for the Installation of Standpipe and Hose Systems	1/3/2014	F2015
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 36-2013	Standard for Solvent Extraction Plants 1/5/2015 F2016		
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 52-2013	Vehicular Gaseous Fuel Systems Code	1/3/2014	F2015
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 67-2013	Guideline on Explosion Protection for Gaseous Mixtures in Pipe Systems	1/3/2014	F2015
NFPA 70B-2013	Recommended Practice for Electrical Equipment Maintenance	1/3/2014	F2015
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 Protective	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 211-2013	Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances	1/3/2014	F2015
NFPA 214-2011	Standard on Water-Cooling Towers	1/3/2014	F2015
NFPA 225-2013	Model Manufactured Home Installation Standard	1/5/2015	F2016
NFPA 232-2012	Standard for the Protection of Records	7/7/2014	A2016
NFPA 241-2013	Standard for Safeguarding Construction, Alteration, and Demolition Operations 1/5/2015 Standard Methods of Fire Tests of Door Assemblies	1/5/2015	E2016
NFPA 252-2012 NFPA 257-2012	Standard Methods of Fire Tests of Door Assemblies Standard on Fire Test for Window and Glass Block Assemblies	1/5/2015	F2016 F2016
NFPA 268-2012	Standard on Fire Test for Window and Glass Block Assemblies Standard Test Method for Determining Ignitibility of Exterior Wall Assemblies Using a	1/3/2013	F2010
N1171 200-2012	Radiant Heat Energy Source	1/5/2015	F2016
NFPA 269-2012	Standard Test Method for Developing Toxic Potency Data for Use in Fire Hazard	1/5/2015	12010
14111120) 2012	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	1,0,2010	12010
	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		
	Using a Fire Propagation Apparatus (FPA)	1/5/2015	F2016
NFPA 288-2012	Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in		
	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	A2015
NFPA 307-2011	Standard for the Construction and Fire Protection of Marine Terminals, Piers, and		
	Wharves	7/8/2013	A2015
NFPA 312-2011	Standard for Fire Protection of Vessels During Construction, Conversion, Repair, and		
	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		A2015
NFPA 418-2011	-	1/3/2014	F2015
NFPA 423-2010 NFPA 424-2013	Standard for Construction and Protection of Aircraft Engine Test Facilities	7/8/2013 7/6/2015	A2015 A2017
NFPA 450-2013	Guide for Airport/Community Emergency Planning Guide for Emergency Medical Services and Systems	7/7/2014	A2017
NFPA 472-2013	Standard for Competence of Responders to Hazardous Materials/Weapons of Mass	// //2014	A2010
NITA 4/2-2013	Destruction Incidents	7/6/2015	A2017
NFPA 473-2013	Standard for Competencies for EMS Personnel Responding to Hazardous Materials/	7/0/2013	712017
141111 1/3 2013	Weapons of Mass Destruction Incidents	7/6/2015	A2017
NFPA 475-P*	Recommended Practice for Responding to Hazardous Materials Incidents/Weapons of	77072013	112017
1,11111,701	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		
	Areas	1/3/2014	F2015
NFPA 499-2013	Recommended Practice for the Classification of Combustible Dusts and of Hazardous		
	(Classified) Locations for Electrical Installations in Chemical Process Areas	7/7/2014	A2016
NFPA 501-2013	Standard on Manufactured Housing 1/5/2015 F2016		
NFPA 501A-2013	Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and		
	Communities	1/5/2015	F2016
NFPA 550-2012	Guide to the Fire Safety Concepts Tree	1/5/2015	F2016
NFPA 551-2013	Guide for the Evaluation of Fire Risk Assessments	1/3/2014	F2015
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 557-2012	Standard for Determination of Fire Loads for Use in Structural Fire Protection Design	7/8/2013	A2015
NFPA 654-2013	Standard for the Prevention of Fire and Dust Explosions from the Manufacturing,		
	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	7/7/2014	12016
NIEDA 704 2012	Woodworking Facilities	7/7/2014	A2016
NFPA 704-2012	Standard System for the Identification of the Hazards of Materials for Emergency	7/7/2014	A 2016
NIEDA 920 2012	Response Standard for Fire Protection in Wastewater Treatment and Collection Facilities	7/7/2014 7/8/2013	A2016 A2015
NFPA 820-2012 NFPA 900-2013	Building Energy Code	1/3/2014	F2015
NFPA 901-2011	Standard Classifications for Incident Reporting and Fire Protection Data	1/3/2014	F2015
NFPA 909-2013	Code for the Protection of Cultural Resource Properties - Museums, Libraries, and	1/3/2014	12013
101111707 2013	Places of Worship	1/5/2015	F2016
NFPA 951-P*	Guide to Building and Utilizing Data Information	1/3/2014	F2015
NFPA 1000-2011	Standard for Fire Service Professional Qualifications Accreditation and Certification		
	Systems	1/5/2015	F2016
NFPA 1006-2013	Standard for Technical Rescuer Professional Qualifications	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		
NTTP 1100 0010	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	12016
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 Standard Method of Fire Test for Flame Breaks	7/6/2015 7/7/2014	A2017 A2016
1128PYR-2013 1129PYR-2013	Standard Method of Fire Test for Covered Fuse on Consumer Fireworks	7/7/2014	A2016 A2016
NFPA 1141-2012	Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural,	// //2014	A2010
1111111111-2012	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 1150-2010	Standard on Foam Chemicals for Fires in Class A Fuels	7/7/2014	A2016
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
NFPA 1600-2013	Standard on Disaster/Emergency Management and Business Continuity Programs	1/3/2014	F2015
NFPA 1710-2010	Standard for the Organization and Deployment of Fire Suppression Operations,		
	Emergency Medical Operations, and Special Operations to the Public by Career Fire		
	Departments	7/8/2013	A2015
NFPA 1730-P*	Standard on Organization and Deployment of Code Enforcement, Plan Review, Fire		
	Investigation, and Public Education Operations to the Public	9/9/2013	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 Standard for the Ingression Mointanance Testing and Petingment of In Service	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
	Automotive Fire Apparatus	1/3/2013	1.7010

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 Flame-Resistant Garments for Protection of Industrial Personnel Against		
	Flash Fire	7/7/2014	A2016