

2009 Fall Revision Cycle

Report on Proposals

A compilation of NFPA® Technical Committee Reports on Proposals for public review and comment

Public Comment Deadline: March 6, 2009

NOTE: The proposed NFPA documents addressed in this Report on Proposals (ROP) and in a follow-up Report on Comments (ROC) will only be presented for action at the NFPA June 2010 Association Technical Meeting to be held June 7–11, 2010, at Mandalay Bay Convention Center in Las Vegas, NV, when proper Amending Motions have been submitted to the NFPA by the deadline of October 23, 2009. Documents that receive no motions will not be presented at the meeting and instead will be forwarded directly to the Standards Council for action on issuance. For more information on the rules and for up-to-date information on schedules and deadlines for processing NFPA documents, check the NFPA website (www.nfpa.org) or contact NFPA Standards Administration.



National Fire Protection Association®

1 BATTERYMARCH PARK, QUINCY, MA 02169-7471

Information on NFPA Codes and Standards Development

I. Applicable Regulations. The primary rules governing the processing of NFPA documents (codes, standards, recommended practices, and guides) are the *NFPA Regulations Governing Committee Projects (RGCPs)*. Other applicable rules include *NFPA Bylaws*, *NFPA Technical Meeting Convention Rules*, *NFPA Guide for the Conduct of Participants in the NFPA Standards Development Process*, and the *NFPA Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council*. These rules and regulations are contained in the *NFPA Directory*. For copies of the *Directory*, contact Codes and Standards Administration at NFPA Headquarters; these documents are also available on the NFPA website at “www.nfpa.org.”

The following is general information on the NFPA process. All participants, however, should refer to the actual rules and regulations for a full understanding of this process and for the criteria that govern participation.

II. Technical Committee Report (TCR). The Technical Committee Report is defined as “the Report of the Technical Committee and Technical Correlating Committee (if any) on a document. A Technical Committee Report consists of the Report on Proposals (ROP), as modified by the Report on Comments (ROC), published by the Association” (see 1.4 of *RGCPs*).

III. Step 1: Report on Proposals (ROP). The ROP is defined as “a report to the Association on the actions taken by Technical Committees and/or Technical Correlating Committees, accompanied by a ballot statement and one or more proposals on text for a new document or to amend an existing document” (see 1.4 of *RGCPs*). Any objection to an action in the ROP must be raised through the filing of an appropriate Comment for consideration in the ROC or the objection will be considered resolved.

IV. Step 2: Report on Comments (ROC). The ROC is defined as “a report to the Association on the actions taken by Technical Committees and/or Technical Correlating Committees accompanied by a ballot statement and one or more comments resulting from public review of the Report on Proposals (ROP)” (see 1.4 of *RGCPs*). The ROP and the ROC together constitute the Technical Committee Report. Any outstanding objection following the ROC must be raised through an appropriate Amending Motion at the Association Technical Meeting or the objection will be considered resolved.

V. Step 3a: Action at Association Technical Meeting. Following the publication of the ROC, there is a period during which those wishing to make proper Amending Motions on the Technical Committee Reports must signal their intention by submitting a Notice of Intent to Make a Motion. Documents that receive notice of proper Amending Motions (Certified Amending Motions) will be presented for action at the annual June Association Technical Meeting. At the meeting, the NFPA membership can consider and act on these Certified Amending Motions as well as Follow-up Amending Motions, that is, motions that become necessary as a result of a previous successful Amending Motion. (See 4.6.2 through 4.6.9 of *RGCPs* for a summary of the available Amending Motions and who may make them.) Any outstanding objection following action at an Association Technical Meeting (and any further Technical Committee consideration following successful Amending Motions, see *RGCPs* at 4.7) must be raised through an appeal to the Standards Council or it will be considered to be resolved.

VI. Step 3b: Documents Forwarded Directly to the Council. Where no Notice of Intent to Make a Motion is received and certified in accordance with the Technical Meeting Convention Rules, the document is forwarded directly to the Standards Council for action on issuance. Objections are deemed to be resolved for these documents.

VII. Step 4a: Council Appeals. Anyone can appeal to the Standards Council concerning procedural or substantive matters related to the development, content, or issuance of any document of the Association or on matters within the purview of the authority of the Council, as established by the *Bylaws* and as determined by the Board of Directors. Such appeals must be in written form and filed with the Secretary of the Standards Council (see 1.6 of *RGCPs*). Time constraints for filing an appeal must be in accordance with 1.6.2 of the *RGCPs*. Objections are deemed to be resolved if not pursued at this level.

VIII. Step 4b: Document Issuance. The Standards Council is the issuer of all documents (see Article 8 of *Bylaws*). The Council acts on the issuance of a document presented for action at an Association Technical Meeting within sixty days from the date of the recommendation from the Association Technical Meeting, unless this period is extended by the Council (see 4.8 of *RGCPs*). For documents forwarded directly to the Standards Council, the Council acts on the issuance of the document at its next scheduled meeting, or at such other meeting as the Council may determine (see 4.5.7 and 4.8 of *RGCPs*).

IX. Petitions to the Board of Directors. The Standards Council has been delegated the responsibility for the administration of the codes and standards development process and the issuance of documents. However, where extraordinary circumstances requiring the intervention of the Board of Directors exist, the Board of Directors may take any action necessary to fulfill its obligations to preserve the integrity of the codes and standards development process and to protect the interests of the Association. The rules for petitioning the Board of Directors can be found in the *Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council* and in 1.7 of the *RGCPs*.

X. For More Information. The program for the Association Technical Meeting (as well as the NFPA website as information becomes available) should be consulted for the date on which each report scheduled for consideration at the meeting will be presented. For copies of the ROP and ROC as well as more information on NFPA rules and for up-to-date information on schedules and deadlines for processing NFPA documents, check the NFPA website (www.nfpa.org) or contact NFPA Codes & Standards Administration at (617-984-7246).

2009 Fall Revision Cycle ROP Contents

by NFPA Numerical Designation

Note: Documents appear in numerical order.

NFPA No.	Type Action	Title	Page No.
10	P	Standard for Portable Fire Extinguishers	10-1
11	P	Standard for Low-, Medium-, and High-Expansion Foam.....	11-1
13E	P	Recommended Practice for Fire Department Operations in Properties Protected by Sprinkler and Standpipe Systems.....	13E-1
14	P	Standard for the Installation of Standpipe and Hose Systems.....	14-1
18	P	Standard on Wetting Agents	18-1
37	P	Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines	37-1
45	P	Standard on Fire Protection for Laboratories Using Chemicals.....	45-1
53	P	Recommended Practice on Materials, Equipment, and Systems Used in Oxygen-Enriched Atmospheres	53-1
70B	P	Recommended Practice for Electrical Equipment Maintenance	70B-1
91	P	Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids	91-1
120	P	Standard for Fire Prevention and Control in Coal Mines	120-1
122	P	Standard for Fire Prevention and Control in Metal/Nonmetal Mining and Metal Mineral Processing Facilities.....	122-1
204	P	Standard for Smoke and Heat Venting	204-1
211	P	Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances	211-1
214	P	Standard on Water-Cooling Towers	214-1
255	W	Standard Method of Test of Surface Burning Characteristics of Building Materials	255-1
276	N	Standard Method of Fire Test for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Components	276-1
326	P	Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair	326-1
329	P	Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases	329-1
405	P	Standard for the Recurring Proficiency of Airport Fire Fighters	405-1
408	P	Standard for Aircraft Hand Portable Fire Extinguishers	408-1
409	P	Standard on Aircraft Hangars	409-1
410	P	Standard on Aircraft Maintenance	410-1
422	P	Guide for Aircraft Accident/Incident Response Assessment	422-1
423	P	Standard for Construction and Protection of Aircraft Engine Test Facilities	423-1
495	P	Explosive Materials Code	495-1
498	R	Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives	498-1
505	P	Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operations	505-1
520	P	Standard on Subterranean Spaces	520-1

551	P	Guide for the Evaluation of Fire Risk Assessments	551-1
600	R	Standard on Industrial Fire Brigades	600-1
601	R	Standard for Security Services in Fire Loss Prevention	601-1
701	P	Standard Methods of Fire Tests for Flame Propagation of Textiles and Films	701-1
750	P	Standard on Water Mist Fire Protection Systems	750-1
804	P	Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants	804-1
805	P	Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants.....	805-1
806	N	Performance-Based Standard for Fire Protection for Advanced Nuclear Reactor Electric Generating Plants.....	806-1
850	P	Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations.....	850-1
851	P	Recommended Practice for Fire Protection for Hydroelectric Generating Plants	851-1
853	P	Standard for the Installation of Stationary Fuel Cell Power Systems	853-1
900	P	Building Energy Code.....	900-1
914	P	Code for Fire Protection of Historic Structures	914-1
1003	P	Standard for Airport Fire Fighter Professional Qualifications	1003-1
1035	P	Standard for Professional Qualifications for Public Fire and Life Safety Educator	1035-1
1150	P	Standard on Foam Chemicals for Fires in Class A Fuels	1150-1
1201	C	Standard for Providing Emergency Services to the Public.....	1201-1
1250	P	Recommended Practice in Emergency Service Organization Risk Management.....	1250-1
1407	N	Standard for Fire Service Rapid Intervention Crews.....	1407-1
1410	P	Standard on Training for Initial Emergency Scene Operations.....	1410-1
1452	P	Guide for Training Fire Service Personnel to Conduct Dwelling Fire Safety Surveys	1452-1
1581	P	Standard on Fire Department Infection Control Program	1581-1
1600	C	Standard on Disaster/Emergency Management and Business Continuity Programs.....	1600-1
1620	C	Recommended Practice for Pre-Incident Planning.....	1620-1
1801	N	Standard on Thermal Imagers for the Fire Service.....	1801-1
1931	P	Standard for Manufacturer's Design of Fire Department Ground Ladders	1931-1
1932	P	Standard on Use, Maintenance, and Service Testing of In-Service Fire Department Ground Ladders	1932-1
1936	P	Standard on Powered Rescue Tools.....	1936-1
1952	N	Standard on Surface Water Operations Protective Clothing and Equipment.....	1952-1
1977	P	Standard on Protective Clothing and Equipment for Wildland Fire Fighting.....	1977-1
2010	P	Standard for Fixed Aerosol Fire-Extinguishing Systems	2010-1

**2009 Fall Revision Cycle ROP
Committees Reporting**

	Type Action	Page No.
Aerosol Extinguishing Technology		
2010 Standard for Fixed Aerosol Fire-Extinguishing Systems	P	2010-1
Aircraft Maintenance Operations		
410 Standard on Aircraft Maintenance	P	410-1
Aircraft Rescue and Fire Fighting		
405 Standard for the Recurring Proficiency of Airport Fire Fighters	P	405-1
408 Standard for Aircraft Hand Portable Fire Extinguishers	P	408-1
422 Guide for Aircraft Accident/Incident Response Assessment	P	422-1
Airport Facilities		
409 Standard on Aircraft Hangars	P	409-1
423 Standard for Construction and Protection of Aircraft Engine Test Facilities	P	423-1
Building Systems		
900 Building Energy Code	P	900-1
Chimneys, Fireplaces, and Venting Systems for Heat-Producing Appliances		
211 Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances	P	211-1
Cultural Resources		
914 Code for Fire Protection of Historic Structures	P	914-1
Electric Generating Plants		
850 Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations	P	850-1
851 Recommended Practice for Fire Protection for Hydroelectric Generating Plants	P	851-1
853 Standard for the Installation of Stationary Fuel Cell Power Systems	P	853-1
Electrical Equipment Maintenance		
70B Recommended Practice for Electrical Equipment Maintenance	P	70B-1
Emergency Management and Business Continuity		
1600 Standard on Disaster/Emergency Management and Business Continuity Programs	C	1600-1
Emergency Service Organization Risk Management		
1201 Standard for Providing Emergency Services to the Public	C	1201-1
1250 Recommended Practice in Emergency Service Organization Risk Management	P	1250-1
Explosives		
495 Explosive Materials Code	P	495-1
498 Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives	R	498-1
Fire and Emergency Services Protective Clothing and Equipment		
Electronic Safety Equipment		
1801 Standard on Thermal Imagers for the Fire Service	N	1801-1
Special Operations Protective Clothing and Equipment		
1952 Standard on Surface Water Operations Protective Clothing and Equipment	N	1952-1
Wildland Fire Fighting Protective Clothing and Equipment		
1977 Standard on Protective Clothing and Equipment for Wildland Fire Fighting	P	1977-1
Fire Department Ground Ladders		
1931 Standard for Manufacturer's Design of Fire Department Ground Ladders	P	1931-1
1932 Standard on Use, Maintenance, and Service Testing of In-Service Fire Department Ground Ladders	P	1932-1
Fire Department Rescue Tools		
1936 Standard on Powered Rescue Tools	P	1936-1

Fire Protection for Nuclear Facilities				
804	Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants	P		804-1
805	Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants	P		805-1
806	Performance-Based Standard for Fire Protection for Advanced Nuclear Reactor Electric Generating Plants	N		806-1
Fire Risk Assessment Methods				
551	Guide for the Evaluation of Fire Risk Assessments	P		551-1
Fire Service Occupational Safety and Health				
1581	Standard on Fire Department Infection Control Program	P		1581-1
Fire Service Training				
13E	Recommended Practice for Fire Department Operations in Properties Protected by Sprinkler and Standpipe Systems	P		13E-1
1407	Standard for Fire Service Rapid Intervention Crews	N		1407-1
1410	Standard on Training for Initial Emergency Scene Operations	P		1410-1
1452	Guide for Training Fire Service Personnel to Conduct Dwelling Fire Safety Surveys	P		1452-1
Fire Tests				
255	Standard Method of Test of Surface Burning Characteristics of Building Materials	W		255-1
276	Standard Method of Fire Test for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Components	N		276-1
701	Standard Methods of Fire Tests for Flame Propagation of Textiles and Films	P		701-1
Foam				
11	Standard for Low-, Medium-, and High-Expansion Foam	P		11-1
Forest and Rural Fire Protection				
1150	Standard on Foam Chemicals for Fires in Class A Fuels	P		1150-1
Handling and Conveying of Dusts, Vapors, and Gases				
91	Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids	P		91-1
Industrial Trucks				
505	Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operations	P		505-1
Internal Combustion Engines				
37	Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines	P		37-1
Laboratories Using Chemicals				
45	Standard on Fire Protection for Laboratories Using Chemicals	P		45-1
Loss Prevention Procedures and Practices				
600	Standard on Industrial Fire Brigades	R		600-1
601	Standard for Security Services in Fire Loss Prevention	R		601-1
Mining Facilities				
120	Standard for Fire Prevention and Control in Coal Mines	P		120-1
122	Standard for Fire Prevention and Control in Metal/Nonmetal Mining and Metal Mineral Processing Facilities	P		122-1
Oxygen-Enriched Atmospheres				
53	Recommended Practice on Materials, Equipment, and Systems Used in Oxygen-Enriched Atmospheres	P		53-1
Portable Fire Extinguishers				
10	Standard for Portable Fire Extinguishers	P		10-1

Pre-Incident Planning			
1620	Recommended Practice for Pre-Incident Planning	C	1620-1
Professional Qualifications			
Fire Fighter Professional Qualifications			
1003	Standard for Airport Fire Fighter Professional Qualifications	P	1003-1
Public Fire Educator Professional Qualifications			
1035	Standard for Professional Qualifications for Public Fire and Life Safety Educator	P	1035-1
Smoke Management Systems			
204	Standard for Smoke and Heat Venting	P	204-1
Standpipes			
14	Standard for the Installation of Standpipe and Hose Systems	P	14-1
Subterranean Spaces			
520	Standard on Subterranean Spaces	P	520-1
Tank Leakage and Repair Safeguards			
326	Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair	P	326-1
329	Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases	P	329-1
Water Additives for Fire Control and Vapor Mitigation			
18	Standard on Wetting Agents	P	18-1
Water-Cooling Towers			
214	Standard on Water-Cooling Towers	P	214-1
Water Mist Fire Suppression Systems			
750	Standard on Water Mist Fire Protection Systems	P	750-1

Key to Proposal Headings

The first line of every proposal includes the following information:

Document No.	Proposal No.	Log No.	Paragraph Reference	Committee Action
101	6	38	3.4	Accept

Example: 101-6 Log #38
(3.4)

Final Action: Accept

TYPES OF ACTION

P Partial Revision **C** Complete Revision **N** New Document **R** Reconfirmation **W** Withdrawal

The following classifications apply to Committee members and represent their principal interest in the activity of the Committee.

1. **M** Manufacturer: A representative of a maker or marketer of a product, assembly, or system, or portion thereof, that is affected by the standard.
2. **U** User: A representative of an entity that is subject to the provisions of the standard or that voluntarily uses the standard.
3. **IM** Installer/Maintainer: A representative of an entity that is in the business of installing or maintaining a product, assembly, or system affected by the standard.
4. **L** Labor: A labor representative or employee concerned with safety in the workplace.
5. **RT** Applied Research/Testing Laboratory: A representative of an independent testing laboratory or independent applied research organization that promulgates and/or enforces standards.
6. **E** Enforcing Authority: A representative of an agency or an organization that promulgates and/or enforces standards.
7. **I** Insurance: A representative of an insurance company, broker, agent, bureau, or inspection agency.
8. **C** Consumer: A person who is or represents the ultimate purchaser of a product, system, or service affected by the standard, but who is not included in (2).
9. **SE** Special Expert: A person not representing (1) through (8) and who has special expertise in the scope of the standard or portion thereof.

NOTE 1: "Standard" connotes code, standard, recommended practice, or guide.

NOTE 2: A representative includes an employee.

NOTE 3: While these classifications will be used by the Standards Council to achieve a balance for Technical Committees, the Standards Council may determine that new classifications of member or unique interests need representation in order to foster the best possible Committee deliberations on any project. In this connection, the Standards Council may make such appointments as it deems appropriate in the public interest, such as the classification of "Utilities" in the National Electrical Code Committee.

NOTE 4: Representatives of subsidiaries of any group are generally considered to have the same classification as the parent organization.

**FORM FOR COMMENTS ON NFPA REPORT ON PROPOSALS
2009 FALL REVISION CYCLE
FINAL DATE FOR RECEIPT OF COMMENTS: 5:00 pm EST, March 6, 2009**

For further information on the standards-making process, please contact the Codes and Standards Administration at 617-984-7249 or visit www.nfpa.org/codes.

For technical assistance, please call NFPA at 1-800-344-3555.

FOR OFFICE USE ONLY

Log #: _____

Date Rec'd: _____

Please indicate in which format you wish to receive your ROP/ROC electronic paper download
(Note: If choosing the download option, you must view the ROP/ROC from our website; no copy will be sent to you.)

Date 8/1/200X Name John B. Smith Tel. No. 253-555-1234

Company _____ Email _____

Street Address 9 Seattle St. City Tacoma State WA Zip 98402

***If you wish to receive a hard copy, a street address MUST be provided. Deliveries cannot be made to PO boxes.

Please indicate organization represented (if any) Fire Marshals Assn. of North America

1. (a) NFPA Document Title National Fire Alarm Code NFPA No. & Year NFPA 72, 200X ed.

(b) Section/Paragraph 4.4.1.1

2. Comment on Proposal No. (from ROP): 72-7

3. Comment Recommends (check one): new text revised text deleted text

4. Comment (include proposed new or revised wording, or identification of wording to be deleted): [Note: Proposed text should be in legislative format; i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (~~deleted wording~~).]

Delete exception.

5. **Statement of Problem and Substantiation for Comment:** (Note: State the problem that would be resolved by your recommendation; give the specific reason for your Comment, including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.)

A properly installed and maintained system should be free of ground faults. The occurrence of one or more ground faults should be required to cause a 'trouble' signal because it indicates a condition that could contribute to future malfunction of the system. Ground fault protection has been widely available on these systems for years and its cost is negligible. Requiring it on all systems will promote better installations, maintenance and reliability.

6. Copyright Assignment

(a) I am the author of the text or other material (such as illustrations, graphs) proposed in this Comment.

(b) Some or all of the text or other material proposed in this Comment was not authored by me. Its source is as follows (please identify which material and provide complete information on its source):

I agree that any material that I author, either individually or with others, in connection with work performed by an NFPA Technical Committee shall be considered to be works made for hire for the NFPA. To the extent that I retain any rights in copyright as to such material, or as to any other material authored by me that I submit for the use of an NFPA Technical Committee in the drafting of an NFPA code, standard, or other NFPA document, I hereby grant and assign all and full rights in copyright to the NFPA. I further agree and acknowledge that I acquire no rights in any publication of the NFPA and that copyright and all rights in materials produced by NFPA Technical Committees are owned by the NFPA and that the NFPA may register copyright in its own name.

Signature (Required) _____

PLEASE USE SEPARATE FORM FOR EACH COMMENT • email: proposals_comments@nfpa.org • NFPA Fax: (617) 770-3500
Mail to: Secretary, Standards Council, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471

**FORM FOR COMMENTS ON NFPA REPORT ON PROPOSALS
2009 FALL REVISION CYCLE
FINAL DATE FOR RECEIPT OF COMMENTS: 5:00 pm EST, March 6, 2009**

For further information on the standards-making process, please contact the Codes and Standards Administration at 617-984-7249 or visit www.nfpa.org/codes.

For technical assistance, please call NFPA at 1-800-344-3555.

FOR OFFICE USE ONLY

Log #: _____

Date Rec'd: _____

Please indicate in which format you wish to receive your ROP/ROC electronic paper download
(Note: If choosing the download option, you must view the ROP/ROC from our website; no copy will be sent to you.)

Date _____ Name _____ Tel. No. _____

Company _____ Email _____

Street Address _____ City _____ State _____ Zip _____

***If you wish to receive a hard copy, a street address **MUST** be provided. Deliveries cannot be made to PO boxes.

Please indicate organization represented (if any) _____

1. (a) NFPA Document Title _____ NFPA No. & Year _____

(b) Section/Paragraph _____

2. Comment on Proposal No. (from ROP): _____

3. Comment Recommends (check one): new text revised text deleted text

4. Comment (include proposed new or revised wording, or identification of wording to be deleted): [Note: Proposed text should be in legislative format; i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (~~deleted wording~~).]

5. **Statement of Problem and Substantiation for Comment:** (Note: State the problem that would be resolved by your recommendation; give the specific reason for your Comment, including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.)

6. Copyright Assignment

(a) I am the author of the text or other material (such as illustrations, graphs) proposed in this Comment.

(b) Some or all of the text or other material proposed in this Comment was not authored by me. Its source is as follows (please identify which material and provide complete information on its source):

I agree that any material that I author, either individually or with others, in connection with work performed by an NFPA Technical Committee shall be considered to be works made for hire for the NFPA. To the extent that I retain any rights in copyright as to such material, or as to any other material authored by me that I submit for the use of an NFPA Technical Committee in the drafting of an NFPA code, standard, or other NFPA document, I hereby grant and assign all and full rights in copyright to the NFPA. I further agree and acknowledge that I acquire no rights in any publication of the NFPA and that copyright and all rights in materials produced by NFPA Technical Committees are owned by the NFPA and that the NFPA may register copyright in its own name.

Signature (Required) _____

**PLEASE USE SEPARATE FORM FOR EACH COMMENT • email: proposals_comments@nfpa.org • NFPA Fax: (617) 770-3500
Mail to: Secretary, Standards Council, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471**

10/31/2008

Sequence of Events Leading to Issuance of an NFPA Committee Document

Step 1 Call for Proposals

▼ Proposed new document or new edition of an existing document is entered into one of two yearly revision cycles, and a Call for Proposals is published.

Step 2 Report on Proposals (ROP)

▼ Committee meets to act on Proposals, to develop its own Proposals, and to prepare its Report.

▼ Committee votes by written ballot on Proposals. If two-thirds approve, Report goes forward. Lacking two-thirds approval, Report returns to Committee.

▼ Report on Proposals (ROP) is published for public review and comment.

Step 3 Report on Comments (ROC)

▼ Committee meets to act on Public Comments to develop its own Comments, and to prepare its report.

▼ Committee votes by written ballot on Comments. If two-thirds approve, Report goes forward. Lacking two-thirds approval, Report returns to Committee.

▼ Report on Comments (ROC) is published for public review.

Step 4 Technical Committee Report Session

▼ "*Notices of intent to make a motion*" are filed, are reviewed, and valid motions are certified for presentation at the Technical Committee Report Session. ("Consent Documents" that have no certified motions bypass the Technical Committee Report Session and proceed to the Standards Council for issuance.)

▼ NFPA membership meets each June at the Annual Meeting Technical Committee Report Session and acts on Technical Committee Reports (ROP and ROC) for documents with "certified amending motions."

▼ Committee(s) vote on any amendments to Report approved at NFPA Annual Membership Meeting.

Step 5 Standards Council Issuance

▼ Notification of intent to file an appeal to the Standards Council on Association action must be filed within 20 days of the NFPA Annual Membership Meeting.

▼ Standards Council decides, based on all evidence, whether or not to issue document or to take other action, including hearing any appeals.

The Technical Committee Report Session of the NFPA Annual Meeting

The process of public input and review does not end with the publication of the ROP and ROC. Following the completion of the Proposal and Comment periods, there is yet a further opportunity for debate and discussion through the Technical Committee Report Sessions that take place at the NFPA Annual Meeting.

The Technical Committee Report Session provides an opportunity for the final Technical Committee Report (i.e., the ROP and ROC) on each proposed new or revised code or standard to be presented to the NFPA membership for the debate and consideration of motions to amend the Report. The specific rules for the types of motions that can be made and who can make them are set forth in NFPA's rules, which should always be consulted by those wishing to bring an issue before the membership at a Technical Committee Report Session. The following presents some of the main features of how a Report is handled.

What Amending Motions Are Allowed. The Technical Committee Reports contain many Proposals and Comments that the Technical Committee has rejected or revised in whole or in part. Actions of the Technical Committee published in the ROP may also eventually be rejected or revised by the Technical Committee during the development of its ROC. The motions allowed by NFPA rules provide the opportunity to propose amendments to the text of a proposed code or standard based on these published Proposals, Comments, and Committee actions. Thus, the list of allowable motions include motions to accept Proposals and Comments in whole or in part as submitted or as modified by a Technical Committee action. Motions are also available to reject an accepted Comment in whole or part. In addition, Motions can be made to return an entire Technical Committee Report or a portion of the Report to the Technical Committee for further study.

The NFPA Annual Meeting, also known as the NFPA World Safety Conference & Exposition®, takes place in June of each year. A second Fall membership meeting was discontinued in 2004, so the NFPA Technical Committee Report Session now runs once each year at the Annual Meeting in June.

Who Can Make Amending Motions. NFPA rules also define those authorized to make amending motions. In many cases, the maker of the motion is limited by NFPA rules to the original submitter of the Proposal or Comment or his or her duly authorized representative. In other cases, such as a Motion to Reject an accepted Comment, or to Return a Technical Committee Report or a portion of a Technical Committee Report for Further Study, anyone can make these motions. For a complete explanation, NFPA rules should be consulted.

The Filing of a Notice of Intent to Make a Motion. Before making an allowable motion at a Technical Report Session, the intended maker of the motion must file, in advance of the session, and within the published deadline, a Notice of Intent to Make a Motion. A Motions Committee appointed by the Standards Council then reviews all notices and certifies all amending motions that are proper. The Motions Committee can also, in consultation with the makers of the motions, clarify the intent of the motions and, in certain circumstances, combine motions that are dependent on each other together so that they can be made in one single motion. A Motions Committee report is then made available in advance of the meeting listing all certified motions. Only these Certified Amending Motions, together with certain allowable Follow-Up Motions (that is, motions that have become necessary as a result of previous successful amending motions) will be allowed at the Technical Committee Report Session.

Consent Documents. Often there are codes and standards up for consideration by the membership that will be noncontroversial and no proper Notices of Intent to Make a Motion will be filed. These "Consent Documents" will bypass the Technical Committee Report Session and head straight to the Standards Council for issuance. The remaining Documents are then forwarded to the Technical Committee Report Session for consideration of the NFPA membership.

Action on Motions at the Technical Committee Report Session. In order to actually make a Certified Amending Motion at the Technical Committee Report Session, the maker of the motion must sign in at least an hour before the session begins. In this way a final list of motions can be set in advance of the session. At the session, each proposed document up for consideration is presented by a motion to adopt the Technical Committee Report on the document. Following each such motion, the presiding officer in charge of the session opens the floor to motions on the document from the final list of Certified Amending Motions followed by any permissible Follow-Up Motions. Debate and voting on each motion proceeds in accordance with NFPA rules. NFPA membership is not required in order to make or speak to a motion, but voting is limited to NFPA members who have joined at least 180 days prior to the session and have registered for the meeting. At the close of debate on each motion, voting takes place, and the motion requires a majority vote to carry. In order to amend a Technical Committee Report, successful amending motions must be confirmed by the responsible Technical Committee, which conducts a written ballot on all successful amending motions following the meeting and prior to the Document being forwarded to the Standards Council for issuance.

Standards Council Issuance

One of the primary responsibilities of the NFPA Standards Council, as the overseer of the NFPA codes and standards development process, is to act as the official issuer of all NFPA codes and standards. When it convenes to issue NFPA documents, it also hears any appeals related to the document. Appeals are an important part of assuring that all NFPA rules have been followed and that due process and fairness have been upheld throughout the codes and standards development process. The Council considers appeals both in writing and through the conduct of hearings at which all interested parties can participate. It decides appeals based on the entire record of the process as well as all submissions on the appeal. After deciding all appeals related to a document before it, the Council, if appropriate, proceeds to issue the document as an official NFPA code or standard. Subject only to limited review by the NFPA Board of Directors, the decision of the Standards Council is final, and the new NFPA code or standard becomes effective twenty days after Standards Council issuance.

Report of the Committee on

Standpipes

Thomas C. Brown, *Chair*

The RJA Group, Inc., MD [SE]

Richard W. Bonds, Ductile Iron Pipe Research Association, AL [M]
Lisa Marie Bossert, Schirmer Engineering Corporation, NC [I]
Marinus Both, Western States Fire Protection Company, NV [IM]
Randal G. Brown, Randal Brown & Associates, Ltd., Canada [SE]
Larry Buckett, Vipond Fire Protection, Canada [IM]
 Rep. Canadian Automatic Sprinkler Association
Brian G. Conway, Great Lakes Plumbing & Heating Company, IL [IM]
 Rep. Illinois Fire Prevention Association
Phillip J. Ford, Liberty Mutual Property, PA [I]
 Rep. Property Casualty Insurers Association of America
Stephen G. Jones, Road Sprinkler Fitters Local Union 669, CO [L]
 Rep. United Assn. of Journeymen & Apprentices of the Plumbing & Pipe Fitting Industry
Thomas H. Jutras, Engineering Planning & Management, Inc., MA [IM]
 Rep. New England Association of Fire Protection System Designers
Edwin A. Kotak, Jr., Robert W. Sullivan, Inc., MA [SE]
Richard W. Kozel, Livingston Fire Protection, Inc., MD [IM]
George E. Laverick, Underwriters Laboratories Inc., IL [RT]
Stephen M. Leyton, Protection Design and Consulting, CA [M]
 Rep. American Fire Sprinkler Association
Kevin D. Maughan, Tyco Fire Suppression & Building Products, RI [M]
Maurice M. Pilette, Mechanical Designs Ltd., MA [SE]
Rich Richardson, Seattle Fire Department, WA [E]
Sam P. Salwan, Environmental Systems Design, Inc., IL [SE]
Peter T. Schwab, Wayne Automatic Fire Sprinklers, Inc., FL [IM]
Bruce W. Silk, Boca Raton Fire Department, FL [E]
Todd A. Stevens, Viking Corporation, NC [M]
Ronald N. Webb, S.A. Comunale Company, Inc., OH [IM]
 Rep. National Fire Sprinkler Association
Jim Widmer, Potter Roemer, LLC, GA [M]
 Rep. Fire Equipment Manufacturers' Association

Alternates

Paul E. Albinger, Jr., Elkhart Brass Manufacturing Company, Inc., IN [M]
 (Alt. to Jim Widmer)
John B. Corso, National Fire Sprinkler Association, Inc., KY [IM]
 (Alt. to Ronald N. Webb)
Gary L. English, Seattle Fire Department, WA [E]
 (Alt. to Rich Richardson)
Cliff Hartford, Tyco Fire & Building Products, NY [M]
 (Alt. to Kevin D. Maughan)
John L. Hulett, Western States Fire Protection Company, CO [IM]
 (Alt. to Marinus Both)
James Lawrence, HFP Corporation, MA [M]
 (Alt. to Stephen M. Leyton)
Eric Lee, Environmental Systems Design, Inc., IL [SE]
 (Alt. to Sam P. Salwan)
Terence A. Manning, Rolf Jensen & Associates, AZ [SE]
 (Alt. to Thomas C. Brown)
Matthew Osburn, Canadian Automatic Sprinkler Association, Canada [IM]
 (Alt. to Larry Buckett)
James W. Nolan, James W. Nolan Company, IL [SE]
 (Member Emeritus)

Staff Liaison: **David R. Hague**

Committee Scope: This Committee shall have primary responsibility for documents on the installation of standpipes, hose systems in buildings and structures.

This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the front of this book.

The Report of the Technical Committee on **Standpipes** is presented for adoption.

This Report was prepared by the **Technical Committee on Standpipes** and proposes for adoption, amendments to NFPA 14, **Standard for the Installation of Standpipe and Hose Systems**, 2007 edition. NFPA 14-2007 is published in Volume 2 of the 2008 National Fire Codes and in separate pamphlet form.

This Report has been submitted to letter ballot of the **Technical Committee on Standpipes**, which consists of 23 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

14-1 Log #CP10 **Final Action: Accept**
(Entire Document)

Submitter: Technical Committee on Standpipes,
Recommendation: Review entire document to: 1) Update any extracted material by preparing separate proposals to do so, and 2) review and update references to other organizations documents, by preparing proposal(s) as required.
Substantiation: To conform to the NFPA Regulations Governing Committee Projects.
Committee Meeting Action: Accept
Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
 ALBINGER, JR., P.: As I was unable to attend the meeting I am abstaining from voting.

14-2 Log #CP11 **Final Action: Accept**
(Entire Document)

Submitter: Technical Committee on Standpipes,
Recommendation: Delete reference to soldered joints throughout the standard.
Substantiation: The committee is concerned that the use of soldered joints in areas that are not sprinklered (such as stairwells) or in cases where the sprinkler system is not operable, are not provided with adequate protection for the soldered joint. It is not the intent to prohibit the use of brazed joints.
Committee Meeting Action: Accept
Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
 ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-3 Log #17 **Final Action: Reject**
(1.1.2 (New))

Submitter: Jim Widmer, Potter Roemer, LLC
Recommendation: Add new text as follows:
 1.1.2 The installation of standpipes and hose systems is independent of any other fixed protection equipment installed in a building.
Substantiation: The scope of this standard by definition should focus on its use by fire service personnel and trained personnel using occupant hose in Class II and Class III systems. Although other fire protection systems may be attached to the standpipe system, we should not lose site of the intended purpose of this standard.
Committee Meeting Action: Reject
Committee Statement: The scope of the document is already adequately addressed in Section 1.1.1. A standpipe is not always an independent system.
Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
 ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-4 Log #42 **Final Action: Accept in Principle in Part**
(3.3.x Fire Department (New))

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.
Recommendation: Add new definition for Fire Department:
3.3.X Fire Department. Personnel trained in the use of heavy fire streams and provide their own firefighting equipment and gear.
A.3.3.X The definition of a Fire department could include a public fire brigade or an industrial fire brigade.
 Revise the definition of a Class I System as follows:
3.3.15.1 A system that provides 2½ in. hose connections to supply water for use by fire departments and those trained in handling heavy fire streams.
Substantiation: This will clarify that a Class I Standpipe System does not have hose and is only used by people who will bring their own firefighting equipment. This will help clarify that a manual system is okay for use in a Class I Standpipe System which does not need water until the fire department arrives.
Committee Meeting Action: Accept in Principle in Part
 Extract the preferred definition of fire department from NFPA 1002 as follows:
 3.3.x Fire Department. An organization providing rescue, fire suppression, and related activities, including any public, governmental, private, industrial, or military organization engaging in this type of activity. [NFPA 1002]
 Accept the proposed language for 3.3.15.1.
 Strike same wording (and those handling heavy streams) in 3.3.15.3.

Committee Statement: Committee action uses the preferred definition for fire department and meets the submitters intent.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-5 Log #55 **Final Action: Accept**
(3.3.2.1.1 Fire Department Connection)

Submitter: Roland J. Huggins, American Fire Sprinkler Association, Inc.

Recommendation: Revise text to read as follows:

Fire Department Connection. For automatic standpipe systems, a connection through which the fire department can pump the secondary water supply to an automatic standpipe system at the required system demand. Supplemental water may also be provided into the sprinkler system, standpipe, or other system furnishing water for fire extinguishment to supplement existing water supplies.

Substantiation: The definition conflicts with chap. 7. A supplemental water supply does not equal the system demand as indicated by Webster's definition and explicitly stated in NFPA 13: A.8.17.2.3. The fire department connection (FDC) is providing supplemental water for the sprinkler system. For automatic standpipes, the FDC must independently meet the system demand as required by 14:7.7.2.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-6 Log #54 **Final Action: Accept**
(3.3.3.2 Horizontal Exit)

Submitter: Glossary of Terms Technical Advisory Committee,

Recommendation: Revise text as follows:

3.3.3.2 Horizontal Exit. A way of passage from one building to an area of refuge in another building on approximately the same level, or a way of passage through or around a fire barrier to an area of refuge on approximately the same level in the same building that affords safety from fire and smoke originating from the area of incidence and areas communicating therewith.

Substantiation: The proposed definition is identical to the NFPA preferred definition from NFPA 101, Life Safety Code.

This proposal is submitted in accordance with the scope of the NFPA Glossary of Terms Advisory Committee that the Committee is responsible for "Submitting proposals and comments to NFPA documents to generate consistent definitions and minimize the number of duplicate definitions."

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-7 Log #31 **Final Action: Reject**
(3.3.4.1 Cryo-fluid Delivery Pipe System (New))

Submitter: Denyse DuBrucq, AirWars Defense

Recommendation: Add new text as follows:

Cryo-fluid delivery pipe system. A hose system with traps to insure single delivery gas retention for cryogenic temperature liquids as Liquid Nitrogen.

Substantiation: New technology (see Airwars Defense) allows purging and fire control with gas from evaporation of cryogenic liquids. These liquids can be available from fire departments, stored onsite, or from cryo liquid vendors.

Committee Meeting Action: Reject

Committee Statement: Beyond the scope of NFPA 14. Standpipes are considered to be water based systems. See Section 3.3.12.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-8 Log #77 **Final Action: Reject**
(3.3.7 Lateral Piping, 6.1.2.3, and 6.3.3 (New))

Submitter: Larry Keeping, Vipond Fire Protection

Recommendation: Add a new 3.3.7 to provide a definition for "lateral piping" as follows:

3.3.7 A run of pipe, generally in a horizontal plane, supplied by a standpipe to two or more fire hose connections.

Renumber the existing 3.3.6 to 3.3.16 as 3.3.7 to 3.3.17 accordingly.

Revise 6.1.2.3 to read:

Where a standpipe or lateral pipe piping is normally...

Revise 6.3.3 to read:

6.3.3 Listed indicating-type valves shall be provided at the standpipe for controlling branch lines for remote hose stations lateral piping.

Substantiation: The terms "lateral piping" and "lateral pipe" are used in the standard but not defined. This proposal is to standardize the text in the standard to use just one of the two terms and to suggest a definition. Since a "branch line" is defined as piping to "... not more than one hose connection..." , it falls that "lateral piping" must supply two or more.

As per the current 6.3.3 a control valve is required to isolate a "branch line". According to 6.3.7 this control valve must be supervised and according to 7.11.2.2, this valve must have a corresponding drain valve and piping (i.e., a main drain connection) installed downstream. Further, according to 5.5.1 a pressure gauge is also required, adjacent to the drain connection. As a means to isolate just a single hose connection on a "branch line" this is an expensive and impractical measure, but it would be totally appropriate for isolation of two or more hose connections in accordance with the proposed new "lateral piping" definition.

Committee Meeting Action: Reject

Committee Statement: It is the committees intent that lateral piping serving two or more hose connections shall be treated as a standpipe.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-9 Log #65 **Final Action: Accept in Principle**
(3.3.11 Standpipe and 3.3.11.1 Horizontal Standpipe (New))

Submitter: Stephen M. Leyton, Protection Design and Consulting

Recommendation: Revise text to read as follows:

~~3.3.11 Standpipe. The vertical portion of the system piping that delivers the water supply for hose connections, and sprinklers on combined systems, vertically from floor to floor. The term standpipe can also refer to the horizontal portion of the system piping that delivers the water supply for two or more hose connections, and sprinklers on combined systems, on a single level.~~

3.3.11.1 Horizontal Standpipe. The horizontal portion of the system piping that delivers the water supply for two or more hose connections, and sprinklers on combined systems, on a single level.

Substantiation: The term "Horizontal Standpipe" is used elsewhere in the standard. To substantiate the concept of a horizontal standpipe, and in accordance with the Manual of Style, breaking out a separate definition is appropriate.

Committee Meeting Action: Accept in Principle

In addition to accepting the proposed changes, revise the definition as shown:

~~3.3.11 Standpipe. The vertical portion of the system piping that delivers the water supply for hose connections, and sprinklers on combined systems, vertically from floor to floor.~~

Committee Statement: Meets the intent of the submitter.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-10 Log #CP15 **Final Action: Accept**
(3.3.12.1 Automatic Wet Standpipe System)

Submitter: Technical Committee on Standpipes,

Recommendation: Revise/reorganize/renumber the following definitions:

3.3.12.1 Automatic Wet Standpipe System. A standpipe system containing water at all times that is attached to a water supply capable of supplying the system demand at all times and that requires no action other than opening a hose valve to provide water at hose connections.

3.3.12.2 Manual Wet Standpipe System. A standpipe system containing water at all times, that relies exclusively on the fire department connection to supply the system demand.

3.3.12.3 Automatic Dry Standpipe System. A standpipe system permanently attached to a water supply capable of supplying the system demand at all times, containing air or nitrogen under pressure, the release of which (as from opening

a hose valve) opens a dry pipe valve to allow water to flow into the piping system and out of the opened hose valve.

3.3.12.4 Semiautomatic Dry Standpipe System. A standpipe system permanently attached to a water supply capable of supplying the system demand at all times, arranged through the use of a device such as a deluge valve, and that requires activation of a remote control device to provide water at hose connections.

3.3.12.5 Manual Dry Standpipe System. A standpipe system with no permanently attached water supply, that relies exclusively on the fire department connection to supply the system demand.

3.3.X Combined System. A standpipe system that supplies both hose connections and automatic sprinklers.

Move 3.3.9 to 3.3.8.1 (subordinate definition to 3.3.8)
Move 3.3.16.3 to 3.3.8.2 (subordinate definition to 3.3.8)
Move 3.3.16.4 to 3.3.8.3 (subordinate definition to 3.3.8)

Rename 3.3.15 to System Classes

Delete the following sections:

5.2.1.1 (Already addressed in 9.2)

5.2.2.1 (Doesn't speak to system demand; definition)

5.2.2 (Isn't necessary)

5.2.3 (Definition)

5.2.3.2 (Already addressed in 9.2)

5.2.4 (Definitions)

A.5.2.4 (Isn't necessary)

5.2.5 (Definitions)

A.5.2.5 (Isn't necessary)

Substantiation: Correlates chapter 3 & 5.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-11 Log #45 **Final Action: Accept in Principle**
(3.3.15.3 Standpipe Systems)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.
Recommendation: Delete Class III Standpipe Systems from the entire document.

Substantiation: A Class III Standpipe System is impossible to design with a single hose outlet due to the fact that 100 psi is the maximum pressure for a Class II Standpipe System and the minimum pressure for a Class I Standpipe System. In addition, the outlets have to be physically located in different places to meet the distance requirements of 7.3.2.3 and 7.3.3.1. Therefore two standpipe systems are required to meet the requirements for both systems. If a Class I system is needed it can be installed. If a Class II system is needed it can be installed separately. If both are needed then both a Class I and II can be specified.

Committee Meeting Action: Accept in Principle

Revise section 7.3.4.1.2 to read as follows:

7.3.4.1.2 For Class III systems installed without hose, the water supply flow, pressure and, duration requirements shall be as specified for Class I systems.

Committee Statement: To delete class III standpipes would conflict with the IBC Chapter 9. The submitters concerns regarding pressure requirements are already addressed in 7.3.4.1.2.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-12 Log #53 **Final Action: Accept**
(3.3.16.1 Control Valve)

Submitter: Glossary of Terms Technical Advisory Committee,

Recommendation: Revise text as follows:

3.3.16.1 Control Valve. A valve controlling flow to water-based fire protection systems. Control valves do not include hose valves, inspector's test valves, drain valves, trim valves for dry pipe, preaction and deluge valves, check valves, or relief valves.

Substantiation: The proposed definition is identical to the NFPA preferred definition from NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.

This proposal is submitted in accordance with the scope of the NFPA Glossary of Terms Advisory Committee that the Committee is responsible for "Submitting proposals and comments to NFPA documents to generate consistent definitions and minimize the number of duplicate definitions."

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-13 Log #CP18 **Final Action: Accept**
(Chapter 4, 5, 6 & 7)

Submitter: Technical Committee on Standpipes,

Recommendation: Revise as follows:

Relocate all component requirements from Chapter 5, 6 & 7 to Chapter 4.

Substantiation: Places all system component requirements to Chapter 4.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-14 Log #32 **Final Action: Reject**
(4.3.4.2 (New))

Submitter: Denyse DuBrucq, AirWars Defense

Recommendation: Add new text as follows:

Couplings and unions for cryo-piping requires liquid ? equivalent to 1/250th the pipe segment length it feeds to prevent moisture invasion and must have anti-back-flow valve.

Substantiation: Pipe purging keeps moisture out of cryogenic piping to insure clear passage when/as needed.

Committee Meeting Action: Reject

Committee Statement: Beyond the scope of the standard.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-15 Log #78 **Final Action: Accept**
(4.4.2.1.1, 4.4.2.2.1, 4.4.2.2.2, and 4.4.2.2.5)

Submitter: Larry Keeping, Vipond Fire Protection

Recommendation: Revise 4.4.2.1.1, 4.4.2.2.1, 4.4.2.2.2 and 4.4.2.2.5 as follows:

4.4.2.1.1 Welding shall be permitted as a means of joining sprinkler standpipe piping in accordance with 4.4.2.2 through 4.4.2.6.

4.4.2.2.1 When welding sprinkler pipe standpipe piping, the pipe shall be shop-welded unless the requirements of 4.4.2.2 or 4.4.2.6 are met.

4.4.2.2.2 Where the design specifications require any part of the piping system to be welded in place, welding of sprinkler standpipe piping shall be permitted where the welding process is performed in accordance with NFPA 51B, Standard for Fire Prevention During Welding, Cutting, and Other Hot Work, and the mechanical fittings required by 8.16.3 and 8.15.21 of NFPA 13 are provided.

4.4.2.2.5 Torch cutting and welding shall not be permitted as a means of modifying or repairing sprinkler standpipe systems.

Substantiation: The proposed revisions to the text from "sprinkler" to "standpipe" are editorial. When the welding requirements were adopted from NFPA 13 during the previous revision cycle, the sprinkler references were inadvertently retained.

The last portion of text from 4.4.2.2.2 is proposed to be deleted, because the references are inappropriate. NFPA 14 does not contain requirements comparable to the NFPA 13 specifications for flushing connections or system subdivision.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-16 Log #79 **Final Action: Reject**
(4.4.4.3, 4.4.4.4, A.4.5.2, and A.4.4.2.2)

Submitter: Larry Keeping, Vipond Fire Protection

Recommendation: Revise 4.4.4.3, 4.4.4.4, 4.4.5.2 and A.4.4.2.2 as follows:

4.4.4.3 Solder joints shall be permitted for exposed wet pipe standpipe systems in buildings equipped with an approved automatic sprinkler system with light hazard occupancies where the temperature classification of the installed sprinklers is of the ordinary- or intermediate-temperature classification.

4.4.4.4 Solder joints shall be permitted for wet pipe standpipe systems in buildings equipped with an approved automatic sprinkler system with light hazard and ordinary hazard (Group 1) occupancies where the piping is concealed, irrespective of sprinkler temperature ratings.

4.4.5.2 Outlet Fittings. Rubber-gasketed outlet fittings that are used on sprinkler standpipe systems shall meet the following requirements:

(I) Be installed....

A.4.4.2.2 Cutting and welding operations account for 4 percent of fires each year in nonresidential properties and 8 percent in industrial and manufacturing properties. In-place welding of sprinkler standpipe piping introduces a significant hazard...

Substantiation: The new text proposed for 4.4.4.3 and 4.4.4.4 is to clarify the intent. When the requirements were adopted from NFPA 13 during the previous revision cycle the words were imported directly, so the intended application on a standpipe system is not clearly defined.

The proposed revision to the text of 4.4.5.2 and A.4.4.2.2 from “sprinkler” to “standpipe” is editorial. When the requirements were adopted from NFPA 13 during the previous revision cycle, the sprinkler references were inadvertently retained.

Committee Meeting Action: **Reject**

Committee Statement: See Committee Action and Statement on Proposal 14-2 (Log #CP11).

Number Eligible to Vote: **23**

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-17 Log #39 **Final Action: Accept**
(4.4.5.1)

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Delete 4.4.5.1 Other joining methods investigated for suitability in automatic sprinkler installations and listed for this service shall be permitted where installed in accordance with their listing limitations, including installation instructions.

Substantiation: Section 1.4 already addresses alternative and equivalencies and the duplicate language is not needed.

Committee Meeting Action: **Accept**

Number Eligible to Vote: **23**

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-18 Log #18 **Final Action: Reject**
(4.6.1.5 (New))

Submitter: Jim Widmer, Potter Roemer, LLC

Recommendation: Add new text as follows:

4.6.1.5 Hose stations installed under conditions where they are subject to physical damage (e.g., from impact, vibration, the environment) shall be enclosed in a listed protective cabinet.

Substantiation: Big box stores, warehouses, and parking garages habitually have problems with exposed hose stations. They are subject to tampering and vandalisms which may render them in operative in a fire incidence. Material handling equipment may collide with hose stations installed in aisle ways leaving them unusable. A listed protective cabinet will protect hose stations from unnecessary treatment.

Committee Meeting Action: **Reject**

Committee Statement: The proposal did not contain enforceable language regarding the type of protection needed or alternative methods. The proposal was worded in such a way as to require protection for each hose station/valve.

Number Eligible to Vote: **23**

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-19 Log #19 **Final Action: Reject**
(4.6.2.1)

Submitter: Jim Widmer, Potter Roemer, LLC

Recommendation: Revise text as follows:

4.6.2.1 Each hose connection provided for use by trained personnel (Class II and Class III systems) shall be equipped with not more than 100 ft (30.5 m) of listed, 1½ in. (40 mm), lined, collapsible or noncollapsible fire hose attached and ready for use regardless of the presence of any other fixed fire protection system.

Substantiation: An installation standard shouldn't restrict an AHJ with regard to standpipe installations. If an AHJ determines that trained people are available to use the standpipes, then an installation standard should not have a restriction disallowing the installation. Furthermore, it is important to clarify that regardless of any other fixed Fire Protection Systems, lengths of Fire Hose exceeding 100' (30M) will not be acceptable.

Committee Meeting Action: **Reject**

Committee Statement: Reference to AHJ approval in 7.3.4.1.

Number Eligible to Vote: **23**

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-20 Log #20 **Final Action: Accept in Principle**
(4.6.3.1)

Submitter: Jim Widmer, Potter Roemer, LLC

Recommendation: Delete text as follows:

4.6.3.1 Each 1½ in. (40 mm) hose station provided with 1½ in. (40 mm) hose shall be equipped with a listed rack. or approved storage facility.

Substantiation: The term “approved” means acceptable to the authority having jurisdiction. Deleting “approved storage facility” relieves the AHJ of compromising. Products that are appropriate for installation should be listed.

Committee Meeting Action: **Accept in Principle**

Revise text as follows:

4.6.3.1 Each 1½ in. (40 mm) hose station provided with 1½ in. (40 mm) hose shall be equipped with a listed rack. or approved storage method. or approved-storage facility.

Committee Statement: Allows a storage method other than a rack.

Number Eligible to Vote: **23**

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-21 Log #40 **Final Action: Reject**
(4.10 and 6.4.5)

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Revise to read:

4.10 Signs. Signs shall comply with 6.4.5.

Relocate the existing 4.10 to 6.4.5.1 renumber the remaining.

6.4.5.1 Approved signs shall be permanently marked and shall be constructed of weather-resistant materials.

6.4.5.2.2 A sign also shall indicate the system operating pressure required at the inlets to deliver the system demand.

Substantiation: This language better conveys the intent of the section. The system pressure information is important for fire department pump operators in case of system pump failure during an incident and is the correct terminology for the fire service not system demand.

Committee Meeting Action: **Reject**

Committee Statement: Requirements for signs must remain in Section 4.10 as that section applies to all signs required by the standard. The committee believes that inlet pressure information for FDC's should remain in the standard.

Number Eligible to Vote: **23**

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-22 Log #80 **Final Action: Accept in Principle**
(5.1.5 and 5.2.1.1)

Submitter: Larry Keeping, Vipond Fire Protection

Recommendation: Move the existing text of 5.2.1.1 to a new 5.1.5 and revise as follows:

~~5.2.1.1~~ **5.1.5 Water Supply.** The water supply for an automatic wet, an automatic dry or a semiautomatic dry standpipe system shall be capable of supplying the system demand.

Substantiation: The water supply requirements for an automatic dry standpipe system should also be applicable to automatic wet and semiautomatic dry systems, so the text should be revised accordingly and moved to the General section.

Committee Meeting Action: **Accept in Principle**

Committee Statement: See Committee Action and Statement on Proposal 14-10 (Log #CP15).

Number Eligible to Vote: **23**

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-23 Log #CP4 **Final Action: Accept**
(5.2.1.3.3)

Submitter: Technical Committee on Standpipes,
Recommendation: Add a new Section 5.2.1.3.3 to read as follows:
5.2.1.3.3 The use of a listed quick opening device shall be permitted to meet the requirements of Section 5.2.1.3.2.
Substantiation: Quick opening devices are frequently used in standpipe systems, particularly automatic dry systems. The use of such devices should be recognized by the installation standard.
Committee Meeting Action: Accept
Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-24 Log #CP19 **Final Action: Accept**
(5.2.3.1.4)

Submitter: Technical Committee on Standpipes,
Recommendation: Add text as follows:
5.2.3.1.4 All wiring for actuation of semiautomatic systems shall be supervised in accordance with NFPA 72.
Substantiation: Provides for supervision and protection of wiring for semiautomatic systems.
Committee Meeting Action: Accept
Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-25 Log #5 **Final Action: Reject**
(5.2.3.6.2.1.1 (New))

Submitter: Robert Bourke, Northeastern Regional Fire Code Development Committee
Recommendation: Add a new 5.2.3.6.2.1.1 to read:
5.2.3.6.2.1.1 Control Valves shall not be located in a confined space.
Substantiation: Control valves should not be permitted to be installed in areas classified as confined space. Valves located in these areas will not be readily accessible for maintenance, testing, or to shutdown in an emergency. Special precautions are needed to access confined spaces. The proposed text is consistent with NFPA 20 text on pump location.
Committee Meeting Action: Reject
Committee Statement: Currently valves are acceptable in pits and pits are confined spaces. It is not the intent of the committee to limit valve locations to spaces that are accessible.
Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-26 Log #81 **Final Action: Reject**
(5.2.3.8 and 5.2.4.1 (New))

Submitter: Larry Keeping, Vipond Fire Protection
Recommendation: Add a new 5.2.3.8 and a new 5.2.4.1 as follows:
5.2.3.8 A semi-automatic dry standpipe system shall be supervised with air or nitrogen, to provide a means of notification if hose valves have been inadvertently opened or the system piping has been damaged.
5.2.4.1 A manual dry standpipe system shall be supervised with air or nitrogen, to provide a means of notification if hose valves have been inadvertently opened or the system piping has been damaged.
Substantiation: Semi-automatic dry and manual dry standpipe systems are most common in facilities such as parking garages, where it is possible for someone to open multiple hose valves (i.e., vandalism or curiosity) or damage the piping (i.e., vehicular impact). Without providing supervision with air or nitrogen, these problems could remain undiscovered and then the system could prove ineffective at the time of a fire when the fire department connects to it.
Committee Meeting Action: Reject
Committee Statement: The does not share the submitters perception that all system be supervised. The determination of the status of a standpipe system can be determined by the inspection requirements in NFPA 25, where piping cannot be visually inspected, section 6.1.1 already provides for supervision of standpipe systems.

Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-27 Log #33 **Final Action: Reject**
(5.2.6)

Submitter: Denyse DuBrucq, AirWars Defense
Recommendation: Add new text as follows:
Manual cryo-hose system requires Liquid Nitrogen from ? onsite or carried by fire department to facilitate space purging to prevent - for gas leak - or control/end fire.
Substantiation: Places cryo fire fighting fixed systems to allow fire control w/o water or foam damage.
Committee Meeting Action: Reject
Committee Statement: Beyond the scope of this document.
Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-28 Log #21 **Final Action: Accept**
(5.3.2.1)

Submitter: Jim Widmer, Potter Roemer, LLC
Recommendation: Revise text as follows:
5.3.2.1 A Class II standpipe system shall provide 1½ in. (40 mm) hose stations to supply water for use primarily by trained personnel or a hose connection for by the fire department during initial response.
Substantiation: One of the points brought up by fire service personal against hose stations is that they can't rely on the occupant hose. This hose is not intended for use by fire service personnel. This change will clearly separate who uses the rack hose and who attaches their own hose to the connection.
Committee Meeting Action: Accept
Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-29 Log #22 **Final Action: Reject**
(5.3.2.2, 5.3.3.1 and 5.3.4)

Submitter: Jim Widmer, Potter Roemer, LLC
Recommendation: Delete text as follows:
5.3.2.2 A minimum 1 in. (25.4 mm) hose shall be permitted to be used for hose stations in light hazard occupancies where investigated and listed for this service and where approved by the authority having jurisdiction:
-5.3.3.1 A minimum 1 in. (25.4 mm) hose shall be permitted to be used for hose stations in light hazard occupancies where investigated and listed for this service and where approved by the authority having jurisdiction:
-5.3.4 For Class II and Class III standpipe systems, a minimum 1 in. (25.4 mm) hose shall be permitted to be used for hose stations in light hazard occupancies where listed for this service and approved by the authority having jurisdiction.
Substantiation: Since 5.3.2.2 & 5.3.3.1 are basically the same, they can be combined and referenced as a single section. This adds clarity for the AHJ and end-user. New section 5.3.4 accomplishes this without changing the requirements.
Committee Meeting Action: Reject
Committee Statement: The proposed 5.3.4 does not conform to existing numbering. The standard currently addresses the use of 1" hose.
Number Eligible to Vote: 23
Ballot Results: Affirmative: 21 Abstain: 1
Ballot Not Returned: 1 Silk, B.
Explanation of Abstention:
ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-30 Log #23 **Final Action: Reject**
(5.3.3.2)

Submitter: Jim Widmer, Potter Roemer, LLC
Recommendation: Revise text as follows:
5.3.3.2 Where the building is protected throughout by an approved automatic sprinkler system, Class II and Class III hose stations for use by trained personnel shall not be required, conform to section 4.6.2.1. subject to the approval of the authority having jurisdiction, provided that each Class I hose connection is 2½ in. (65 mm) and is equipped with a 2½ in. × 1½ in. (65 mm ×

40 mm) reducer and a cap attached with a chain; Subject to the approval of the authority having jurisdiction the 130 ft (39.7 m) travel distance limitation shall not apply.

Substantiation: The two systems are complimentary and not duplicative. The restrictions in this section are inappropriate. An installation standard shouldn't restrict an AHJ with regard to installation of hose stations. If an AHJ determines that trained people are available to use the hose stations, then an installation standard should not have a restriction disallowing the installation.

Committee Meeting Action: Reject

Committee Statement: See Committee Action and Statement on Proposal 14-19 (Log #19).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-31 Log #12 **Final Action: Reject**
(5.4.2)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Delete text as follows:

Delete section 5.4.2.

Substantiation: Class I standpipe systems are for fire department use by definition. It should not matter to the public whether these connections are fed by a manual system or an automatic one. There is no hose at the outlet. Nobody should be trying to use these connections anyway. The requirement for the sign just adds unnecessary cost to the system and makes it more difficult for owners to comply with the fire code when the signs get lost.

Committee Meeting Action: Reject

Committee Statement: The committee feels that a sign stating that the system is manual is necessary for firefighter safety.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 19 Negative: 2 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

SCHWAB, P.: I agree with the submitter that a sign at every valve is redundant and adds unnecessary cost. If the committee insists on this sign, then they need to specify more information such as color, text size, etc.

WEBB, R.: I feel that a requirement of having these signs at each hose valve is not a life safety issue and is an unnecessary burden & maintenance to the owner of the property. To require these signs on a manual standpipe in an open parking garage just doesn't make sense. Currently we are doing a six level parking garage that has 25 standpipes. So in this case we are now forcing the owner to maintain and keep track of 150 signs. If the concern is with a building having both a manual and automatic standpipe then it should be addressed to this situation and not to a building that solely has only a manual standpipe.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-32 Log #64 **Final Action: Reject**
(5.4.2)

Submitter: Ronald N. Webb, S.A. Comunale Company, Inc.

Recommendation: Delete text as follows:

5.4.2 Manual Standpipe Systems. Where a manual standpipe system is provided, each hose connection shall be provided with a conspicuous sign that reads "MANUAL STANDPIPE FOR FIRE DEPARTMENT USE ONLY."

Substantiation: I believe that this paragraph should be deleted since the Fire Department is the only one who will use these hose valves. So to have the requirement for manual standpipes only and not the other type of standpipes just doesn't make any sense since in both cases there may not be any hose for a building occupant to fight a fire with. Now if there is a hose supplied then maybe there should be a sign. But not for a class 1 - 2 1/2" hose valve. If the Fire Department needs to know that this is a manual standpipe it should be noted at the FDC, not the hose valve.

Committee Meeting Action: Reject

Committee Statement: The committee feels that a sign stating that the system is manual is necessary for firefighter safety.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 20 Negative: 1 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

WEBB, R.: See response to Proposal 14-31 (Log #12).

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-33 Log #82 **Final Action: Accept**
(5.5.1.2, 5.5.1.4, and 5.5.2)

Submitter: Larry Keeping, Vipond Fire Protection

Recommendation: Revise 5.5.1.2, 5.5.1.4 and 5.5.2 as follows:

5.5.1.2 Each gauge shall be controlled by a valve having an arrangement for draining connection shall be equipped with a shutoff valve and provisions for draining.

5.5.1.4 Pressure gauges shall be installed above and below each alarm check valve, dry pipe valve, deluge valve, backflow preventer, or system riser check valve where such devices are present.

5.5.2 Pressure-Regulating Devices.

5.5.2.1 A valved outlet for a pressure gauge shall be installed on the upstream side of every pressure-regulating device.

5.5.2.2 Pressure gauges shall be installed on the upstream and the downstream sides of every pressure-regulating device installed in accordance with 7.2.2(6).

Substantiation: The text of the proposed revision to 5.5.1.2 was taken from NFPA 13 and is suggested as an editorial revision to more clearly state the requirement.

In 5.5.1.4, the gauge requirements for automatic dry and semi-automatic dry system components should also be indicated.

The new text is proposed for 5.5.2 to coordinate the pressure gauge requirements in that section with the gauge locations specified in 7.2.2(6) and illustrated in Figures A.7.2.2(a) and A.7.2.2(b).

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 20 Negative: 1 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

WEBB, R.: To require a gauge at every pressure regulating valve is an unnecessary cost and burden to the property owner. Per NFPA 25 every five years these gauges must be tested and calibrated and from our experience they have to be typically replaced. I have to question why we need all of these gauges. If we are just trying to make it easier for the contractor to perform the flow test every five years on the pressure regulating valve then I think our focus is on the wrong group and it should be on the end user. I agree that a gauge is required somewhere upstream the pressure regulating valve but not at everyone. If the committee feels that just having one at the top of the riser is not sufficient then some other less demanding criteria should be developed. Like one on every other floor or even at a maximum specified distance. Then the static pressure could easily be determined by just taking this distance times .434. Bottom line is that we want to make sure that the pressure coming out of these valves is less than 175 PSI and more than 100 PSI. This is a wide range to hit and by requiring at a gauge on every valve seems to be an over kill.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-34 Log #44 **Final Action: Accept in Principle**
(5.6)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Revise section 5.6.1 as follows:

5.6.1 Where required by the authority having jurisdiction for automatic or semiautomatic systems, listed Except where permitted by (new) 5.6.2. Listed water flow and supervisory alarms shall be provided.

Add a new section 5.6.2 (renumber the existing sections): Water flow alarms and supervisory alarms shall not be required for manual dry standpipe systems. **Substantiation:** It is essential to know when water is flowing in a standpipe system. The exception for manual dry standpipes is appropriate as it recognizes the fire departments use only. The exception does not include manual wet since these types of systems could be part of a combined system and water flow in the riser is important to know (i.e., a hose connection accidentally opened on a lower level). This proposed requirement is especially important for combined sprinkler/standpipe systems, by avoiding a compromised sprinkler system if a hose valve is inadvertently opened.

Committee Meeting Action: Accept in Principle

Revise Section 5.6.1 to read as follows:

5.6.1 Except for manual dry systems, listed water flow and control valve supervision shall be provided for each standpipe system.

Committee Statement: It is not the intent of the committee to require supervision of systems except for waterflow and control valve supervision. meets the intent of the submitter.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-35 Log #72 **Final Action: Reject**
(6.1.2.1)

Submitter: Thomas G. Wellen, American Fire Sprinkler Association, Inc.
Recommendation: Revise text to read as follows:

6.1.2.1* Standpipe system piping shall be protected from fire and mechanical damage.

Substantiation: The main text for this section only includes mechanical damage and the annex material indicates protection from fire damage. Including "fire" in the main text will tie into the annex statement.

A.6.1.2.1 Standpipes should not be placed in unsprinklered areas of combustible construction.

Committee Meeting Action: Reject

Committee Statement: The committee feels that this topic is already adequately addressed in the standard.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-36 Log #56 **Final Action: Accept in Principle**
(6.1.2.2 and 6.1.2.2.1)

Submitter: Roland J. Huggins, American Fire Sprinkler Association, Inc.
Recommendation: Revise text to read as follows:

6.1.2.2 Standpipes, supply mains, and lateral piping supplied by standpipes shall be located in enclosed exit stairways or shall be protected by a degree of fire resistance equal to that required for enclosed exit stairways in the building in which they are located.

6.1.2.2.1 In buildings equipped-protected throughout with an approved automatic sprinkler system, supply mains and lateral piping to 2 ½ in. (65 mm) hose connections shall not be required to be protected.

Substantiation: It seems prudent to protect the supply main in non-sprinklered buildings.

Protected throughout is the standard reference for allowing differences when sprinklers are present.

Committee Meeting Action: Accept in Principle

Revise text to read as follows:

6.1.2.2 Standpipes, feed mains, and lateral piping supplied by standpipes shall be located in enclosed exit stairways or shall be protected by a degree of fire resistance equal to that required for enclosed exit stairways in the building in which they are located.

6.1.2.2.1 In buildings equipped-protected throughout with an approved automatic sprinkler system, feed mains and lateral piping to 2 ½ in. (65 mm) hose connections shall not be required to be protected.

Committee Statement: Feed main versus a supply main is a defined term.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-37 Log #6 **Final Action: Accept**
(6.1.2.5)

Submitter: Robert Bourke, Northeastern Regional Fire Code Development Committee

Recommendation: Delete 6.1.2.5.

~~6.1.2.5 To minimize or prevent pipe breakage where subject to earthquakes, standpipe systems shall be protected in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems.~~

Substantiation: 6.1.2.5 is almost identical to 6.1.2.6 and is not needed. Removes redundant text. Section 6.1.2.6 reads "6.1.2.6 Where standpipe systems are required to be protected against damage from earthquakes, standpipe systems shall be protected in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems."

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-38 Log #73 **Final Action: Accept**
(6.1.2.5)

Submitter: Thomas G. Wellen, American Fire Sprinkler Association, Inc.
Recommendation: Delete the following text:

~~6.1.2.5 To minimize or prevent pipe breakage where subject to earthquakes, standpipe systems shall be protected in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems.~~

Substantiation: 6.1.2.5 and 6.1.2.6 indicate the same requirement and the existing 6.1.2.6 provides the best wording.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-39 Log #26 **Final Action: Reject**
(6.3.5.3 (New))

Submitter: William M. Connolly, State of New Jersey

Recommendation: Add new text as follows:

6.3.5.3 In buildings greater than 128 meters (420 feet) in height, manual and remote control valves shall be provided on all riser piping supplying automatic sprinkler systems at every third floor of the building served. This requirement is independent of sprinkler floor control valves required by NFPA 13.

Substantiation: This proposal is one of five proposals being submitted by the State of New Jersey to provide increased reliability of fire suppression systems in very tall buildings, those that exceed 420 feet in height, by requiring control valves on every third floor.

Recommendation 12 of the NIST WTC report calls for the redundancy of active fire suppression systems to be increased to accommodate the greater risks associated with increasing building height and population. This proposal, in addition to the others motioned above, seeks to do that by providing for isolation such that the system will function as intended if one of those feeds is damaged or otherwise interrupted. The installation of manual and remote control valves are necessary to isolate a damaged portion of the system.

Committee Meeting Action: Reject

Committee Statement: Proposal pertains to automatic sprinklers and should be directed to NFPA 13.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-40 Log #7 **Final Action: Accept**
(6.3.6.1.2.2.1 (New))

Submitter: Robert Bourke, Northeastern Regional Fire Code Development Committee

Recommendation: Add a new section to read:

6.3.6.1.2.2.1 Wall post indicator valves shall be permitted when approved by the AHJ.

Substantiation: For consistency with NFPA 13. There is no reason that wall post indicator valves should not be permitted for standpipe systems when approved by the AHJ.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-41 Log #CP17 **Final Action: Accept**
(6.3.7.3)

Submitter: Technical Committee on Standpipes,

Recommendation: Add text as follows:

6.3.7.3 The by-pass valves required in Section 7.2.2(4) shall be supervised in the closed position.

6.3.7.3.1 Supervision of these valves shall be in accordance with 6.3.7.1(1) or (2).

Substantiation: Addresses supervision of normally closed valves.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

 14-42 Log #14 **Final Action: Accept**
 (6.4.1)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Add text to read as follows:

Add an exception to the beginning of 6.4.1 so that it reads, “Except for the valve required by 6.3.2, shutoff valves shall not be installed between the fire department connection and the system.”

Substantiation: Sections 6.4.1, 6.4.3 and 6.3.2 all contradict one another. In one case (6.4.1) the statement is made that there cannot be a control valve between the FDC and the system (which is interpreted as any portion of the system including hose connections). On the other hand, sections 6.3.2 and 6.4.3 clearly allow control valves on individual standpipe (risers) in order to isolate the standpipe (riser) from the rest of the system.

The best way to deal with the contradiction is to make it clear that the control valve required by 6.3.2 to isolate the standpipe is acceptable (necessary) between the FDC and the hose connections.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

 14-43 Log #8 **Final Action: Accept in Principle**
 (6.4.3.1 (New))

Submitter: Robert Bourke, Northeastern Regional Fire Code Development Committee

Recommendation: Add a new section to read:

6.4.3.1 The FDC shall not be permitted on the pump suction.

Substantiation: Consistent with NFPA 20.

Committee Meeting Action: Accept in Principle

Extract 8.17.2.4.8 from NFPA 13.

Committee Statement: Meets the intent of the submitter.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

 14-44 Log #CP5 **Final Action: Reject**
 (6.4.3.1, A.6.4.3.1 (New))

Submitter: Technical Committee on Standpipes,

Recommendation: Add new Section 6.4.3.1 to read as follows:

6.4.3.1* Fire department connections for manual standpipe systems shall be sized based on the flow requirements for the system.

A.6.4.3.1 Fire department connections serve as the primary water supply for manual standpipe systems. One 2 1/2” (65mm) inlet should be provided for each 250 gpm of required flow. For example, a standpipe system requiring a total flow of 1250 gpm should be provided with five 2 1/2” (65mm) inlets on the fire department connection.

Substantiation: Guidance is needed for the proper sizing of fire department connections serving manual standpipe systems.

Committee Meeting Action: Reject

Committee Statement: The committee is not certain that the 250 gpm required flow is correct.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

Comment on Affirmative:

SCHWAB, P.: I agree that this requirement for 250 GPM per FDC inlet should be rejected. It is possible to flow more than 250 GPM through a 2-1/2” outlet as evidenced by the amount of water that can be flowed through a 2-1/2” outlet from a fire hydrant. However, guidance is needed in the standard addressing this issue as some manufacturer’s of FDC’s show this exact requirement in their literature.

 14-45 Log #49 **Final Action: Reject**
 (7.1.2)

Submitter: Stephen J. DiGiovanni, Clark County Fire Department

Recommendation: Add new text to read as follows:

7.1.2 Where the arrangement of fire hose and nozzle employed by the responding fire department requires residual outlet pressures in excess of 100 psi, design shall accommodate that demand as directed by the serving fire official.

Substantiation: This section is to allow fire departments to require hose valve outlet pressures exceeding 100 psi where deemed necessary by combinations of hoses, nozzles, and other equipment that cause higher friction loss during normal fire fighting operations.

Many users of the standard are unaware of the pressure demands due to the use of small diameter hose and high-pressure nozzles. This code section identifies that the fire hose arrangement may require outlet pressures exceeding the existing limits. This amendment also specifically requires that design be modified to address the higher pressure requirement.

Committee Meeting Action: Reject

Committee Statement: This standard establishes the minimum requirements for standpipe systems. Pressures in excess of the minimum are already permitted. The AHJ can establish requirements other than those contained in the standard.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

 14-46 Log #38 **Final Action: Accept in Principle**
 (7.2)

Submitter: Cecil Bilbo, Jr., National Fire Sprinkler Association

Recommendation: Revise text as follows:

7.2* Pressure Limitation. The maximum pressure at any point in the system at any time shall not exceed 350 psi (24 bar) unless there are express mains feeding higher standpipes. These mains may have pressures in accordance with their materials listings when there is no pressure greater than 350 psi available at the level of any hose connection.

Substantiation: Many Fire Departments have (Chicago FD, NYFD) or, are contemplating the use of, higher pressure pumper trucks. These trucks will be capable of 600 psi. This will allow the use of these trucks on standpipes. Currently there is no guidance for this type of pressure in a standpipe express riser or FDC supply pipe.

This proposal was developed by the NFSA Engineering and Standards Committee.

Committee Meeting Action: Accept in Principle

Revise text as follows:

7.2* Pressure Limitation. The maximum pressure at any point in the system at any time shall not exceed 350 psi (24 bar) except as permitted by Section 7.2.1.

7.2.1 Where express mains supply higher standpipe zones, the maximum pressure shall not exceed that for which the system components are rated as approved by the AHJ.

Add a new definition as follows:

3.3.4.1 Express Main. A pipe supplying an upper zone that does not also supply any lower zone.

Committee Statement: Meets the intent of the submitter. Changes meet the NFPA Manual of Style. A definition of express main is needed.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 19 Negative: 2 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

CONWAY, B.: Before eliminating the 350 PSI pressure limitation, the committee needs to provide clear minimum standards for pipe, fittings, support, etc.

NFPA 14 – 2007 chapter 4.2 allows Schedule 10 AND 40 pipe to be used up to 300 PSI. Likewise, UL only lists pipe up to 300 PSI and FM has only approved pipe to 300 PSI. While the standard does recognize certain ASTM and ANSI standards for pipe, neither the standards nor NFPA 14 establish minimum safety factors.

For example, ASTM A53 requires Schedule 80 – 6” pipe to pass a hydrostatic test of 2350 PSI. A conventional safety factor of 5 to 1 would allow 6” Schedule 80 to be used up to 470 PSI, assuming suitable joining techniques were used.

Mr. Bilbo references certain fire departments that are now using 600 psi pumpers in his substantiation. An empty 4” pipe that is fed from an FDC and is suddenly hit with 600 PSI will incur forces that 3/8” all-thread-rod supporting hangers 15 feet on-center may not be able to withstand.

Rather than eliminating the 350 PSI limitation, we need to set an upper pressure limit and prescribe clear minimum standards for the components and installation methods to be used at these higher pressures.

PILETTE, M.: No data provided to substantiate Committee Action. Here say by submitter provides no pressure limitation, no requirements for “Listing” for fire protection use of components, subjective in for comment and determination by AHJ. System pressure per various designs could be in excess of °F 1000 plus psi. Proposal/committee action needs further review.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-47 Log #66 **Final Action: Accept in Principle**
(7.2)

Submitter: Stephen M. Leyton, Protection Design and Consulting

Recommendation: Revise text to read as follows:

7.2 Pressure Limitation. The maximum pressure at any point in the system shall not exceed 350 PSI (24 bar), or the maximum pressure for which the system components are rated, as approved by the authority having jurisdiction.

Substantiation: The 350 PSI pressure limit presents significant design challenges in very tall and very large buildings, especially in the fire department connection piping to upper zones in very tall buildings. There are products available and in service for higher pressure applications: some fire departments have pumper trucks capable of 500 PSI residual pressures; some fire departments stock up to 400 PSI fire hose; currently, at least one manufacturer is testing a 400 PSI fire department inlet connection; currently, U.L. listed 400 PSI fire hose and control valves (regulating type) are available. There are certain situations where a legitimate demand for greater than 350 PSI may exist in certain system designs and should be allowed at the discretion of the AHJ and/or Fire Chief. The 350 PSI limit unnecessarily and unreasonably eliminates that option.

Committee Meeting Action: Accept in Principle

Committee Statement: See Committee Action and Statement on Proposal 14-46 (Log #38).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 19 Negative: 2 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

CONWAY, B.: See Proposal 14-46 (Log #38).

PILETTE, M.: See Proposal 14-46 (Log #38).

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-48 Log #60 **Final Action: Accept**
(7.2.1 and 7.8.3)

Submitter: Roland J. Huggins, American Fire Sprinkler Association, Inc.

Recommendation: Revise text as follows:

7.2.1 Maximum Pressure for at Hose Connections

Delete sections 7.2.1.1 and 7.2.1.2

Renumber 7.8.3.1, 7.8.3.2, and 7.8.3.3 as 7.2.1.1, 7.2.1.2, and 7.2.1.3

respectively

Substantiation: These two sections unnecessarily repeated the same text except 7.8.3.1 identifies the intent for only trained personnel to use the 1 1/2 in. hose connections and followed the manual of style on each criteria having its own paragraph.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-49 Log #50 **Final Action: Reject**
(7.2.1.3 (New))

Submitter: Stephen J. DiGiovanni, Clark County Fire Department

Recommendation: Add new text to read as follows:

7.2.1.3 For Class I standpipes, a pressure-regulating device shall not be required where the static pressure of a hose connection exceeds 175 psi, provided that downstream components, including fire hose and fire nozzles of the responding fire suppression company, are rated for the anticipated static and residual pressures, subject to approval by the AHJ.

Substantiation: This section is intended to allow for static pressures exceeding 175 psi on the discharge side of Class I hose valves. The intent of the section is to allow the maximum pressure on the discharge side of Class I hose valves to be regulated by pressure limitations of exposed components, as well as approval by the authority having jurisdiction.

The major impetus for this request is to solve a design issue with standpipe systems. The issue is that with commercially available equipment and code compliant design, it is difficult to design standpipe systems with consistent outlet pressures exceeding 100 psi residual pressure. The limitation in static pressure at 175 psi can cause design discrepancies in cases where the responding fire company requires outlet residual pressures in excess of 100 psi. For instance, if the static pressure at a hose valve is 176 psi, NFPA 14 requires a pressure-regulating device to be installed. One type of commercially available pressure-regulating device is a direct acting pressure-regulating device that is integrated in the hose valve. Direct acting hose valve pressure-regulating devices depress inlet pressure to the outlet pressure on a linear basis, i.e., the lower the pressure on the inlet side, the lower the pressure will be on the outlet side. When the drop in pressure due to the fire pump curve is taken into account, it is possible to lose up to 30-50 psi (or more) on the inlet side of the hose valve. With this drop in inlet pressure, the outlet residual pressure after

the pressure-regulating valve is similarly reduced. It is very possible to devise design scenarios, with varying supply pressures from the fire pump and the city supply, and with the pressure reductions caused by several types of pressure-regulating devices, where the residual pressure on the outlet side of the hose valve hardly approaches the 100 psi pressure minimum required by code, much less any greater pressure.

This design limitation is coupled with the variances in fire hose lays that exist with the various municipal fire departments. A common hose type is small diameter hose of 1-3/4 inch diameter. Further, common nozzle types are combination fog nozzles that can require up to 100 psi for proper operation. In order to flow just 150 gpm through 200 feet (spacing criteria per Section 7.3.2.3 of NFPA 14, 2007 edition) of 1-3/4 inch hose and end with a minimum pressure of 100 psi at the nozzle, the residual pressure at the outlet of the hose valve must be a minimum of 170 psi. If a lower pressure nozzle is used, with a required nozzle pressure of only 50 psi, the hose lay still requires a minimum of 120 psi residual pressure at the outlet of the hose valve. Table A.7.8 of NFPA 14, 2007 edition, lists several other hose lay scenarios where the minimum required residual pressure at the hose valve outlet exceeds 100 psi. From experience with standpipe system design and review of the interaction with the supply pressure curves, the limitations in equipment performance, and the limitations of code requirements, it is difficult to ensure proper design of standpipe systems with such residual pressure limitations.

It is important to note that several examples of the components downstream of Class I hose valves are of such construction to allow for higher pressures from Class I hose valves. The additional pressure over 175 psi that may be imparted on fire hose can likely be accommodated from currently available fire hose, which is commercially available with service pressure ratings of 300 psi or greater. Additionally, nozzles with service pressures of 200 psi are commercially available, further allowing for increased pressures. As such, there may be little negative impact with respect to the equipment currently employed by municipal fire departments.

The intent of the code amendment is to allow for the pressures at the discharge of the hose valve to be regulated by the equipment that will be subject to the anticipated pressures, rather than setting an arbitrary pressure limit. Allowing the increase in static pressure on the discharge side of the hose valve will allow greater flexibility in the design of standpipe systems, allowing code compliant design with listed equipment for those organizations requiring higher residual outlet pressures as a result of hose lay selection.

Committee Meeting Action: Reject

Committee Statement: The duplicate section was eliminated.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-50 Log #CP16 **Final Action: Reject**
(7.2.2 & 7.9)

Submitter: Technical Committee on Standpipes,

Recommendation: Delete Section 7.9

Substantiation: It is the committees intent to review sections 7.2.2 and 7.9 based upon the action of the NFPA 20 Committee in regard to the newly proposed Chapter 4 in NFPA 20.

Committee Meeting Action: Reject

Committee Statement: The substantiation is not clear as to why Section 7.9 should be deleted.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-51 Log #11 **Final Action: Reject**
(Figure 7.2.2(a) and (b))

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Delete text as follows:

Delete the fire department connection shown on Figure A.7.2.2(a) and Figure A.7.2.2(b).

Substantiation: Given the wide variety of situations where pressure regulating devices are going to be used in standpipe systems, it may not always be possible to locate the fire department connection on the downstream side of the regulating valve arrangement. Section 6.4.3 requires the FDC to be connected on the water supply side of the standpipe isolation valves, which contradicts the placement shown in the Figures, so we should delete the placement in the Figures.

Committee Meeting Action: Reject

Committee Statement: It is the intent that the FDC is always downstream of pressure regulating devices installed in accordance with 7.2.2.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-52 Log #67 **Final Action: Reject**
(7.3.2 and 7.3.2.1)

Submitter: Stephen M. Leyton, Protection Design and Consulting

Recommendation: Revise text to read as follows:

7.3.2 Class I Systems. Class I systems shall be provided with 2½ in. (65 mm) hose connections in the following locations:

(1) At the intermediate or main floor level landing of every required exit stairway, as approved by the authority having jurisdiction. Where more than one intermediate landing occurs between floors, connections shall be located at the highest intermediate landing.

~~7.3.2.1 Hose connections shall be permitted to be located at the main floor landings in exit stairways where approved by the authority having jurisdiction.~~

Substantiation: Consolidates 7.3.2(1) and the exception in 7.3.2.1, and rewrites 7.3.2(1) so that it is closer to the language of the International Building Code. As written, users of the standard can be confused by the apparent bias toward intermediate landing locations – in fact, many building and fire officials require standpipe connections on main floor landings, especially in high-rise buildings. Placing both options in the same subsection highlights the significance of the AHJ's requirements.

Committee Meeting Action: Reject

Committee Statement: Already covered in the standard.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 20 Negative: 1 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

SCHWAB, P.: I agree with Mr. Leyton on this proposal. Many of installations we perform are on the main landing. The jurisdictions that require the intermediate landing do so simply because the standard is written that this is the mandatory location and the main landing is the exception. As the proposal is written, the AHJ does not have to make a decision that is contrary to the "preferred" location. The other issue of contention is that even though the intermediate landing requirement has been required for several cycles, architects have not adopted the practice of increasing the size of the landings. Placing the standpipe and associated equipment on an intermediate landing while staying outside of the egress path is in many situations impossible to accomplish.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-53 Log #CP3 **Final Action: Accept**
(7.3.2 Class I Systems, A.7.3.2)

Submitter: Technical Committee on Standpipes,

Recommendation: Revise Section 7.3.2 to read as follows:

7.3.2* Class I Systems. Class I systems shall be provided with 2 ½ in. (65 mm) hose connections in the following locations:

(1) At the highest intermediate landing between floor levels in every required exit stairway

(2) On each side of the wall adjacent to the exit openings of horizontal exits

(3) In other than covered mall buildings, in each exit passageway at the entrance from the building areas into the passageway

(4) In covered mall buildings, at the entrance to each exit passageway or exit corridor, and at the interior side of public entrances from the exterior to the mall

(5)* At the highest landing of stairways with stairway access to a roof, ~~and or~~ on roofs with a slope of less than 3 4 in 12 where stairways do not access the roof

A.7.3.2 Hose connections are now specified to be located at intermediate landings between floors to prevent congestion at doorways. ~~Where there are multiple intermediate floor landings between floors, hose connections should be located at the landing approximately midway between floors.~~ It is recognized that fire departments often use the hose connection on the floor below the fire floor, and the location of hose connections at intermediate landings also reduces the hose lay distance in such cases. Only one standpipe is necessary to serve the roof, it is not the intent to extend each standpipe to the roof level.

Substantiation: Clarifies the requirement for standpipes on building roofs.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-54 Log #57 **Final Action: Reject**
(7.3.2.2)

Submitter: Roland J. Huggins, American Fire Sprinkler Association, Inc.

Recommendation: Revise text to read as follows:

7.3.2.2 Test Connection

7.3.2.2.1 An additional 2 ½ in. (65 mm) hose connection shall be provided at the hydraulically most remote portion of the system to facilitate testing.

7.3.2.2.2 Where horizontal standpipes have three or more hose connections on any floor, two additional 2 ½ in. (65mm) hose connections shall be provided at the hydraulically most remote portion of the system.

Substantiation: This correlates with the 750 gpm flow test for a single horizontal standpipe per 7.10.1.1.2

Committee Meeting Action: Reject

Committee Statement: Two additional hose valves are not needed at the end of the horizontal standpipe as it is not calculated in that fashion.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-55 Log #CP14 **Final Action: Accept**
(7.3.2.2)

Submitter: Technical Committee on Standpipes,

Recommendation: Delete Section 7.3.2.2 and modify Figure A.7.3.2(d) to illustrate one hose valve on the roof.

Substantiation: It is not the intent of the committee to require the second hose valve for testing. The topmost outlet and the outlet on the next floor below can be used for testing purposes. this better reflects the calculation requirement in Chapter 7.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-56 Log #24 **Final Action: Reject**
(7.3.4.1)

Submitter: Jim Widmer, Potter Roemer, LLC

Recommendation: Delete text as follows:

~~Where the building is protected throughout by an approved automatic-sprinkler system in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems, and NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height, Class II hose stations for use by trained personnel shall not be required, subject to the approval of the local fire department and the authority having jurisdiction, provided that each Class I hose connection is 2½ in. (65 mm) and is equipped with a 2½ in. × 1½ in. (65 mm × 40 mm) reducer and a cap attached with a chain.~~

Substantiation: Paragraph 7.3.4.1 has restrictions that are inappropriate in an installation standard. An installation standard shouldn't restrict an AHJ with regard to standpipe installations. If an AHJ determines that trained people are available to use the standpipes, then an installation standard should not have a restriction disallowing the installation.

Committee Meeting Action: Reject

Committee Statement: See Committee Action and Statement on Proposal 14-19 (Log #19).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-57 Log #68 **Final Action: Accept in Principle**
(7.6.3)

Submitter: Stephen M. Leyton, Protection Design and Consulting

Recommendation: Revise text to read as follows:

7.6.3 Where the building is protected throughout by an approved automatic sprinkler system in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems*, ~~and or~~ NFPA 13R *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including For Stories in Height*, the minimum standpipe size shall be 4 in. (100 mm) for hydraulically-calculated systems hydraulically designed in accordance with 7.8.1.

Substantiation: Eliminates confusion about reference to calculated systems, which could mean either calculated *combined* sprinkler systems or a *pipe*-scheduled standpipe system per 7.8.2. Harmonizes 7.6.3 with 7.8.1.

Committee Meeting Action: Accept in Principle

Change to and/or make the same change in Section 7.3.4.1 in addition to the proposed change.

Committee Statement: Addresses the inclusion of either NFPA 13 and/or NFPA 13R.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-58 Log #58

Final Action: Accept in Principle

(7.7.4)

Submitter: Roland J. Huggins, American Fire Sprinkler Association, Inc.

Recommendation: Revise text as follows:

Where a standpipe system is provided with a When calculating the system demand supplied by the fire department connection, the local fire department shall be consulted regarding the water supply available from a fire department pumper.

Substantiation: All standpipes require a fire department connection and this wording correlates better with 7.7.1

Committee Meeting Action: Accept in Principle

When calculating determining the system demand to be supplied by the fire department at the fire department connection, the local fire department shall be consulted regarding the water supply available from a fire department pumper.

Committee Statement: Meets the intent of the submitter.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-59 Log #59

Final Action: Accept

(7.8.2)

Submitter: Roland J. Huggins, American Fire Sprinkler Association, Inc.

Recommendation: Delete entire 7.8.2 section on Pipe Schedule design including Table 7.8.2.1 and renumber 7.8.3 accordingly.

Substantiation: This section needs to be significantly edited if not deleted. The pipe schedule design is intended to be used as an option to performing hydraulic calculations. How do we know we are achieving the assigned 100 psi at the most remote 2 1/2 in. outlet since there is no defined minimum inlet pressure or requirement to account for elevation? The section also limits this option to wet pipe systems for buildings that are not high rise buildings. Many of us assume it is intended to apply to wet manual but the text allows wet automatic. IF we are willing to casually depend on the capacity of any and all fire pumps, keep the section but delete the last three lines of 7.8.2.1 and stop the sentence at "...to provide the required waterflow rate."

Considering the criticality of these manual systems, allowing only calculated systems is appropriate.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-60 Log #CP2

Final Action: Reject

(7.8.2, 7.8.2.1, 7.8.2.1.1, 7.8.2.1.2, 7.8.2.1.3, 7.8.2.2)

Submitter: Technical Committee on Standpipes,

Recommendation: Revise Section 7.8.2 to read as follows:

7.8.2 Minimum Design Pressure for Pipe Schedule Designed Systems.

7.8.2.1 Pipe schedule designed standpipe systems shall have piping sized in accordance with the pipe schedule in Table 7.8.2.1 to provide the required waterflow rate at a minimum residual pressure of 100 psi (6.9 bar) at the topmost 2 1/2 in. (65 mm) hose connection and 65 psi (4.5 bar) at the topmost 1 1/2 in. (40 mm) hose station.

7.8.2.1.1 Pipe schedule systems shall be hydraulically calculated to verify the flow and pressure requirements in accordance with Sections 7.8.1 and 7.10.

7.8.2.1.2 Hydraulic calculations shall terminate at the fire department connection.

7.8.2.1.3 The system designer shall verify with the local fire department that the system demand can be met by the local fire apparatus.

7.8.2.2 Pipe schedule designs shall be limited to wet standpipes for buildings that are not high-rise buildings.

Substantiation: Provides clarification on the requirements for calculating a pipe schedule standpipe system.

Committee Meeting Action: Reject

Committee Statement: There is no need to hydraulically calculate a pipe schedule system.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-61 Log #41

Final Action: Accept in Principle

(7.8.1.1 (New))

Submitter: Jon Nisja, Northcentral Regional Fire Code Development Committee

Recommendation: Add new text to read as follows:

7.8.1.1 In buildings other than high-rise, protected throughout with an automatic sprinkler system installed in accordance with NFPA 13 or 13R, a Class I or III standpipe system need only to meet the pressure requirement for the sprinkler system.

Substantiation: This proposal modifies the pressure requirements for a fire department standpipe in sprinklered buildings. NFPA 14 presently requires 100 psi at the upper-most location in the building for firefighting purposes. This proposal would permit the standpipe pressure to only meet the sprinkler pressure. This proposal would only be applicable in low and mid-rise buildings (i.e. buildings less than 75 feet. in height). Taller buildings are typically considered high-rise buildings and, in most cases, are already provided with fire pumps to overcome pressure losses due to elevation.

This proposal is intended to address Class I and Class III standpipe systems; these are fire department use standpipe systems (not occupant use standpipe systems). As such, the fire department will be present for firefighting purposes and has the ability to supply additional pressure by pumping into the fire department connection. Supporting sprinkler and standpipe systems through the fire department connection is standard operating procedures for most fire departments.

Without this change, many low-rise and mid-rise buildings would require the installation of a fixed fire pump inside the building. Standpipes are required by the model codes in certain buildings even when low-rise, such as covered malls and certain assembly buildings. Standpipe systems are also required in mid-rise building (typically 4 or more stories in height). A fire pump adds substantial cost; in cases where the building is also sprinklered, fire protection contractors will often reduce the size of sprinkler piping to recover the cost of the pump since they have higher design pressures to work with.

According to NFPA statistics, most fires in sprinkler-protected buildings are controlled by the sprinkler system (97% according to <http://www.nfpa.org/assets/files/PDF/OSsprinklers.pdf>). This means that in the vast majority of sprinklered buildings, standpipe systems serve "mop-up" purposes only. Based on this, the 100 psi requirement at the top is excessive and adds cost to the construction project that is unnecessary. In many ways this proposal provides a better fire protection scenario as it allows the fire department to control the pressure based on need, not based on an automatic setting at the pump. (If there is a fire pump in the building, the fire department cannot limit that pressure.) In addition, fire apparatus undergo rigorous annual testing and have a low history of failure. This, coupled with a multiple apparatus response to these types of incidents, provides a higher degree of reliability than a fixed fire pump inside the building.

Committee Meeting Action: Accept in Principle

Add a new Section 7.8.1.1 to read as follows:

7.8.1.1* Manual standpipe systems shall be designed to provide 100 psi at the topmost outlet with the calculations terminating at the fire department connection.

A.7.8.1.1 It is not the intent to provide an automatic water supply for manual standpipe systems.

Committee Statement: Meets the intent of the submitter and clarifies that manual systems are intended to be calculated.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-62 Log #51

Final Action: Accept in Principle

(7.8.3.2.1 (New))

Submitter: Stephen J. DiGiovanni, Clark County Fire Department

Recommendation: Add new text to read as follows:

7.8.3.2.1 For Class I standpipes, a pressure-regulating device shall not be required where the static pressure of a hose connection exceeds 175 psi, provided that downstream components, including fire hose and fire nozzles of the responding fire suppression company, are rated for the anticipated static and residual pressures, subject to approval by the AHJ.

Substantiation: This section is intended to allow for static pressures exceeding 175 psi on the discharge side of Class I hose valves. The intent of the section is to allow the maximum pressure on the discharge side of Class I hose valves to be approved by pressure limitations of exposed components, as well as approved by the authority having jurisdiction.

The major impetus for this request is to solve a design issue with standpipe

systems. The issue is that with commercially available equipment and code compliant design, it is difficult to design standpipe systems with consistent outlet pressures exceeding 100 psi residual pressure. The limitation in static pressure at 175 psi can cause design discrepancies in cases where the responding fire company requires outlet residual pressures in excess of 100 psi. For instance, if the static pressure at a hose valve is 176 psi, NFPA 14 requires a pressure-regulating device to be installed. One type of commercially available pressure-regulating device is a direct acting pressure-regulating device that is integrated in the hose valve. Direct acting hose valve pressure-regulating devices depress inlet pressure to the outlet pressure on a linear basis, i.e., the lower the pressure on the inlet side, the lower the pressure will be on the outlet side. When the drop in pressure due to the fire pump curve is taken into account, it is possible to lose up to 30-50 psi (or more) on the inlet side of the hose valve. With this drop in inlet pressure, the outlet residual pressure after the pressure-regulating valve is similarly reduced. It is very possible to devise design scenarios, with varying supply pressures from the fire pump and the city supply, and with the pressure reductions caused by several types of pressure-regulating devices, where the residual pressure on the outlet side of the hose valve hardly approaches the 100 psi pressure minimum required by code, much less any greater pressure.

This design limitation is coupled with the variances in fire hose lays that exist with the various municipal fire departments. A common hose type is small diameter hose of 1-3/4 inch diameter. Further, common nozzle types are combination fog nozzles that can require up to 100 psi for proper operation. In order to flow just 150 gpm through 200 feet (spacing criteria per Section 7.3.2.3 of NFPA 14, 2007 edition) of 1-3/4 inch hose and end with a minimum pressure of 100 psi at the nozzle, the residual pressure at the outlet of the hose valve must be a minimum of 170 psi. If a lower pressure nozzle is used, with a required nozzle pressure of only 50 psi, the hose lay still requires a minimum of 120 psi residual pressure at the outlet of the hose valve. Table A.7.8 of NFPA 14, 2007 edition, lists several other hose lay scenarios where the minimum required residual pressure at the hose valve outlet exceeds 100 psi. From experience with standpipe system design and review of the interaction with the supply pressure curves, the limitations in equipment performance, and the limitations of code requirements, it is difficult to ensure proper design of standpipe systems with such residual pressure limitations.

It is important to note that several examples of the components downstream of Class I hose valves are of such construction to allow for higher pressures from Class I hose valves. The additional pressure over 175 psi that may be imparted on fire hose can likely be accommodated from currently available fire hose, which is commercially available with service pressure ratings of 300 psi or greater. Additionally, nozzles with service pressures of 200 psi are commercially available, further allowing for increased pressures. As such, there may be little negative impact with respect to the equipment currently employed by municipal fire departments.

The intent of the code amendment is to allow for the pressures at the discharge of the hose valve to be regulated by the equipment that will be subject to the anticipated pressures, rather than setting an arbitrary pressure limit. Allowing the increase in static pressure on the discharge side of the hose valve will allow greater flexibility in the design of standpipe systems, allowing code compliant design with listed equipment for those organizations requiring higher residual outlet pressures as a result of hose lay selection.

Committee Meeting Action: Accept in Principle

Add the proposed language to the annex in section A.7.8.3

A.7.8.3 For Class I standpipes, a pressure-regulating device should not be required where the static pressure of a hose connection exceeds 175 psi, provided that downstream components, including fire hose and fire nozzles of the responding fire suppression company, are rated for the anticipated static and residual pressures, subject to approval by the AHJ. Due to the inherent safety issues of higher pressure, the AHJ should determine that the fire department is trained in the use of higher pressure hose and nozzles.

Committee Statement: Meets the intent of the submitter and addresses the use of high pressure hose and nozzles. Enhances AHJ privilege in allowing pressures greater than 175 psi.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-63 Log #27
(7.9.2.2 (New))

Final Action: Reject

Submitter: William M. Connolly, State of New Jersey

Recommendation: Add new text as follows:

7.9.2.2 All buildings that are more than 128 meters (420 feet) in height shall have risers supplying automatic sprinkler systems interconnected to each other at the top and bottom most floor in each vertical riser zone. The interconnection shall be at least as large as the largest riser supplied.

Substantiation: This proposal is one of five proposals being submitted by the State of New Jersey to provide increased reliability of fire suppression systems in very tall buildings, those that exceed 420 feet in height, by requiring looping of sprinkler risers.

The difficulty of fighting fires in very tall buildings ranges from hard to

virtually impossible. Accordingly, the reliable functioning of required sprinkler systems is critically important. The National Institute of Standards and Technology (NIST) World Trade Center (WTC) Report documented that the proximate cause of the collapse was a building contents fire that raged out of control, in part at least, because the building's fire sprinkler systems were non-functional due to the initial aircraft attack. Events far less dramatic could knock out or make a sprinkler riser inoperative, thereby leaving the structure very vulnerable to fire.

Recommendation 12 of the NIST WTC report calls for the redundancy of active fire suppression systems to be increased to accommodate the greater risks associated with increasing building height and population. This proposal seeks to do that by providing an interconnection between the two water feeds to each floor designed such that the system will function as intended if one of those feeds is damaged or otherwise interrupted.

It is interesting to note that existing standards for water mains in residential subdivisions call for looping and valving to ensure that no more than 20 homes could be cut off by a water main break. Such a break would create a fire suppression risk for 4 people (the average occupancy of one home) or no more than 80 people (assuming all 20 homes catch fire). In contrast, we do not require looping and valving to isolate failure in buildings that might contain 10,000 occupants. This proposal seeks to correct that problem.

Committee Meeting Action: Reject

Committee Statement: Should be directed to the NFPA 13 Committee for coordination as it relates to sprinkler systems. No data was provided to support the proposed 420 ft requirement.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-64 Log #48
(7.9.3 and A.7.9.3)

Final Action: Accept in Principle

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Add a new 7.9.3 and A.7.9.3 (renumber existing sections):

7.9.3 Where pumps in series are located on different floors serving different zones, at least two supply pipes shall be provided between pumps.

A.7.9.3 See Figure A.7.9.3

(See Figure A.7.9.3 on the following page)

Revise sections in the existing 7.9.3 as follows:

7.9.3..... provisions for supply lines piping in 7.9.2.

7.9.3.1 At least two lines supply pipes shall be provided between zones.

7.9.3.2 One of the lines supply pipes specified in 7.9.3.1 shall be arranged so that the supply can be automatically delivered directly from the lower to the higher zone.

Substantiation: The standard needs to address the issue of how to handle pumps in series on multiple floors. With the 350 psi maximum, this is an acceptable method of maintaining reasonable pressure in the pipes. More than one interpretation is currently possible given the recent vote on the Formal Interpretation on this subject. In existing sections in 7.9.3 line was changed to supply pipes to more accurately describe the equipment.

Committee Meeting Action: Accept in Principle

Modify the proposed language in 7.9.3.2.1 as follows:

7.9.3.1 At least two lines supply pipes, each capable of individually providing the required flow and pressure, shall be provided between zones.

Committee Statement: Clarifies that each supply pipe must be capable of supplying the higher zone pump.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

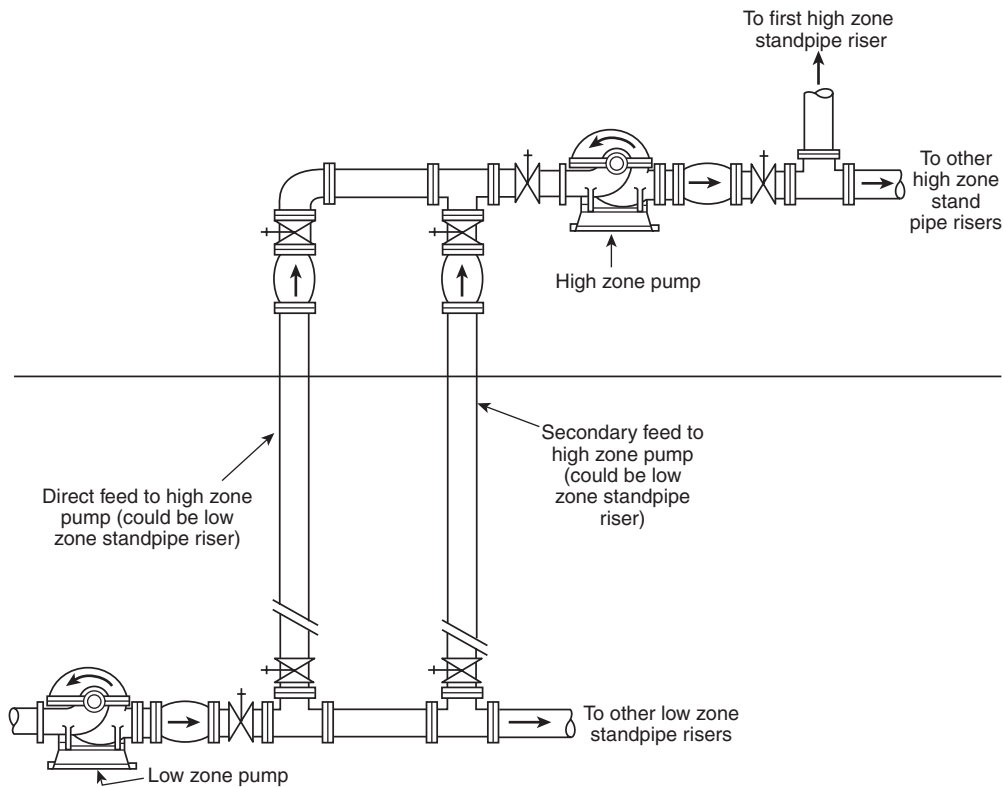


Figure A.7.9.3

14-65 Log #2
(7.9.4, 9.1.4)

Final Action: Accept in Principle

Submitter: Jeffrey M. Shapiro, International Code Consultants

Recommendation: Revise text to read as follows:

9.1.4 7.9.4 For systems with two or more zones in which portions of the second and higher zones cannot be supplied using the residual pressure required by Section 7.8.1.1 by means of Where fire department pumps cannot supply the required system demand through a fire department connection, an auxiliary means of water supply consisting of high-level water storage with additional pumping equipment or other means acceptable to the authority having jurisdiction shall be provided.

7.9.4.1 This means shall be in the form of high-level water storage with additional pumping equipment or other means acceptable to the authority having jurisdiction.

9.1.4 Where a secondary water supply is required by 7.9.4, a single water supply shall not be permitted.

Substantiation: This proposal fixes a shortcoming in NFPA 14 involving buildings in roughly the 30 to 40 story range. Standpipe systems in such buildings may only require a single zone but upper floors may not be within the pumping range of fire apparatus, which is a function of both the apparatus pump and residual pressure provided by the municipal water supply. The need for a secondary water supply should not be tied to whether a system has multiple zones, which is the current trigger suggested by 7.9.4. Instead, a secondary water supply should be provided whenever the ability of fire apparatus to supply the system has been exceeded. NFPA 14 implies this already in 7.7.1, which states that Class I and Class III standpipe systems must be designed so that the system demand can be supplied by each fire department connection, and this proposed change will help to clarify application of the standard.

The provisions have been relocated to Chapter 9 because they more closely relate to water supply than to general system design.

Committee Meeting Action: Accept in Principle

Accept the proposed language and add the following:

9.1.4.1 The auxiliary water supply must meet the 30 minute minimum water supply requirements of Section 9.2 and 9.3.

Committee Statement: Meets the intent of the submitter and clarifies the capacity and duration of the auxiliary supply.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-66 Log #28
(7.9.5 (New))

Final Action: Reject

Submitter: William M. Connolly, State of New Jersey

Recommendation: Add new text as follows:

7.9.5 A minimum of two sprinkler water supply risers shall be provided in each vertical riser zone of buildings that are more than 128 m (420 feet) in height. Sprinkler water supply risers shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between the nearest portion of the sprinkler water supply risers.

Substantiation: This proposal is one of five proposals being submitted by the State of New Jersey to provide increased reliability of fire suppression systems in very tall buildings, those that exceed 420 feet in height, by requiring remoteness of sprinkler risers and independent street-level water feeds.

The difficulty of fighting fires in very tall buildings ranges from hard to virtually impossible. Accordingly, the reliable functioning of required sprinkler systems is critically important. The National Institute of Standards and Technology (NIST) World Trade Center (WTC) Report documented that the proximate cause of the collapse was a building contents fire that raged out of control, in part at least, because the building's fire sprinkler systems were non-functional due to the initial aircraft attack. Events far less dramatic could knock out or make a sprinkler riser inoperative, thereby leaving the structure very vulnerable to fire.

Recommendation 12 of the NIST WTC report calls for the redundancy of active fire suppression systems to be increased to accommodate the greater risks associated with increasing building height and population. This proposal seeks to do that by providing two remote water feeds to each floor.

Committee Meeting Action: Reject

Committee Statement: Should be directed to the NFPA 13 Committee for coordination as it relates to sprinkler systems. No data was provided to support the proposed 420 ft requirement.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-67 Log #10 **Final Action: Accept**
(7.10.1.1 and 7.10.1.2)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Revise text to read as follows:

Change the name of 7.10.1.1 to “Flow Rate”, revise 7.10.1.1.3 as shown, delete 7.10.1.1.4.1, insert a new 7.10.1.1.5 and revise 7.10.1.2.3 as shown. The results will be the following two sections (with subsections shown for clarity):

7.10.1 Class I and Class III Systems.

7.10.1.1* Flow Rate.

7.10.1.1.1 For Class I and Class III systems, the minimum flow rate for the hydraulically most remote standpipe shall be 500 gpm (1893 L/min), and the calculation procedure shall be in accordance with 7.10.1.2.

7.10.1.1.2* Where a horizontal standpipe on a Class I and Class III system supplies three or more hose connections on any floor, the minimum flow rate for the hydraulically most demanding horizontal standpipe shall be 750 gpm (2840 L/min), and the calculation procedure shall be in accordance with 7.10.1.2.

7.10.1.1.3 The minimum flow rate for additional standpipes shall be 250 gpm (946 L/min) per standpipe for buildings with floor areas that do not exceed 80,000 sq ft per floor. For buildings that do exceed 80,000 sq ft per floor, the minimum flow rate for the additional standpipes shall be 500 gpm (1893 L/min) for the second standpipe and 250 gpm for the third standpipe if the additional flow is required for an unsprinklered building.

7.10.1.1.4 Flow rates for combined systems shall be in accordance with 7.10.1.3.

7.10.1.1.5 The maximum flow rate shall be 1000 gpm (3785 L/min) for buildings that are sprinklered throughout in accordance with NFPA 13 and 1250 gpm (4731 L/min) for buildings that are not sprinklered throughout in accordance with NFPA 13.

7.10.1.2* Hydraulic Calculation Requirements.

7.10.1.2.1 Hydraulic calculations and pipe sizes for each standpipe shall be based on providing 250 gpm (946 L/min) at the two hydraulically most remote hose connections on the standpipe and at the topmost outlet of each of the other standpipes at the minimum residual pressure required by Section 7.8.

7.10.1.2.2 Where a horizontal standpipe on a Class I and Class III system supplies three or more hose connections on any floor, hydraulic calculations and pipe sizes for each standpipe shall be based on providing 250 gpm (946 L/min) at the three hydraulically most remote hose connections on the standpipe and at the topmost outlet of each of the other standpipes at the minimum residual pressure required by Section 7.8.

7.10.1.2.3 Common supply piping shall be calculated and sized to provide the required flow rate for all standpipes connected to such supply piping, with the total not to exceed the maximum flow demand in 7.10.1.1.5.

Substantiation: The word “Minimum” needs to be deleted from the title of 7.10.1.1 because the subsections deal with the maximum required flow as well as the minimum flow.

The maximum required flow was moved from section 7.10.1.1.3 to a new 7.10.1.1.5 for clarity since it is a separate issue. As it is now (combined with the 250 additional flow statement), it appears that it does not apply to the situation where the floor area is greater than 80,000 sq ft, in which case there would be no maximum flow demand when the floor area exceeded 80,000 sq ft.

The additional 500 gpm (instead of 250 gpm) when the building floor area exceeds 80,000 sq ft was added to 7.10.1.1.3 because these two ideas go together. In its current location in 7.10.1.1.4.1, it appears to be a subset of only combined sprinkler/standpipe systems, which is obviously not what the committee intended. Also, the 80,000 sq ft floor area was clarified to be an individual floor area and not an aggregate of multiple floors. This concept is not clear in the existing text.

The revision to 7.10.1.2.3 is necessary to recognize to 1000 gpm maximum flow demand for sprinklered buildings.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-68 Log #25 **Final Action: Accept in Principle**
(7.10.1.1.1)

Submitter: Jim Widmer, Potter Roemer, LLC

Recommendation: Revise text as follows:

7.10.1.1.1 For Class I and Class III systems, the minimum flow rate for the hydraulically most remote standpipe shall be 500 gpm (1893 L/min), through two 2½ in. outlets at one location, and the calculation procedure shall be in accordance with 7.10.1.2.

Substantiation: This addition adds clarity for acceptance testing of a standpipe. Section 7.12.3 clearly defines an outlet as 250 gpm but as previously written in this section it could be interpreted as 500 gpm through a single outlet when a 2 way manifold is used.

Committee Meeting Action: Accept in Principle

Revise text as follows:

7.10.1.1.1 For Class I and Class III systems, the minimum flow rate for the hydraulically most remote standpipe shall be 500 gpm (1893 L/min), through two 2½ in. outlets at one location, and the calculation procedure shall be in accordance with 7.10.1.2.

Committee Statement: Clarifies that the 500 gpm requirement is from two outlets, not one.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-69 Log #43 **Final Action: Accept**
(7.10.1.1.2)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Revise the reference in section 7.10.1.1.2 as follows:

7.10.1.1.2..... shall be in accordance with 7.10.1.2.2.

Substantiation: Changing the reference from 7.10.1.2 to 7.10.1.2.2 will direct the user to the correct section for calculating horizontal standpipes.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-70 Log #CP6 **Final Action: Reject**
(7.10.1.1.4.2)

Submitter: Technical Committee on Standpipes,

Recommendation: Add a new Section 7.10.1.1.4.2 to read as follows:

7.10.1.1.4.2 The total flow for a horizontal standpipe supplying three or more hose connections on any floor when the total floor area exceeds 80,000 ft² (7432 m²) shall not be less than 1250 gpm.

Substantiation: For horizontal standpipes, it is the intent to require a minimum flow of 750 gpm (1893 L/min) as required in section 7.10.1.1.2 for the first standpipe and an additional 500 gpm (743 L/min) as required in Section 7.10.1.1.4.1 for the second standpipe in buildings where the floor area exceeds 80,000 ft² (7432 m²).

Committee Meeting Action: Reject

Committee Statement: The committee is not sure if the requirement for 1250 gpm is correct.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-71 Log #15 **Final Action: Accept in Principle**
(7.10.1.2.1.1 and A.7.10.1.2.1.1 (New))

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Add text to read as follows:

7.10.1.2.1.1* Where a standpipe system has risers that terminate at different floor levels, separate hydraulic calculations shall be performed for the standpipes that exist on each level. In each case, flow shall only be added for standpipes that exist on the floor level of the calculations.

A.7.10.1.2.1.1 For example, consider the standpipe system shown in Figure A.7.10.1.2.1.1 with two risers that terminate at the 15th floor and two risers that terminate at the 10th floor of this fully sprinklered high-rise building. In this case, two separate hydraulic calculations need to be performed. The first would verify that the system can deliver 100 psi to the top of the risers on the 15th floor with a total of 750 gpm flowing (250 gpm each at points A, B and C). The second would need to prove that the system can deliver 100 psi to the 10th floor with a total of 1000 gpm flowing (250 gpm each at points D, E, F and G). Note that since the building is sprinklered, there is no flow required from the fourth riser in this second calculation.

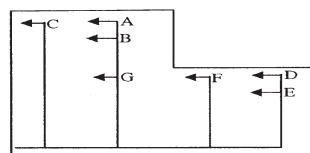


Figure A.7.10.1.2.1.1

Figure A.7.10.1.2.1.1

Substantiation: The standard is not clear on how to deal with standpipes that terminate at different elevations. Given that the system is only designed to handle a single fire at a time, and given the fact that it is unlikely that a hose will be run from a standpipe that does not reach the upper elevations to fight a fire at the upper elevations, it seems reasonable to require the standpipe system to be treated differently at different elevations. At the lower elevations, all of the standpipe systems potentially come into play, so a separate calculation for those standpipes appears to be in order.

Committee Meeting Action: Accept in Principle

Include figure from Proposal 14-75 (Log #86) instead of the proposed figure.

Committee Statement: Meets the intent of the submitter.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

Comment on Affirmative:

SCHWAB, P.: The figure from Proposal 14-75 was not included with the package. Also, the proposed annex language does not match the replacement figure and needs to be modified as such.

7.10.1.2.3 When the floor area exceeds 80,000 sf and the building is sprinklered throughout, the two most remote SP's shall be calculated for 500 GPM each, with 250 GPM flowing from each of the two most remote connections on those two standpipes.

Substantiation: 7.10.1.2.2 causes some confusion for designers indicating that 1,250 gpm is required even for buildings sprinklered throughout. 7.10.1.1.3 indicates that when a building is provided with sprinklers throughout, the minimum flow rate is 1,000 gpm. When a building or parking garage exceeds 80,000 sf in area, the second most remote standpipe is designed to accommodate 500 gpm. So the total should not exceed 1,000 gpm. However, designers are taking 7.10.1.2.2 to indicate that "three" most remote hose connections shall be calculated which would result in a minimum flow rate of 1,250 gpm (500 + 250 + 250 + 250) even in a building that is sprinklered throughout. For unsprinklered buildings, add 250 for a third SP, making the 1,250 GPM as required.

Committee Meeting Action: Accept in Principle

Committee Statement: See Committee Action and Statement on Proposal 14-67 (Log #10).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-72 Log #35 **Final Action: Accept in Principle**
(7.10.1.2.3)

Submitter: Cecil Bilbo, Jr., National Fire Sprinkler Association

Recommendation: Revise text as follows:

Common supply piping shall be calculated and sized to provide the required flow rate for all standpipes connected to such supply piping, with the total not to exceed 1250 gpm (4731 L/min) or 1000 gpm (3785 L/min) for buildings sprinklered throughout.

Substantiation: The current section wording is under "hydraulic calculations" and would require a different flow than that mandated under minimum flow rates in 7.10.1.1.3. This new wording would require the flows in 7.10.1.1.3.

This proposal was developed by the NFSA Engineering and Standards Committee.

Committee Meeting Action: Accept in Principle

Committee Statement: See Committee Action and Statement on Proposal 14-67 (Log #10).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-75 Log #86 **Final Action: Accept in Principle**
(7.10.1.2.4 (New))

Submitter: Peter T. Schwab, Wayne Automatic Fire Sprinklers, Inc.

Recommendation: Add new text as follows:

Where standpipes terminate at a level lower than roof level, they shall not be required to be calculated with the topmost outlets. Additional calculations shall be provided at the lower level.

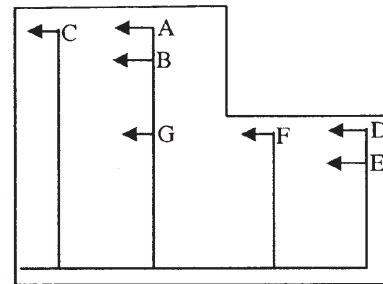


Figure A.7.10.1.2.1.1

14-73 Log #36 **Final Action: Accept in Principle**
(7.10.1.2.3)

Submitter: Cecil Bilbo, Jr., National Fire Sprinkler Association

Recommendation: Add new text as follows:

Add a new 7.10.1.2.3 and renumber accordingly.

7.10.1.2.3 Where vertical standpipes on a Class I and Class III system supply three or more hose connections on any floors that are in a separate portion of the building from taller vertical standpipes, hydraulic calculations and pipe sizes for each standpipe shall be based on providing 250 gpm (946 L/min) at the three hydraulically most remote hose connections on the highest floor of the lower portion and at the topmost outlet of each of the other standpipes at the minimum residual pressure required by Section 7.8.

Substantiation: There are many buildings that have sections of the building that are lower than the other taller portions with more floors. These shorter sections of buildings are being interpreted to require the flow from three outlets on one standpipe when they are in different sections of the building from taller standpipes.

This proposal was developed by the NFSA Engineering and Standards Committee.

Committee Meeting Action: Accept in Principle

Committee Statement: See Committee Action and Statement on Proposal 14-71 (Log #15).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

Substantiation: Some AHJ's require calculations for the topmost standpipes to include the demand for a standpipe many floors below. The calculations for the lower standpipe should be done at that lower level as well.

Committee Meeting Action: Accept in Principle

Committee Statement: See Committee Action and Statement on Proposal 14-71 (Log #15).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-76 Log #16 **Final Action: Reject**
(7.10.1.2.4 (New))

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Add text to read as follows:

7.10.1.2.4 Flows from additional standpipes as required by 7.10.1.1 are not required to be balanced to the higher pressure at the point of connection. **Substantiation:** Unlike fire sprinklers (that have fixed k-factors), standpipe outlets are used on hose systems that have variable k-factors, making the balancing of pressures unnecessary. For example, consider the situation where the top outlet on a remote standpipe is discharging 250 gpm at 100 psi, and the elevation loss and friction loss between this outlet and the next outlet down is a total of 5 psi. The next outlet down will see a residual pressure of 105 psi, which might result in a flow of 256 gpm if the hose connection is assumed to have a k-factor of 25 (necessary to produce the flow of 250 gpm at 100 psi from the top outlet). However, we are only required to calculate 250 gpm from this outlet by rule (7.10.1.1.3) because the user (fire fighter) can always close the nozzle, effectively changing the k-factor) if water conservation becomes

14-74 Log #74 **Final Action: Accept in Principle**
(7.10.1.2.3)

Submitter: Thomas G. Wellen, American Fire Sprinkler Association, Inc.

Recommendation: Add new section 7.10.1.2.3 and renumber the remaining section to 7.10.1.2.4.

necessary.

Committee Meeting Action: Reject

Committee Statement: Acceptance of this proposal would create a conflict with Chapter 8. The submitter is encouraged to resubmit a comment to coordinate hydraulic requirements with Chapter 8 and other related sections of this standard relating to hydraulic calculation requirements.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 18 Negative: 3 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

BOTH, M.: This proposal is in line with the current edition of NFPA 14 and specifically the following sections:

- **Minimum flow rates:**
 - 7.10.1.1.1 “the minimum flow rate”... “shall be 500 gpm”
 - 7.10.1.1.3 “The minimum flow rate for additional stand pipes shall be 250 gpm per standpipe”
 - 7.10.1.2.1 “Hydraulic calculations”... ‘shall be based on providing 250 gpm”
- **Maximum Flow Rates:**
 - 7.10.1.1.3 “with the total not to exceed 1250 gpm or 1000 gpm”
 - 7.10.1.2.3 “with the total not to exceed 1250 gpm”
 - 7.10.3 “The maximum flow required from a 2 1/2” hose connection shall be 250 gpm”

The hydraulically calculation of a standpipe system according to the above requirements from NFPA 14 can reasonably only be achieved by using fixed hose flows in the hydraulic calculations in lieu of K-factors, as per Mr. Isman’s proposal. In fact he is only clarifying what NFPA 14 already states.

SCHWAB, P.: I agree with the submitter. A review of chapter eight or the manufacturers’ hose valve listings does not indicate any information in regards to K factor information for hose valves. A hose valve demand is added as a fixed flow and a K factor is then established for that demand (flow and pressure). As Mr. Isman indicates, the K factors for hose valves are variable. I do not believe this proposal conflicts with the standard as written.

WEBB, R.: In my opinion the committee is just using a strict interpretation on how hydraulic calculations are to be performed instead of addressing the intent of the code and what is actually being done out in the real world. A hose valve is not a sprinkler head and cannot be treated equally. With a sprinkler head the orifice size is fixed which makes it easy to determine the K factor. Where as a hose valve opening is governed by whether the valve is open partially or all the way which makes it impossible to establish a fixed K factor. Also if you would start using a K factor and trying to balance pressures it would be impossible to meet paragraph 7.10.1.1.3 that states that the total flow shall not exceed 1250 GPM or 1000 GPM for buildings sprinkler throughout. The only way to achieve this is to treat the hose allowance just as you do in an NFPA 13 calculation which is to input the flow as a fix flow without a K factor.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-77 Log #29 **Final Action: Reject**
(7.10.1.2.4 (New))

Submitter: William M. Connolly, State of New Jersey

Recommendation: Add new text as follows:

7.10.1.2.4 Independent hydraulic design evaluations shall be completed utilizing individual water supply risers for each vertical riser zone. System hydraulic design shall not be based upon redundancy of water supply risers required by 7.9.5 (new) for each vertical riser zone.

Substantiation: This proposal is one of five proposals being submitted by the State of New Jersey to provide increased reliability of fire suppression systems in very tall buildings, those that exceed 420 feet in height, by requiring that system hydraulic design be based on one riser for each vertical riser zone.

There are several proposals to this Standard that will require redundancy of sprinkler risers to floors in very tall buildings. This proposal makes clear that the proposed required redundancy should not be taken into consideration when the hydraulic design evaluation is being performed.

Committee Meeting Action: Reject

Committee Statement: See Committee Action and Statement on Proposal 14-64 (Log #48).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-78 Log #CP7 **Final Action: Accept**
(7.10.4 (New))

Submitter: Technical Committee on Standpipes,

Recommendation: Add a new Section 7.10.4 to read as follows:

7.10.4 Sprinkler System Hose Demand. Sprinkler system hose demand in fully sprinklered buildings shall not be required to be added to standpipe calculations.

Substantiation: Clarifies the intent that hose demand is not required for

standpipe calculations.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-79 Log #9 **Final Action: Accept in Principle**
(7.11.1)

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Revise to read:

7.11.1 A permanently installed 3-in drain riser shall be provided adjacent to each standpipe equipped with pressure-regulating devices to facilitate tests of each device. The drain shall be sized large enough to handle the full flow required from the largest pressure reduction device, but shall not be less than 3 inches.

Substantiation: Coordination with NFPA 25 Section 12.5.1.2 which requires a “full flow test” to be conducted. A 3” drain is not sufficient when working with a 4” or larger pressure reduction valve flowing 500 plus gpm.

Committee Meeting Action: Accept in Principle

Revise to read:

7.11.1 A permanently installed 3-in drain riser shall be provided adjacent to each standpipe equipped with pressure-regulating devices to facilitate tests of each device. The drain shall be sized large enough to handle the full flow required from the largest pressure reduction regulating device, but shall not be less than 3 inches.

Committee Statement: Meets the intent of the submitter and removes unenforceable language.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-80 Log #46 **Final Action: Reject**
(7.11.1)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Revise section 7.11.1 as follows:

A permanently installed 3 in. drain riser shall be provided adjacent to each standpipe equipped with pressure regulating devices pressure-reducing valves to facilitate tests of each device valve.

Substantiation: The term pressure-regulating device is a global term which includes pressure restricting devices, pressure-reducing valves and pressure-control valves. The 3 inch drain riser is needed to test pressure-reducing valves, not all pressure regulating-devices. NFPA 25, section 13.5.1 only requires pressure-reducing valves to be tested. Since pressure restricting devices are not required to be tested, we should not have to install a 3 inch drain riser. The NFPA 25/14 TCs should correlate on this issue.

Committee Meeting Action: Reject

Committee Statement: It is the committees intent that both pressure restricting and pressure reducing valves be tested.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-81 Log #83 **Final Action: Reject**
(7.11.1, 7.11.1.1, 7.11.1.2, and 7.11.1.3)

Submitter: Larry Keeping, Vipond Fire Protection

Recommendation: Revise 7.11.1 and 7.11.1.1 to read:

7.11.1 For standpipes equipped with 2½ in. (65 mm) valve connections A a permanently installed 3 in. (76 mm 80 mm) drain riser shall be provided adjacent to each standpipe equipped with pressure-regulating devices to facilitate tests of each device.

7.11.1.1 A drain riser ~~The~~ specified by 7.11.1 shall be equipped with a 3 in. x 2½ in. (76 mm 80 mm x 65 mm) tee with an internal threaded swivel fitting having NHS threads, as specified in NFPA 1963, Standard for Fire Hose Connections, with a plug, and shall be located on at least every other floor.

Add a new 7.11.1.2 and 7.11.1.3 as follows:

7.11.1.2 For standpipes equipped with 1½ in. (40 mm) valve connections A a permanently installed 2 in. (50 mm) drain riser shall be provided adjacent to each standpipe equipped with pressure-regulating devices to facilitate tests of each device.

7.11.1.3 A drain riser specified by 7.11.1.2 shall be equipped with a 2 in. x 1½ in. (50 mm x 40 mm) tee with an internal threaded swivel fitting having

NHS threads, as specified in NFPA 1963, Standard for Fire Hose Connections, with a plug, and shall be located on at least every other floor.

Renumber the existing 7.11.1.2 to 7.11.1.4 as 7.11.1.4 to 7.11.1.6 accordingly.

Substantiation: The current drain riser size requirement is really only applicable to systems equipped with 2½ in. valve connections. There are often occasions where Class III systems are installed with standpipes supplying 1½ in. valve connections that are independent of the standpipes fitted with the 2½ in. connections. Additionally, there are occasions where Class II systems utilize pressure-regulating devices, due to high water supply pressures. With the proposed text, drain risers would be permitted to be properly sized to address these situations.

Committee Meeting Action: Reject

Committee Statement: See committee action and statement on Proposal 14-79 (Log #9) with regard to 7.11.1, regarding 7.11.2 & 3, the committee did not see a compelling need for the proposed new sections.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-82 Log #1 **Final Action: Accept**
(7.11.1.4)

Note: This proposal appeared as Comment 14-10 (Log #6) which was held from the F05 ROC on Proposal 14-2.

Submitter: Robert Bourke, Northeastern Regional Fire Code Development Committee

Recommendation: Revise to read:

7.11.1.4 Where local fire department hose threads do not conform to NFPA 1963, *Standard for Fire Hose Connections*, the fire department authority-having jurisdiction shall designate the hose threads to be used.

Substantiation: The AHJ could be a building official in many cases and they are not the ones who should be dealing with hose thread issues that are under the purview of the fire department.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-83 Log #3 **Final Action: Reject**
(7.12.1,7.12.2)

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Revise to read:

7.12.1 The fire department shall be consulted for information concerning the location and configuration for fire department connections. One or more fire department connections shall be provided for each zone of each Class I or Class III standpipe system.

7.12.1.1 In a building with multiple pressure zones, a dedicated fire department connection shall be provided for each pressure zone from the street to the respective pressure zone. The high zone fire department connection(s) shall not be required to be provided where 7.9.4 applies.

7.12.2 High-rise buildings shall have at least two remotely located fire department connections, for each zone.

7.12.2.1 A single connection for each zone shall be permitted where acceptable to the fire department.

Substantiation: Base code wording is confusing, too restrictive. A building with 5 pressure zones would require 5 sets of FDC on two sides of the building. Additionally some of the wording and figures would lead to over-pressurization of the zone by the fire department, in order to supply upper portions of the building.

Committee Meeting Action: Reject

Committee Statement: Would conflict with NFPA 20, Chapter 4, no compelling need perceived for the proposed changes, the committee favors maintaining zoned FDC's.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-84 Log #4 **Final Action: Accept in Part**
(8.1.5)

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Revise to read:

8.1.5 The plans shall include an isometric and elevation diagram. The vertical elevation of each floor shall be indicated.

Substantiation: Complex systems need more detailed drawings to get an understanding of the system arrangement.

Committee Meeting Action: Accept in Part

The proposed requirement for isometric drawing is not accepted. The balance of the proposal is accepted. The revision now reads as follows:

8.1.5 The plans shall include an elevation diagram. The vertical elevation of each floor shall be indicated.

Committee Statement: An isometric drawing is not needed.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-85 Log #52 **Final Action: Reject**
(8.3.1.2.1 and A.8.3.1.2.1 (New))

Submitter: Stephen J. DiGiovanni, Clark County Fire Department

Recommendation: Add new text to read as follows:

8.3.1.2.1* The minimum starting pressure at all hose valve outlets in the calculations shall be 100 psi, or the pressure dictated by the AHJ. The pressure required to operate the fire hose and nozzle combination shall incorporate the nozzle inlet pressure as determined by the nozzle manufacturer, the friction loss of the fire hose as determined by the hose manufacturer, and any other equipment such as valves and fittings.

A.8.3.1.2.1 Depending on the arrangement of hose, nozzle, and fittings used by the responding fire departments, the minimum residual pressures required at the outlet of the hose valve may have to exceed 100 psi. Examples of various hose lays and the corresponding required residual outlet pressures are shown in Table A.7.8. In order to ensure that the system design takes into account the demands of the anticipated hose lay, it is important to require designers to go through the exercise of analyzing the friction losses through the various hose diameter, hose length, and nozzle selections that exist. The AHJ should specify the hose lay configuration to the designer, including identifying the hose used, the length anticipated to be used, and the type of nozzle used. The designer should then calculate the pressure required at the hose valve outlet to operate the hose lay correctly, and either use that pressure or a pressure of 100 psi, in the calculations.

Substantiation: This section is intended to require additional coordination and calculations to ensure that the design of the standpipe system meets the needs to the municipal fire departments that are the end users of the standpipe system.

Due to varying fire hose lays employed by various fire departments, the actual required pressure at the hose valve outlet may exceed the 100 psi minimum stated in Section 7.8.1 of NFPA 14. In order to ensure that the fire hose lay is operated correctly, and that sufficient flow is delivered to the nozzle, design must accommodate any increased pressures required at the hose valve outlet.

In order to ensure this step occurs in the design, the code amendment requires that analysis be made of the required pressure at the nozzle and the pressure losses through the fire hose lay, and that this resulting hose outlet pressure be used as the minimum outlet pressure when the resulting hose outlet pressure exceeds 100 psi.

The code amendment implies coordination between the AHJ and the designer prior to design. Appendix material is provided, and partially stipulates the process of this coordination, whereby the AHJ is responsible for determining the fire hose lay, and the designer is responsible for determining the required residual pressures at the hose valve outlet and incorporating that residual pressure in the design.

This amendment intends to require an added step in the design process that will ensure proper hose operation for the responding municipal fire departments.

Committee Meeting Action: Reject

Committee Statement: Already covered in Annex A.7.8 and A.8.1. The 100 psi is a minimum requirement and can be exceeded while still complying with the standard.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-86 Log #30 **Final Action: Reject**
(9.1.6 (New))

Submitter: William M. Connolly, State of New Jersey

Recommendation: Add new text as follows:

9.1.6 Where a secondary water supply is required by 7.9.5 (new) required fire pumps shall draw from a minimum of two independent street level water mains located in different streets.

Exception: When a street level water main is a looped or gridded system, two taps may draw from the same main provided the main is part of a system which

is looped or gridded and valved such that an interruption on one side of the loop or grid can be isolated so that the water supply will continue without interruption through at least one of the taps. Each tap shall be sized to supply the required flow. The taps shall be located as remote from one another as is practicable given the site conditions.

Substantiation: This proposal is one of five proposals being submitted by the State of New Jersey to provide increased reliability of fire suppression systems in very tall buildings, those that exceed 420 feet in height, by requiring independent street-level water feeds.

The difficulty of fighting fires in very tall buildings ranges from hard to virtually impossible. Accordingly, the reliable functioning of required sprinkler systems is critically important. The National Institute of Standards and Technology (NIST) World Trade Center (WTC) Report documented that the proximate cause of the collapse was a building contents fire that raged out of control, in part at least, because the building's fire sprinkler systems were non-functional due to the initial aircraft attack. Events far less dramatic could knock out or make a sprinkler riser inoperative, thereby leaving the structure very vulnerable to fire.

Recommendation 12 of the NIST WTC report calls for the redundancy of active fire suppression systems to be increased to accommodate the greater risks associated with increasing building height and population. This proposal seeks to do that by providing two water feeds to the risers such that the system will function as intended if one of those feeds is damaged or otherwise interrupted.

It is interesting to note that existing standards for water mains in residential subdivisions call for looping and valving to ensure that no more than 20 homes could be cut off by a water main break. Such a break would create a fire suppression risk for 4 people (the average occupancy of one home) or no more than 80 people (assuming all 20 homes catch fire). In contrast, we do not require looping and valving to isolate failure in buildings that might contain 10,000 occupants. This proposal seeks to correct that problem.

Committee Meeting Action: Reject

Committee Statement: More appropriately relates to NFPA 20 or NFPA 24 as it relates to water supplies and public water mains and is beyond the scope of this standard.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-87 Log #34 **Final Action: Reject**
(9.4)

Submitter: Denyse DuBrucq, AirWars Defense

Recommendation: Add new text as follows:

Cryo-supplies for cryo systems must have gravity or pump feeds with connections to access entry of cryo-pipe system.

Substantiation: Need guarantee of connection to supply. Many facilities have on-site Liquid Nitrogen supplies and AWD is encouraging Fire Departments to do same.

Committee Meeting Action: Reject

Committee Statement: Beyond the scope of this standard.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-88 Log #CP1 **Final Action: Accept**
(Figure 11.1.3(A) Flow Test)

Submitter: Technical Committee on Standpipes,

Recommendation: Add a new line to Figure 11.1.3(a) to record flow test results for the flow test required by section 11.5. Proposed language to read as follows:

Flow Test

Flow water from the hydraulically most remote standpipe outlet(s).

Record: Static pressure: _____ psi (bar) Residual pressure: _____ psi (bar) Nozzle diameter: _____ in. (cm) Pitot pressure: _____ psi (bar)

Total flow: _____ gpm (L/min)

Note: The minimum flow should be 500 gpm (1893 L/min) at 100 psi (6.9 bar) residual pressure for Class I or III systems and 100 gpm (379 L/min) at 65 psi (4.5 bar) for Class II systems.

Substantiation: Recording of flow test data is needed on the "Contractors Material and Test Certificate for Aboveground Piping".

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-89 Log #61 **Final Action: Accept**
(11.4.7)

Submitter: Roland J. Huggins, American Fire Sprinkler Association, Inc.

Recommendation: Revise text to read as follows:

11.4.7 Existing Systems

11.4.7.1 Where an existing standpipe system, including yard piping and fire department connections, is modified, the new piping shall be independently tested in accordance with 11.4.1.

11.4.7.2 Modifications that cannot be isolated, such as new valves or the point of connection for new piping, shall not require testing in excess of system static pressure.

Substantiation: Questions often arise on how to hydrostatically test small modifications. The proposed text mimics NFPA 13:24.2.1.6 except it uses WORKING Pressure. I modified it to avoid requiring a new definition plus static pressure satisfies the testing needs.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-90 Log #62 **Final Action: Accept in Part**
(Chapter 13 (New))

Submitter: Roland J. Huggins, American Fire Sprinkler Association, Inc.

Recommendation: Add new Chapter 13 to read as follows:

Chapter 13 System Testing, Inspection, and Maintenance

13.1 General. A standpipe system installed in accordance with this standard shall be properly inspected, tested, and maintained by the property owner or their authorized representative in accordance with NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, to provide at least the same level of performance and protection as designed.

Substantiation: 11.8(2) requires a copy of NFPA 25 to be provided but nothing says the system shall be maintained. This follows the text from NFPA 13. If accepted, it seems appropriate to modify the NFPA 13 text to simply say "... the same level of performance and protection as designed." since automatic protection is not being provided.

Committee Meeting Action: Accept in Part

Add new Chapter 13 to read as follows:

Chapter 13 System Testing, Inspection, and Maintenance

13.1 General. A standpipe system installed in accordance with this standard shall be properly inspected, tested, and maintained by the property owner or their authorized representative in accordance with NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, to provide at least the same level of performance and protection as designed.

Committee Statement: Consistent with NFPA 13 and NFPA 25.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-91 Log #84 **Final Action: Accept**
(A.4.4.2.4.2)

Submitter: Larry Keeping, Vipond Fire Protection

Recommendation: Revise the second sentence of A.4.4.2.4.2 to read:

To accomplish this, the mating surfaces for a circumferential butt weld joint should be prepared and configured so that a full penetration weld is achievable, but a partial penetration weld is acceptable.

Substantiation: Since 4.4.2.4.2 specifically deals with the subject of circumferential butt joints, the words "for a circumferential butt weld joint" should be added to A.4.4.2.4.2 for clarity, to reduce the chances of the text being read out of context.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-92 Log #70 **Final Action: Accept**
(A.5.4.1 (New))

Submitter: Thomas G. Wellen, American Fire Sprinkler Association, Inc.

Recommendation: Add new annex to 5.4.1.1*. A.5.4.1.1 A fire pump may be installed to supply the sprinkler demand and

inside hose requirements only. The fire pump is not required to supply the manual wet standpipe system demand at the most remote hose outlets.

Substantiation: Sometimes a fire pump is needed for low-rise buildings to supply the fire sprinkler systems. Some jurisdictions are confused on why the pump does not supply the manual wet standpipe system. The annex will clarify that a fire pump can be installed to supply the sprinkler system only and does not have to supply the water flow and pressures required for a manual wet system.

Committee Meeting Action: Accept

Committee Statement: Change the word “may” to “can” to conform to the NFPA Manual of Style.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-93 Log #CP13 **Final Action: Accept**
(A.5.5.2)

Submitter: Technical Committee on Standpipes,

Recommendation: Add text as follows:

A.5.5.2 It is the intent of the standard to have the ability to read pressures on each floor where pressure regulating devices are installed, and to provide a valved outlet for a pressure gauge. A permanently installed pressure gauge is not required.

Substantiation: Clarifies the requirements for pressure gauges on the upstream side of pressure regulating devices.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 20 Negative: 1 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

WEBB, R.: Same response as Proposal 14-33 (Log # 82).

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-94 Log #76 **Final Action: Reject**
(A.5.5.2 (New))

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Add new text as follows:

A.5.5.2 A single pressure gage on a riser can serve to meet this requirement for all of the pressure-regulating devices on the riser as long as there are no control valves or check valves between the pressure gage and the pressure-regulating devices.

Substantiation: Some AHJ’s are interpreting section 5.5.2 as requiring a separate pressure gage for each pressure-regulating device. This would require multiple redundant gages that are not necessary for testing purposes. There is no requirement in NFPA 14 for the gage that is used during testing to be within any specific distance of the pressure-regulating device, nor should there be.

The intent is to have a mechanism for understanding the pressure on the inlet side of the pressure-regulating device during static and residual testing of the device. Under static conditions, the difference between the pressure at the gage and the pressure at the device will be the elevation head difference between the two objects (0.433 times the difference in elevation in feet).

Under residual (flowing) conditions, the difference in pressure between the device and the gage will depend on whether or not the flow going through the device passes the gage. If the flow going through the device passes the gage, the pressure difference is the total of the elevation difference plus the friction loss, which can easily be calculated with the Hazen-Williams formula. If the flow does not go past the pressure gage (which would happen if the water was coming from below and the gage was at the top of the riser or vice versa) then the pressure difference between the two objects is simply the elevation head as it is in the static condition.

The intent of NFPA 14 is to make sure that the test can be conducted with a known pressure at the inlet of the pressure-regulating device. This intent can be met with a single gage on a riser, even when multiple pressure-regulating devices are installed at different elevations on that riser.

Committee Meeting Action: Reject

Committee Statement: See Committee Action and Statement on Proposal 14-93 (Log #CP13).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 20 Negative: 1 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

WEBB, R.: Same response as Proposal 14-33 (Log # 82).

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-95 Log #75 **Final Action: Reject**
(A.6.8)

Submitter: Phillip A. Brown, American Fire Sprinkler Association, Inc.

Recommendation: Add new text as follows:

The hydraulic information sign is not required for manual wet standpipe and manual dry standpipe systems.

Substantiation: Both manual wet and dry standpipe systems require their system demands be pumped into them through the fire department connection. The capability to supply this demand is solely placed on the responding fire department and its equipment. The fire departments pumper trucks use a variable speed fire pump and the operating engineer adjust the pressure and flow to meet the demand of the responding firefighters. Providing hydraulic calculations for manual wet and dry standpipes serves no practical purpose.

Committee Meeting Action: Reject

Committee Statement: The hydraulic information sign is required since these systems are hydraulically calculated.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-96 Log #63 **Final Action: Accept**
(A.7.2.2)

Submitter: Roland J. Huggins, American Fire Sprinkler Association, Inc.

Recommendation: Revise text to read as follows:

A.7.2.2 A small diameter pressure-reducing device can be required due to the minimum listed flow for large diameter pressure-reducing devices typically exceeding low flow conditions, to accommodate low flow conditions such as those created by the flow of a single sprinkler. These should also be arranged such that the failure of a single device does not allow pressure in excess of 175 psi to more than two hose connections.

Substantiation: This identifies why a smaller diameter PRV can be required as well as the fact that it can also allow excessive pressure into the system.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-97 Log #85 **Final Action: Accept in Principle**
(A.7.2.2)

Submitter: Larry Keeping, Vipond Fire Protection

Recommendation: Revise A.7.2.2 as follows:

A.7.2.2 A small diameter pressure-reducing device can be required to accommodate low flow conditions such as those created by the flow of a single sprinkler for combined systems or flow from a 1 1/2 in. (40 mm) hose connection on standpipe systems that do not supply sprinklers.

Substantiation: The new text is proposed to clarify the intent. The current reference to a “single sprinkler” is not applicable to many standpipe systems, but low flow situations can also be encountered from small hose stream nozzles.

Committee Meeting Action: Accept in Principle

Committee Statement: See Committee Action on Proposal 14-96 (Log #63).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-98 Log #37 **Final Action: Accept in Principle**
(Figure A.7.2.2(a) and (b))

Submitter: Cecil Bilbo, Jr., National Fire Sprinkler Association

Recommendation: Revise text as follows:

Remove the words “To fire department connection” and the piping shown near this wording.

Substantiation: There are many instances where the Fire Department Connection is attached to the system further downstream than the location shown in the drawing. Plan reviewers are asking for the FDC piping to connect immediately next to the PRV assembly based on this diagram.

This proposal was developed by the NFSA Engineering and Standards Committee.

Committee Meeting Action: Accept in Principle

Modify both figures to indicate that the FDC does not need to be located immediately adjacent to the pressure reducing device.

Committee Statement: It is the intent of the committee to require the installation of the FDC downstream of the pressure reducing device but not immediately adjacent thereto.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-99 Log #69 **Final Action: Accept in Part**
(Figure A.7.2.2(a) and (b))

Submitter: Stephen M. Leyton, Protection Design and Consulting
Recommendation: Delete Figure A.7.2.2(a).

Revise Figure A.7.2.2(b) as shown.

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-100 Log #71 **Final Action: Reject**
(A.7.3.2.2 (New))

Submitter: Thomas G. Wellen, American Fire Sprinkler Association, Inc.
Recommendation: Add new text to read as follows:

A.7.3.2.2 The intent is to provide two outlets at the top of the most remote standpipe to facilitate testing as indicated by Figure A.7.3.2(d). An outlet at the top landing and one outlet located on the landing below would not be considered an acceptable arrangement for testing purposes.

Substantiation: New installations are occurring with one outlet at the top and an additional outlet on the landing below on the most remote standpipe. The wording is needed to clarify the intent of the committee.

Committee Meeting Action: Reject

Committee Statement: It is not the intent of the committee to require a second valve for testing purposes.

Number Eligible to Vote: 23

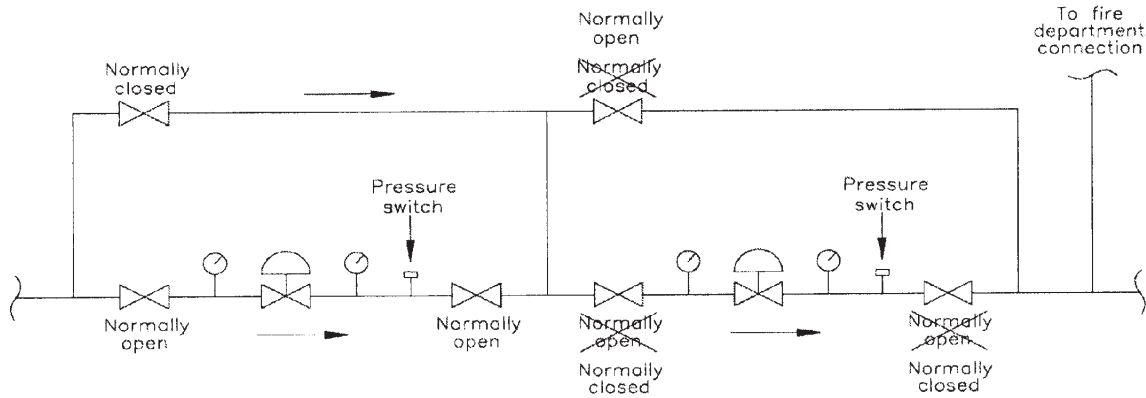
Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

A.
Proposed Figure 7.2.2 (Attachment)



Substantiation: There is no reasonable application for Figure A.7.2.2 (a), where a bypass would be required or furnished around a single Pressure Reducing Valve.

As shown, Figure A.7.2.2 (b) would direct water through both Pressure Reducing Valves, creating a redundant pressure reduction that would cause different outlet pressures in case of failure. The intent of the redundancy is to have a (redundant) backup valve, not a two-stage design. The inlet valve on the second PRV should be normally closed. The second valve on the bypass should be normally open.

Committee Meeting Action: Accept in Part

The deletion of Figure A.7.2.2(a) is accepted, the revision to Figure A.7.2.2(b) is not accepted.

Committee Statement: The committee accepts the deletion of Figure A.7.2.2(a) as it concurs with the submitter that this arrangement should not be used. The revision to Figure A.7.2.2(b) is not accepted because such an arrangement could cause the system piping downstream of these devices to be exposed to excessive pressure should the first valve fail in the open position.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention:

14-101 Log #CP8 **Final Action: Accept**
(Figure A.7.3.2(d))

Submitter: Technical Committee on Standpipes,
Recommendation: Revise Figure A.7.3.2(d) Roof Outlet Piping Arrangement as shown below;

(See Figure A.7.3.2(d) on the following page.)

Substantiation: Provides corrected details for a roof manifold and places the figure in the proper orientation.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

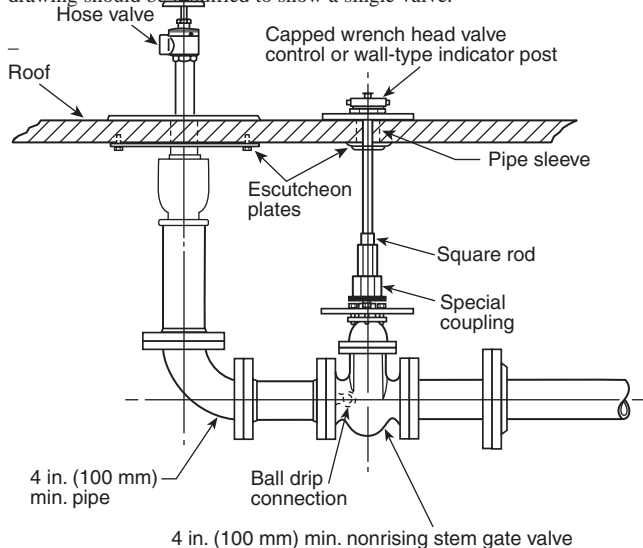
Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

Comment on Affirmative:

CONWAY, B.: During the committee meeting, we agreed to eliminate the pipe sizes shown on Figure a.7.3.2.D. also, the committee clarified that two valves are not required for testing per proposal 14-100 (log #71), so the

drawing should be modified to show a single valve.



ELEVATION VIEW

Figure A.7.3.2(d)

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-103 Log #47 **Final Action: Reject**
(A.7.10.1.2.3 (New))

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Add a new annex to read as follows:

A.7.10.1.2.3 Flow is added at nodes in a standpipe system in 250 gpm increments without requiring additional flow, which might occur from higher pressures at that node (balancing the system). The common supply piping should be hydraulically calculated based on the required flow rate (500, 750, 1000 or 1250 gpm) for the standpipe system. The calculated pressure for the standpipe system does not have to be balanced at the point of connection to the common supply piping.

Substantiation: Standpipe outlets are different from fixed orifices like sprinklers. There is no single K-factor that describes the relationship between flow and pressure once the hose and nozzle are attached. To account for greater flow, the fire fighter can always partially close a nozzle.

Committee Meeting Action: Reject

Committee Statement: See Committee Action and Statement on Proposal 14-76 (Log #16).

Number Eligible to Vote: 23

Ballot Results: Affirmative: 19 Negative: 2 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Negative:

BOTH, M.: This proposal is in line with the current edition of NFPA 14 and specifically the following sections:

- Maximum Flow Rates:
- 7.10.1.1.3 “with the total not to exceed 1250 gpm or 1000 gpm”
- 7.10.1.2.3 “with the total not to exceed 1250 gpm”
- 7.10.3 “The maximum flow required from a 2 1/2” hose connection shall be 250 gpm”

If you do not add the flows in 250 gpm increments you will be in violation of the above requirements from NFPA 14. Mr. Bilbo’s proposal is only clarifying what NFPA 14 already states.

WEBB, R.: Same response as Proposal 14-76 (Log #16)

Explanation of Abstention:

ALBINGER, JR., P.: See my Explanation of Abstention on Proposal 14-1 (Log #CP10).

14-102 Log #13 **Final Action: Accept**
(A.7.5)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Add text to read as follows:

Standpipe systems in separate buildings or structures fed by the same water supply are not required to be interconnected. For example, a building might have an automatic-wet standpipe system while an adjacent parking garage has an automatic-dry standpipe system fed by the same fire pump and water main. These two standpipe systems are not required to be interconnected since they protect different structures.

Substantiation: AHJ’s are demanding the interconnection of standpipes in adjacent structures, which is not possible in many cases. For example, dry systems and wet systems cannot be interconnected without some sort of interlock to keep the water out of the dry system.

Committee Meeting Action: Accept

Number Eligible to Vote: 23

Ballot Results: Affirmative: 21 Abstain: 1

Ballot Not Returned: 1 Silk, B.

Explanation of Abstention: