

***Technical Committee on
Private Water Supply Piping Systems***

MEMORANDUM

DATE: January 17, 2010

TO: Principal and Alternate Members of the Technical Committee on Private Water Supply Piping Systems

FROM: Matt Klaus, Senior Fire Protection Engineer/NFPA Staff Liaison

SUBJECT: **AUT-PRI AGENDA PACKAGE – A2012 ROP Meeting**

Enclosed is the agenda for the Report on Proposals (ROP) meeting for NFPA 13, *Standard for the Installation of Sprinkler Systems*, NFPA 24 *Standard for the Installation of Private service Mains and Their Appurtenances*, and NFPA 291 *Recommended Practice for Fire Flow Testing and Marking of Hydrants*. NFPA 13, 24, and 291 have entered the Annual 2012 revision cycle and will produce 2013 Editions. It is imperative that you review the attached proposals in advance, with your ideas and substantiations for your views. Please note the previous actions and committee statements will appear with the attached proposals. If you have alternate suggestions for text changes, please come prepared with the words and respective substantiation.

For administrative questions, please feel free to contact Joanne Goyette at (617) 984-7950. For technical questions, please feel free to contact Matt Klaus at (617) 984-7448. You can also reach either of us via e-mail at JGoyette@nfpa.org or MKlaus@nfpa.org. We look forward to meeting everyone in Savannah, GA at The Savannah Riverfront Marriott.

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PART 1 – MEETING AGENDA

REPORT ON PROPOSALS (ROP) MEETING
NFPA Technical Committee on
Private Water Supply Piping Systems

Savannah Riverfront Marriott
Savannah, GA
February 4, 2011

AGENDA

1. Call to Order at **8:00 AM**.
2. Self-Introductions of members and guests
3. Review of Distributed Meeting Materials
4. Approval of A09-ROC Meeting Minutes
5. Review of Meeting Procedures and Revision Process
6. Overview of Workload/Schedule/Agenda Additions
7. Guest Presentation – Hydro Flow (Regarding Log#7)
8. Address Public and Committee Proposals
 - NFPA 13
 - NFPA 24
 - NFPA 291
9. Assignments for ROC Meeting
10. New Business
11. Next Meeting
12. Adjournment

PART 2 - TC ADDRESS LIST

Address List No Phone

1/19/2011
Matthew J. Klaus
AUT-PRI

Private Water Supply Piping Systems Automatic Sprinkler Systems

Kenneth W. Wagoner Chair Parsley Consulting Engineers 350 West 9th Avenue, Suite 206 Escondido, CA 92025-5053	SE 8/5/2009 AUT-PRI	Richard W. Bonds Principal Ductile Iron Pipe Research Association 245 Riverchase Pkwy East, Suite O Birmingham, AL 35244	M 1/1/1987 AUT-PRI
Phillip A. Brown Principal American Fire Sprinkler Association, Inc. 12750 Merit Drive, Suite 350 Dallas, TX 75251 Alternate: Jeffrey J. Rovegno	IM 10/6/2000 AUT-PRI	James A. Charrette Principal Allan Automatic Sprinkler Corp. of So. California 3233 Enterprise Street Brea, CA 92821-6239 National Fire Sprinkler Association Installer/Maintainer Alternate: Ronald N. Webb	IM 7/26/2007 AUT-PRI
Flora F. Chen Principal City of Hayward 777 B Street Hayward, CA 94541	E 10/20/2010 AUT-PRI	Stephen A. Clark, Jr. Principal Allianz Risk Consultants, LLC 1003 Reece Drive Hoschton, GA 30548 Alternate: Andrew C. Higgins	I 1/14/2005 AUT-PRI
Jeffry T. Dudley Principal National Aeronautics & Space Administration 503 Glenbrook Circle Rockledge, FL 32955	U 10/20/2010 AUT-PRI	Byron E. Ellis Principal Entergy Corporation 5564 Essen Lane, Mail Code L-ESSN-2M Baton Rouge, LA 70821 Edison Electric Institute	U 7/23/2008 AUT-PRI
Brandon W. Frakes Principal XL Global Asset Protection Services 196 Shady Grove Lane Advance, NC 27006 Alternate: Mark A. Bowman	I 1/15/2004 AUT-PRI	David B. Fuller Principal FM Global 1151 Boston Providence Turnpike PO Box 9102 Norwood, MA 02062-9102	I 7/26/2007 AUT-PRI
Robert M. Gagnon Principal Gagnon Engineering 2660 Daisy Road Woodbine, MD 21797	SE 4/1/1994 AUT-PRI	William J. Gotto Principal Global Risk Consultants Corporation 100 Walnut Avenue, 5th Floor Clark, NJ 07066	SE 8/5/2009 AUT-PRI
LaMar Hayward Principal 3-D Fire Protection, Inc. PO Box 50845 Idaho Falls, ID 83405	IM 8/2/2010 AUT-PRI	Luke Hilton Principal Liberty Mutual Property 13830 Ballantyne Corporate Place, Suite 525 Charlotte, NC 20277-2711 Alternate: Tanya M. Glumac	I 10/1/1996 AUT-PRI

Address List No Phone

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Private Water Supply Piping Systems Automatic Sprinkler Systems

Alan R. Laguna Principal Merit Sprinkler Company, Inc. 930 Kenner Avenue PO Box 1447 Kenner, LA 70062-1447	IM 10/3/2002 AUT-PRI	John Lake Principal City of Gainesville 306 NE 6th Avenue, Building B PO Box 490, Station 9 Gainesville, FL 32602-0490	E 1/31/2001 AUT-PRI
Michael T. Larabel Principal Alticor/Amway Inc. 7575 East Fulton Street, 44B-1C Ada, MI 49357	U 8/2/2010 AUT-PRI	George E. Laverick Principal Underwriters Laboratories Inc. 333 Pfingsten Road Northbrook, IL 60062-2096 Alternate: Michael G. McCormick	RT 4/15/2004 AUT-PRI
James M. Maddry Principal James M. Maddry, P.E. 3680 Foxfire Place Martinez, GA 30907	SE 1/1/1991 AUT-PRI	Kevin D. Maughan Principal Tyco Fire Suppression & Building Products 1467 Elmwood Avenue Cranston, RI 02910 Alternate: Cliff Hartford	M 1/14/2005 AUT-PRI
Bob D. Morgan Principal Fort Worth Fire Department 1000 Throckmorton Street Fort Worth, TX 76102	E 8/2/2010 AUT-PRI	David S. Mowrer Principal Babcock & Wilcox Technical Services, LLC Y-12 National Security Complex PO Box 2009, MS-8107 Oak Ridge, TN 37831-8107	U 1/1/1982 AUT-PRI
Dale H. O'Dell Principal National Automatic Sprinkler Fitters LU 669 14698 Stallion Trails Victorville, CA 92392 United Assn. of Journeymen & Apprentices of the Plumbing & Pipe Fitting Industry Alternate: Charles W. Ketner	L 8/2/2010 AUT-PRI	Adam P. Olomon Principal Aon/RRS/Schirmer Engineering 6455 South Shore Blvd., Suite 400 League City, TX 77573	I 8/2/2010 AUT-PRI
Sam P. Salwan Principal Environmental Systems Design, Inc. 175 West Jackson Blvd., Suite 1400 Chicago, IL 60604 Alternate: Martin Ramos	SE 1/1/1989 AUT-PRI	James R. Schifiliti Principal Fire Safety Consultants, Inc. 2420 Alft Lane, Suite 100 Elgin, IL 60124 Illinois Fire Prevention Association	IM 1/18/2001 AUT-PRI
Peter T. Schwab Principal Wayne Automatic Fire Sprinklers, Inc. 222 Capitol Court Ocoee, FL 34761-3033	IM 7/29/2005 AUT-PRI	J. William Sheppard Principal Sheppard & Associates, LLC 24756 Tudor Lane Franklin, MI 48025	SE 1/1/1984 AUT-PRI

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Scott M. Twele Principal The RJA Group, Inc. Rolf Jensen & Associates, Inc. 591 Camino de la Reina, Suite 1025 San Diego, CA 92108 Alternate: Joshua Davis	SE 10/20/2010 AUT-PRI	Karl Wiegand Principal National Fire Sprinkler Association 40 Jon Barrett Road Patterson, NY 12563 National Fire Sprinkler Association Design Alternate: Steve L. Escue	M 10/27/2009 AUT-PRI
Mark A. Bowman Alternate XL Global Asset Protection Services 13467 Chevington Drive Pickerington, OH 43147 Principal: Brandon W. Frakes	I 1/15/2004 AUT-PRI	Joshua Davis Alternate The RJA Group, Inc. Rolf Jensen & Associates, Inc. 3384 Peachtree Road NE, Suite 550 Atlanta, GA 30326 Principal: Scott M. Twele	SE 10/20/2010 AUT-PRI
Steve L. Escue Alternate TK Engineering Company 427 Church Street Goodlettsville, TN 37072 National Fire Sprinkler Association Design Principal: Karl Wiegand	M 3/4/2009 AUT-PRI	Tanya M. Glumac Alternate Liberty Mutual Property 20 Riverside Road Weston, MA 02493-2231 Principal: Luke Hilton	I 1/10/2008 AUT-PRI
Cliff Hartford Alternate Tyco Fire & Building Products 5907 Raymond Avenue Farmington, NY 14425 Principal: Kevin D. Maughan	M 10/4/2007 AUT-PRI	Andrew C. Higgins Alternate Allianz Risk Consultants, Inc. 3475 Piedmont Road NE, Suite 900 Atlanta, GA 30305 Principal: Stephen A. Clark, Jr.	I 3/21/2006 AUT-PRI
Charles W. Ketner Alternate National Automatic Sprinkler Fitters LU 669 Joint Apprenticeship & Training Committee 7050 Oakland Mills Road Columbia, MD 20732 United Assn. of Journeymen & Apprentices of the Plumbing & Pipe Fitting Industry Principal: Dale H. O'Dell	L 8/2/2010 AUT-PRI	Michael G. McCormick Alternate Underwriters Laboratories Inc. 333 Pfingsten Road Northbrook, IL 60062-2096 Principal: George E. Laverick	RT 10/20/2010 AUT-PRI
Martin Ramos Alternate Environmental Systems Design, Inc. 175 West Jackson Blvd., Suite 1400 Chicago, IL 60604 Principal: Sam P. Salwan	SE 3/15/2007 AUT-PRI	Jeffrey J. Rovegno Alternate Mr. Sprinkler Fire Protection 100 Derek Place Roseville, CA 95678 American Fire Sprinkler Association Principal: Phillip A. Brown	IM 8/5/2009 AUT-PRI

Address List No Phone

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Private Water Supply Piping Systems Automatic Sprinkler Systems

Ronald N. Webb	IM 8/2/2010	Geoffrey N. Perkins	SE 1/1/1992
Alternate S.A. Comunale Company, Inc. 2900 Newpark Drive Barberton, OH 44203 National Fire Sprinkler Association Installer/Maintainer Principal: James A. Charrette	AUT-PRI	Nonvoting Member Bassett Consulting Engineers 49 Park Road Milton, QLD 4064 Australia	AUT-PRI

Matthew J. Klaus	12/16/2010
Staff Liaison National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471	AUT-PRI

PART 3 – NFPA STAFF LIAISON NOTICE

Note from the Staff Liaison

Dear Committee Members:

We are very pleased that you will be participating in the processing of the 2013 Edition of NFPA 13/24/291. Development of the Standard would not be possible without the participation of volunteers like you.

Materials You Will Need to Have for the Committee Meeting

- Agenda with all attachments
- Committee Officers' Guide (Chairs)
- Roberts' Rules of Order (Chairs – abbreviated version may be found in the Committee Officer's Guide)

"Nice to Have" Materials

- NFPA Annual Directory
- NFPA Manual of Style
- Prepared Committee Proposals (If applicable)

Preparation

Prepared actions and statements will clarify your position and provide the committee with a starting point. Prepared actions and statements really help expedite the progress of the meeting.

Getting Things Done

Proposals

Only one posting of proposals will be made; it will be arranged in section/order and will be pre-numbered. This will be posted to the NFPA e-committee website and also attached to this Agenda Package. If you have trouble accessing the website please contact Joanne Goyette at jgoyette@nfpa.org. Please bring the proposals to the committee meeting.

The processing schedule to be followed by the committee is outlined in the schedule in this package. As the schedule is very tight, no extensions of the deadline for receipt of completed ballots or extensions of the period to change vote will be possible.

It is therefore suggested that those of you who must consult with others regarding your ballot do so based on the material passed out at the meeting, and your meeting notes. Do not wait for receipt of the ballot materials from NFPA.

Regulations and Operating Procedures

All actions at, and following, the committee meetings will be governed in accordance with the NFPA Regulations Governing Committee Projects. The latest Regulations (as of this printing) appear on pages 10-28 of the 2010 NFPA Directory.

All committee actions will be in accordance with the NFPA Regulations Governing Committee Projects. The style of NFPA 13/24/291 will comply with the Manual of Style for NFPA Technical Committee Documents. Failure to comply with these rules could result in challenges to the standards-making process. A successful challenge on procedural

grounds could prevent or delay publication of NFPA 13/24/291. Consequently, committees must follow the regulations and procedures.

Processing Proposals

Proposals Requiring Committee Actions

All public proposals must be acted upon. If a proposal does not comply with Section 4.3.3 of the NFPA Regulations Governing Committee Projects (an incomplete proposal), the committee may reject the proposal. However, any of the standard actions may be taken. Please make sure that the committee's action and the committee's statement result in a complete action that can be readily understood.

Committee Actions

The following are the actions permitted by the Regulations Governing Committee Projects for disposition of proposals.

Accept

The committee accepts the proposal exactly as written. Only editorial changes such as paragraph and section numbering, and corrections to spelling, capitalization, and hyphenation may be made.

If a proposal is accepted without a change of any kind, except for editorial changes, the committee can simply indicate acceptance. The committee should add a committee statement explaining the action if, for example the committee does not agree with all of the substantiation or supporting data or has a number of different reasons for acceptance than those stated in the substantiation or supporting data. The absence of such a statement could mislead the reader by giving the impression that the committee agreed with all of the substantiation for the proposal.

Reject

The proposal is rejected by the committee. If the principle or intent of the proposal is acceptable in whole or in part, the proposal should not be rejected, it should be accepted in principle or accepted in principle in part. A complete reason for rejection of the proposal must be supplied in the committee statement.

Accept in Principle

Accept the proposal with a change in wording. The committee action must indicate specifically what action was taken to revise the proposed wording, and where the wording being revised is located (i.e., in the proposed wording or in the document). If the details are in the action on another proposal, the committee action may simply indicate "Accept in Principle" but reference should then be made in the committee statement to the specific proposal detailing the action.

Accept in Part

If part of a proposal is accepted without change and the remainder is rejected, the proposal should be "Accepted in Part." The committee action must indicate what part was accepted and what part was rejected and the committee statement must indicate its reasons for rejecting that portion.

Accept in Principle in Part

This is a combination of "Accept in Principle" and "Accept in Part" as shown above.

Committee Statements

Any proposal that is "Accepted in Principle", "Accepted in Part", "Accepted in Principle in Part" or "Rejected" must include a committee statement, preferably technical in nature that provides the reasons for the action.

References to the requirements of other documents as a reason for rejection should be to the specific sections of the document including the requirements. If there is more than one such section, the reference should include a least one, identified as an example.

It is a violation of the regulations for a committee to reject a proposal simply because it accepted a different proposal on the same subject. Reference in the committee statement to another committee action is inappropriate unless the referenced proposal contains all of the applicable technical justification for the action.

If the rejection or change was for the same reason that another proposal was rejected or changed, the committee statement may refer to that proposal giving the same reason for rejection or change. Please verify that cross references to other proposals are correct.

The committee statement should not refer to another committee statement which, in turn, refers to some other committee statement. There may be a situation where the committee will want to refer to two, three, or more committee statements if they are all appropriate.

When the committee develops a committee action for a proposal that is accepted in principle, the rationale must indicate why the wording submitted was not accepted. This reason should be technical in nature, unless the committee has simply rewritten the submitter's text, in which case the committee can state that the proposed wording should meet the submitter's intent.

The committee statement on a proposal that is accepted in part should indicate specifically why that part of the proposal was not accepted.

Easy Procedures for Handling a Motion

NFPA Committee Meetings are conducted in accordance with Roberts' Rules of Order. In order for a proposal to be discussed, a motion must be made. A simplified procedure for discussion of motions is as follows:

Member

- Member Addresses the Chair
- Receives Recognition from the Chair
- Introduces the Motion
- (Another Member) Seconds the Motion.

Chair (Presiding Officer)

- States the Motion
- Calls for Discussion

- Takes the vote
- Announces the Result of the Vote

It is imperative that you review the proposals before the meeting and develop proposed actions and statements. These prepared actions and statements will clarify your position and provide the committee with a starting point. Prepared actions and statements really help expedite the progress of the meeting.

Balloting Dos and Don'ts

Either fax or mail your ballot - Please do not do both. Don't return the entire package; just return the appropriate ballot page(s) and explanation of votes.

Alternate Members

At the end of each code cycle, the Standards Council reviews records of all members regarding their participation in the standards-making process. Therefore, it is important for alternate members to remember that return of ballots is expected, even though they know that their principal member will be attending meetings and returning their ballots.

General Procedures for Meetings

- Use of tape recorders or other means capable of producing verbatim transcriptions of any NFPA Committee Meeting is not permitted.
- Attendance at all NFPA Committee Meetings is open.
- All guests must sign in and identify their affiliation.
- Participation in NFPA Committee Meetings is generally limited to committee members and NFPA staff. Participation by guests is limited to individuals, who have previously requested of the chair time to address the committee on a particular item, or individuals who wish to speak regarding public proposals or comments that they submitted.
- The chairman reserves the right to limit the amount of time available for any presentation.
- No interviews will be allowed in the meeting room at any time, including breaks.
- All attendees are reminded that formal votes of committee members will be secured by letter ballot. Voting at this meeting is used to establish a sense of agreement, but only the results of the formal letter ballot will determine the official position of the committee on any proposal.
- Note to Special Experts: Particular attention is called to Section 3.3(e) of the NFPA Guide for the Conduct of Participants in the NFPA Codes and Standards Development Process in the NFPA Directory that directs committee members to declare their interest representation if it is other than their official designation as shown on the committee roster, such as when a special expert is retained and represents another interest category on a particular subject. If such a situation exists on a specific issue or issues, the committee member shall declare those interests to the committee, and refrain from voting on any proposal, comment, or other matter relating to those issues.
- Smoking is not permitted at NFPA Committee Meetings

PART 4 – A2009 ROC MEETING MINUTES

DRAFT MEETING MINUTES
Report on Comments Meeting
NFPA Technical Committee on
Private Water Supply Piping Systems
Savannah Marriott
Savannah, GA
September 15-16, 2008

TASK GROUP MEETINGS – 8:00AM

- 1. Call to Order.** Chair Jim Biggins called the meeting to order at 10:00AM.
- 2. Self-Introductions of members and guests.** Committee members introduced themselves and reviewed the committee roster information. Attendance list is attached to these minutes.
- 3. Review of Distributed Meeting Materials** Jim Lake reviewed the materials distributed to the committee
- 4. Approval of A09-ROP Meeting Minutes** The minutes of the A09-ROP meeting were approved without revision.
- 5. Review of Meeting Procedures and Revision Process** Jim Lake provided a presentation on the ROC meeting procedures and the remaining schedule for the revision process.
- 7. Reports of Existing/Standing Task Groups** The committee heard brief reports of the activities of the Task Groups on Underground / Foundation Diagrams; Isolation / Control Valve Terminology; and Residential Sprinkler Underground. The results of the TGs work are incorporated into the Report on Comments.

The Committee expressed their thanks to the TGs and the TGs were dissolved.

- 8. 8. Address Public and Committee Comments** The committee developed a Report Comments for NFPA 24 and Chapter 10 of NFPA 13. See the Committee Ballot and Report on Comments for the actions.
- 9. New Business.** No new business was conducted.
- 10. Upcoming Meeting Dates and Locations.** The next meeting of this committee will be in the 1st Quarter of 2011 as part of the A12 revision cycle
- 11. Adjournment.** The meeting was adjourned at 3:45PM

PART 5 – A2012 REVISION CYCLE DATES

2012 Annual Revision Cycle

	PROCESS STAGE	PROCESS STEP	DATES FOR TC	DATES FOR TCC
1	PRELIMINARY	1.0 Notification of intent to enter cycle	7/9/10	7/9/10
2	REPORT ON PROPOSALS (ROP)	2.1 Proposal closing date	11/23/10*	11/23/10*
		2.2 Final date for ROP meeting	2/25/11	2/24/11
		2.3 Final date for mailing TC ballots	3/18/11	2/18/11
		2.4 Receipt of (TC) ballots by staff liaison	4/22/11	3/11/11
		2.5 Receipt of TC recirculation ballots	5/6/11	3/18/11
		2.6 Final date for TCC meeting		4/15/11
		2.7 Final date for mailing TCC ballots		4/22/11
		2.8 Receipt of TCC ballots		5/13/11
		2.9 Receipt of TCC recirculation ballots		5/20/11
		2.10 Final copy (w/ ballot statements) to Secretary, Standards Council	5/13/11	5/27/11
		2.11 Completion of Reports	5/20/11	6/3/11
		2.12 ROP Published and Posted	6/24/11	6/24/11
3	REPORT ON COMMENTS (ROC)	3.1 Comment closing date	8/30/11	8/30/11
		3.2 Final date for ROC meeting	11/4/11	10/7/11
		3.3 Final date for mailing TC ballots	11/18/11	10/21/11
		3.4 Receipt of (TC) ballots by staff liaison	12/2/11	11/11/11
		3.5 Receipt of TC recirculation ballots	12/9/11	11/18/11
		3.6 Final date for TCC meeting		12/16/11
		3.7 Final date for mailing TCC ballots		12/23/11
		3.8 Receipt of TCC ballots		1/13/12
		3.9 Receipt of TCC recirculation ballots		1/20/12
		3.10 Final copy (w/ ballot statements) to Secretary, Standards Council	12/23/11	1/27/12
		3.11 Completion of Reports	1/13/12	2/3/12
		3.12 ROC Published and Posted	2/24/12	2/24/12
4	TECH SESSION PREPARATION & ISSUANCE OF CONSENT DOCUMENTS	4.1 Notice of Intent to Make a Motion (NITMAM) Closing Date	4/6/12	4/6/12
		4.2 Posting of Filed NITMAM	5/4/12	5/4/12
		4.3 Council Issuance Date for Consent Documents	5/29/12	5/29/12
		4.4 Appeal Closing Date for Consent Documents	6/13/12	6/13/12
5	TECHNICAL SESSION	5.0 Association Meeting for Documents with Certified Amending Motions	6/3-7/12	6/3-7/12
6	APPEALS & ISSUANCE OF DOCUMENTS W/CAMS	6.1 Appeal closing date for Documents with Certified Amending Motions	6/27/12	6/27/12
		6.2 Council issuance for Documents with Certified Amending Motions	7/26/12	7/26/12

* Proposal Closing Dates may vary according to documents and schedules for Revision Cycles may change. Please check the NFPA website (www.nfpa.org) for the most up-to-date information on proposals closing dates and schedules.

**PART 6 – NFPA 13 ANNUAL 2012 MASTER
SCHEDULE**

Technical Committees on Automatic Sprinkler Systems
Annual 2012 Revision Cycle Master Schedule

1. **Proposal Closing Date** - October 1, 2010
2. **PreROP Meetings:** Quincy Marriott, Quincy, MA
 - a. December 1-2, 2010 – Sprinkler System Installation (SSI)
 - b. December 1-2, 2010 – Sprinkler System Discharge (SSD)
 - c. December 2-3, 2010 – Residential Sprinkler Systems (RSS)
3. **ROP Meetings:** Savannah Riverfront Marriott, Savannah, GA
 - a. February 2-3, 2011 - Hanging and Bracing (HBS)
 - b. February 4, 2011 - Private Water Supply (PRI)
 - c. February 7-9, 2011 - Sprinkler System Installation (SSI)
 - d. February 10-11, 2011 - Sprinkler System Discharge (SSD)
 - e. February 14-15, 2011 - Residential Sprinkler Systems (RSS)
4. **TCC-ROP Meeting:** Savannah Riverfront Marriott, Savannah, GA, March 29-30, 2011
5. **ROC Meeting:** Newport Beach Marriott, Newport Beach, CA
 - a. September 19-20, 2011- Sprinkler System Installation (SSI)
 - b. September 22-23, 2011 - Sprinkler System Discharge (SSD)
 - c. September 26-27, 2011 - Residential Sprinkler Systems (RSS)
 - d. September 28, 2011 - Hanging and Bracing (HBS)
 - e. September 29, 2011 - Private Water Supply (PRI)
6. **TCC-ROC Meeting:** Conference Call - TBD

**PART 7 – ANNUAL 2012 PUBLIC PROPOSALS
AUT-PRI**

13- Log #CP4 AUT-PRI
(Entire Document)

Final Action:

Submitter: Technical Committee on Private Water Supply Piping Systems,
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.

13- Log #341 AUT-PRI
(10.1.3)

Final Action:

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.
Recommendation: Clarify the standards necessary to meet the coating and wrapping requirement.
Substantiation: The committee is not clear as to what extent of coating and wrapping is sufficient. Is there a standard on the subject that can be required?

13- Log #366 AUT-PRI
(10.1.6.2)

Final Action:

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.
Recommendation: Revise text to read as follows:
10.1.6.2 Steel pipe utilized in fire department connections and protected in accordance with the requirements of Section 10.1.3 shall not be required to be internally lined.
Substantiation: This proposal clarifies that the lining being addressed is on the interior of the pipe. Some users of the standard have been incorrectly using this section to eliminate external coatings that are required by Section 10.1.3.

13- Log #342 AUT-PRI
(Figure 10.10.1)

Final Action:

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.
Recommendation: Add a section of the figure for the forward flow test of a backflow preventer.
Substantiation: Section 10.10.2.5.1 requires a forward flow test of the backflow preventer during the acceptance test. The proof that the test was run and the results need to be added to the test form.

13- Log #423 AUT-PRI
(Figure 10.10.1)

Final Action:

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

Recommendation: Revise the "Test Description" portion of the figure (5th major category down from the top) by deleting the second and third sentences for "Flushing" and replacing them with a new sentence, "Flush at one of the flow rates as specified in section 10.10.2.1.3"

The "Flushing" section would then read as follows:

"Flushing: Flow the required rate until water is clear as indicated by no collection of foreign material in burlap bags at outlets such as hydrants and blow offs. Flush at one of the flow rates as specified in section 10.10.2.1.3."

Substantiation: As written, the Figure only recognizes two of the three methods for determining appropriate flow conditions for the flush test. Rather than list all of the appropriate methods, it might be easier just to reference them. Alternately, the committee could add a check box to the form asking if the flow was obtained by the system demand, the 10 ft/s velocity, or the maximum flow available.

This proposal was prepared on behalf of the NFSA Engineering and Standards Committee.

13- Log #144 AUT-PRI
(Table A.10.8.2(b))

Final Action:

Submitter: Kenneth W. Wagoner, Parsley Consulting Engineers

Recommendation: Revise text to read as follows:

Example. Using Table A.10.8.2(c) (b), find the horizontal bearing block area for a 6 in. diameter, 45 degree bend with an internal pressure of 150 psi. The soil bearing strength is 3,000 lb/ft², and the safety factor is 1.5. From Table A.10.8.2(c) (b), the required bearing block area for a 6 in. diameter, 90 degree bend with an internal pressure of 100 psi and a soil horizontal bearing strength of 1,000 psi is 7.9 ft².

Substantiation: Table being referenced should be Table (b), as Table (c) does not provide horizontal bearing block area.

24- Log #CP1 AUT-PRI
(Entire Document)

Final Action:

Submitter: Technical Committee on Private Water Supply Piping Systems,

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.

24- Log #26 AUT-PRI
(4.1.3)

Final Action:

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Revise text as follows: 4.1.3 Working plans shall be drawn to an indicated scale on sheets of uniform size, with a plan of each floor as applicable, and shall include the following items that pertain to the design of the system:

(9) The following items that pertain to hydrants:

(a) Size and location, including size and number of outlets and whether outlets are to be equipped with independent gate valves

(b) Thread size and coupling adaptor specifications

(b) Whether hose houses and equipment are to be provided, and by whom

(c) Static and residual hydrants used in flow

(d) Method of restraint

Substantiation: Currently there is not a requirement within this list to show thread specifications for the hydrant and due to the use of five inch hose an adaptor is typically required in some jurisdictions at the time of hydrant installation.

24- Log #8 AUT-PRI
(5.1.2)

Final Action:

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

Recommendation: Revise 5.1.2 as follows:

The volume and pressure of a public water supply shall be determined from waterflow test data or other approved method.

Substantiation: This is consistent with changes in the 2010 NFPA 13. Many water purveyors do not allow waterflow tests and require that modeling be used to determine available water supply.

24- Log #9 AUT-PRI
(5.1.3)

Final Action:

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

Recommendation: Renumber 5.1.3 as A.5.1.2 and revises as follows:

An adjustment to the waterflow test data to account for the following ~~shall~~ should be made, as appropriate:

(1) through (5) remains the same.

Substantiation: Move 5.1.3 to the annex which is consistent with changes in the 2010 NFPA 13.

24- Log #10 AUT-PRI
(5.2.2(e))

Final Action:

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

Recommendation: Modify as follows:

(e) ~~Class II~~ Standpipe systems

Substantiation: There should not be a requirement which requires a 6" minimum underground supply for all Class I & III standpipes. For instance, one could have an automatic wet standpipe with sufficient city water pressure. A manual wet standpipe that is part of a combined system could technically have 2" underground (Only sprinkler demand needs to be provided). NFPA 14 requires that all new standpipes be hydraulically calculated so this standard should not dictate a minimum size for the underground.

24- Log #11 AUT-PRI
(5.4.2)

Final Action:

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

Recommendation: Modify as follows:

5.4.2 Where equipment is installed to guard against possible contamination of the public water system, such equipment and devices shall be listed or classified for fire protection service.

Substantiation: Backflows recognized by UL are classified, which is a form of a listing. This change covers it both ways.

24- Log #27 AUT-PRI
(5.8)

Final Action:

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Revise text as follows: 5.8 Penstocks, Flumes, Rivers, Lakes, or Reservoirs. Water supply connections from approved penstocks, flumes, rivers, lakes, or reservoirs shall be arranged to avoid mud and sediment and shall be provided with approved, double, removable screens or approved strainers installed in an approved manner.

Substantiation: The text would imply that it is permissible to connect to any of the above and the new language requires review by the authority having jurisdiction as to the adequacy of the water supply

24- Log #28 AUT-PRI
(5.9.1.4 (New))

Final Action:

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Revise text as follows:

5.9* Fire Department Connections.

5.9.1.4 Where required, fire department connections shall be identified by an approved reflective material.

Substantiation: Frequently landscape plants can partially obscure FDC locations or the galvanized exterior can blend with the gray of the buildings concrete making locations not readily apparent. The use of reflective tape will provide color cues during the day and high visibility at night.

A5.9.1.4 The colors could be red for sprinkler systems and blue for standpipes and both for combination systems.

24- Log #29 AUT-PRI
(5.9.1.5 (New))

Final Action:

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Add text as follows: 5.9.1.5 Fire department connections shall be protected where subject to mechanical damage.

Substantiation: This protection is provided for hydrants and should be in the code for FDC's as well.

24- Log #30 AUT-PRI
(5.9.1.6 (New))

Final Action:

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Add new text to read: 5.9.1.6 The AHJ shall have the authority to require locking fire department connection (FDC) plugs or caps on all water-based fire protection systems.

Substantiation: The proposed text is from NFPA 1 and should be included in NFPA 24 for consistency. Locking caps are starting to become more popular as a means to prevent vandalism and ensure that FDC's are functional.

24- Log #12 AUT-PRI
(5.9.2)

Final Action:

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

Recommendation: Modify as follows:

5.9.1 General. Where the AHJ requires a remote fire department connection, a fire department connection shall be provided as described in Section 5.9 for systems requiring one by another standard.

Substantiation: Currently the standard requires a fire department connection. If this was a system with only hydrants, an FDC would still be required. This change recognizes that the requirement for a fire department connection will be initiated by another standard. Language is also added to indicate that an FDC being located remote is not required by this standard but is at the discretion of the AHJ. Annex A.5.9.5.1 also gives some guidance but this requirement should be located in the charging statement of the section.

24- Log #31 AUT-PRI
(5.9.4.2 (New))

Final Action:

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Add text as follows:

5.9.4 Drainage.

5.9.4.1 The pipe between the check valve and the outside hose coupling shall be equipped with an approved automatic drip.

5.9.4.2 The approved automatic drip where required shall be readily accessible for inspection and maintenance

Substantiation: In areas subject to freezing NFPA 13 SECTION 8.17.2.6 provides no direction for accessibility and maintenance of this valve leaving the pipe vulnerable to freeze damage.

24- Log #32 AUT-PRI
(5.9.5.3 (New))

Final Action:

Submitter: James Everitt, Western Regional Fire Code Development Committee

Recommendation: Add text as follows:

5.9.5.3* Each fire department connection shall be designated by a sign as follows:

(1) The sign shall have raised or engraved letters at least 1 in. (25.4 mm) in height on a plate or fitting.

(2)*The sign shall indicate the type of system for which the connection is intended.

(3) Where multiple sprinkler FDC's are located in close proximity, or where there may be confusion determining which building or portion of building is served by the FDC, the sign shall indicate by use of verbiage or diagram which building or building portion is served.

Substantiation: This language is necessary to determine which FDC to use.

24- Log #13 AUT-PRI
(5.9.5.4)

Final Action:

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

Recommendation: Modify as follows:

5.9.5.4 Where the system demand pressure of a standpipe system exceeds 150 psi (10.3 bar), the sign required by 5.9.5.3 shall indicate the required design pressure.

Substantiation: The current section is a blanket statement that affects all systems with a fire department connection. Only NFPA 14 has a requirement for the responding fire department to pump the system demand into the fire department connection. NFPA 13 indicates that the purpose of the fire department connection is for supplement water only, not the system demand.

24- Log #36 AUT-PRI
(6.2.1)

Final Action:

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

Recommendation: Revise text to read as follows:

6.2.1 At least one ~~listed~~ indicating valve complying with Section 6.1.4 shall be installed in each source of water supply.

Substantiation: The term "listed indicating valve" leads many authorities to think that a post indicator valve is required. It has been the accepted practice in most areas of the country to accept a non-indicating tapping sleeve and valve as the valve controlling the water supply.

24- Log #14 AUT-PRI
(6.2.2)

Final Action:

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

Recommendation: Modify as follows:

6.2.2 No shutoff valve shall be permitted in the piping from the fire department connection to the point that the fire department connection piping connects to the system piping.

Substantiation: In the 2010 edition of NFPA 13, annex figures were added to clarify that the no shutoff valve requirement applied to the fire department connection piping. (A.8.17.2.4.4. (a) & (b)). Some AHJ's felt that this requirement meant that there could be no shutoff valve downstream of the fire department connection throughout the entire system. This additional text clarifies the requirement.

24- Log #3 AUT-PRI
(6.3.1 and 6.3.3.1)

Final Action:

Submitter: James Whitehead, Los Alamos National Laboratory

Recommendation: Revise text as follows:

6.3.1 Where post indicator valves are used, they shall be set so that the top of the post is 32 in. to 40 in. (0.8 m to 1.0 m) above the final grade.

~~6.3.3.1 Post-indicator valves shall be set so that the top of the post is 36 in. (0.9 m) above the final grade.~~

Substantiation: I propose that the committee complete their original revision by deleting the section of text that they originally set out to revise. Sections 6.3.1 and 6.3.3.1 are in clear contradiction.

This is not original material; its reference/source is as follows:

The previous NFPA committee members that convened to revise NFPA 24 are the authors of this mistake.

24- Log #4 AUT-PRI
(6.3.2 and 6.3.3.2)

Final Action:

Submitter: James Whitehead, Los Alamos National Laboratory

Recommendation: Revise text as follows:

6.3.2 Where post indicator valves are used, they shall be protected against mechanical damage where needed.

~~6.3.3.2 Post-indicator valves shall be protected against mechanical damage where needed.~~

Substantiation: I propose that the committee complete their original revision by deleting the section of text that they originally set out to revise. Sections 6.3.2 and 6.3.3.2 are redundant.

This is not original material; its reference/source is as follows:

The previous NFPA committee members that convened to revise NFPA 24 are the authors of this mistake.

24- Log #15 AUT-PRI
(6.6.1)

Final Action:

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

Recommendation: Modify as follows:

6.6.1 ~~Large; Private;~~ fire service main systems 500 ft or longer shall have sectional controlling valves ~~at appropriate points~~ to permit sectionalizing the system in the event of a break or to make repairs or extensions.

Substantiation: The current language is unenforceable text. ("Large" and "at appropriate points"). This is an attempt to quantify the requirement. 500' may or may not be the correct number. This will be up to the committee. The current language needs to be removed.

24- Log #16 AUT-PRI
(6.7.3)

Final Action:

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

Recommendation: Modify as follows:

6.7.3 Supervision of underground gate valves with roadway boxes shall ~~not be required.~~ be by the use of a lockable cap.

Substantiation: All other valves require supervision. Just because this valve is located underground does not mean that someone will not tamper with it. In a situation where a water line has broken underground, the responding party usually will attempt to turn off any valve that they can until the flow of water is stopped. Relying on them to return all valves to service may not be enough. The cost of a lockable cap is not significantly more than that of a regular cap and provides adequate supervision.

24- Log #17 AUT-PRI
(7.1.1.1.1 (New))

Final Action:

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

Recommendation: Add new section:

7.1.1.1.1 Valves in the hydrant connection shall be installed within 20 ft (6.1 m) of the hydrant.

Substantiation: There is currently no requirement mandating a maximum distance that the valve can be from the hydrant. We have seen where a valve can be 300' or more from a hydrant. This makes it very difficult sometimes to locate the roadway box when it may have been covered with dirt, sod, etc. With a mandated distance, it narrows the search area when a valve has been covered.

24- Log #18 AUT-PRI
(7.3.7.1 (New))

Final Action:

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

Recommendation: Add new section:

7.3.7.1 Devices listed in 7.3.7 shall be allowed in a hydrant service stub when part of an assembly including the hydrant specifically listed for fire protection.

Substantiation: With concerns about terrorism and contamination of water supplies, there has been a push to require some form of protection against induction of chemicals into a water supply. If these are to be used, they should be listed to determine pressure losses and other adverse affects on the operating capabilities of a hydrant.

24- Log #23 AUT-PRI
(8.2.2)

Final Action:

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

Recommendation: Modify as follows:

8.2.2 Hydrants within hose houses shall be located at as close to the front of the house as possible and still allow sufficient room in the back of the doors for the hose gates and the attached hose.

Substantiation: As close as possible and sufficient are unenforceable terms.

24- Log #21 AUT-PRI
(Table 10.1.1)

Final Action:

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

Recommendation: Add under Plastic:

Polyvinyl Chloride (PVC) Pressure Pipe, 14 in. Through 48 in., for Water Distribution AWWA C905

Substantiation: Some water systems will use PVC piping larger than 12" and adding this AWWA standard is appropriate.

24- Log #38 AUT-PRI
(10.2.4 and 10.2.5)

Final Action:

Submitter: Larry Keeping, Vipond Fire Protection

Recommendation: Move Section 10.2.5 to the beginning of Section 10.2 to become Section 10.2.1 and renumber Section 10.2 accordingly.

Move Section 10.2.4 to the beginning of Section 10.3 to become Section 10.3.1 and renumber Section 10.3 accordingly.

With this, Table 10.2.1(a) and Table 10.2.1(b) will be renumbered as Table 10.2.2(a) and Table 10.2.2(b) and the sections will then read as follows:

10.2 Fittings.

10.2.1 ~~10.2.5~~ Buried Fittings. Fittings shall be of an approved type with joints and pressure class ratings compatible with the pipe used.

10.2.2 ~~10.2.1~~ Standard Fittings. Fittings shall meet the standards in Table ~~10.2.2(a)~~ ~~10.2.1(a)~~ or shall be in accordance with Section ~~10.2.3~~ ~~10.2.2~~. In addition to the standards in Table ~~10.2.2(b)~~ ~~10.2.1(b)~~, CPVC fittings shall also be in accordance with Section ~~10.2.3~~ ~~10.2.2~~ and with the portions of the ASTM standards specified in Table ~~10.2.2(b)~~ ~~10.2.1(b)~~ that apply to fire protection service.

10.2.3 ~~10.2.2~~ Special Listed Fittings. Other types of fittings investigated for suitability in automatic sprinkler installations and listed for this service, including, but not limited to, polybutylene, CPVC, and steel differing from that provided in Table 10.2.1(a), shall be permitted when installed in accordance with their listing limitations, including installation instructions.

10.2.4 ~~10.2.3~~ Pressure Limits. Listed fittings shall be permitted for the system pressures as specified in their listings, but not less than 150 psi (10 bar).

10.3 Joining of Pipe and Fittings.

10.3.1 ~~10.2.4~~ Buried Joints. Joints shall be approved.

And the existing Section 10.3.1 through Section 10.3.5.2 becomes Section 10.3.2 through Section 10.3.6.2 accordingly.

Also, with this revision, renumber Section A.10.2.5 is to become Section A.10.2.1:

A.10.2.1 ~~A.10.2.5~~ Fittings generally used are cast iron with joints made to the specifications of the manufacturer of the particular type of pipe (*see the standards listed in Section A.10.3.1 ~~A.10.2.4~~*). Steel fittings also have some applications. The following standards apply to fittings: ...

Also, with this revision, renumber Section A.10.2.4 to become Section A.10.3.1:

A.10.3.1 ~~A.10.2.4~~ The following standards apply to joints used with the various types of pipe: ...

Substantiation: While NFPA 24 is primarily concerned with underground water piping, the way it is currently configured with the rules or "standard" fittings coming first and for "buried" fittings being in a different section on the following page, things are a bit confusing. While Table 10.2.1(a) is mostly about fittings for aboveground piping (i.e. steel pipe and copper tube), at first glance it looks as if it is generally intended to apply all fittings, including the ones for the underground installation. With this rearrangement, putting all fittings into Section 10.2 and the text for buried joints into Section 10.3, with the references to the buried materials coming first, the standard will be easier to read and comprehend.

24- Log #25 AUT-PRI
(10.5.5 and 10.5.6)

Final Action:

Submitter: Brian Larkin, Tyco Thermal Controls

Recommendation: Add new text to read as follows:

10.5.5 Where underground piping must be installed in areas subject to freezing, listed heat tracing shall be permitted to be used for protection from freezing, provided that it is installed and insulated in accordance with the manufacturer's specifications.

10.5.6 Where listed heat tracing systems are used, they shall be supervised.

Substantiation: Some underground piping is subject to freezing when it is not below the frost line such as in areas where it impossible to go beneath the frost line or where pipes transition from below to aboveground. Industry has requested to use heat-tracing for these applications.

Add these two paragraphs to be consistent with NFPA-13 2010. The parameters for heat tracing should be consistent between NFPA standards.

24- Log #2 AUT-PRI
(10.6.1 and 10.6.2)

Final Action:

Submitter: Robert Bourke, Northeastern Regional Fire Code Development Committee

Recommendation: Revise text as follows:

10.6.1 Pipe shall not be run under buildings, unless otherwise permitted by the AHJ.

10.6.2.1.1 Where it is determined by the AHJ that pipe must be run under buildings, special precautions shall be taken, including, but not limited to, the following:

- (1) Arching the foundation walls over the pipe
- (2) Running pipe in covered trenches
- (3) Providing valves to isolate sections of pipe under buildings

Substantiation: Too often, users/contractors make the determination that pipe must run under buildings, even though to do so should be an exception, not the rule. An otherwise typical impairment due to a pipe break will be a major disruption and cause significant damage. The AHJ should be the party that determines that an installation is acceptable and thus only the AHJ should be the party making the determination that all other options have been exhausted before resorting to running the pipe under a building. 10.6.2 is really a subset of 10.6.1 and should be renumbered to 10.6.1.1.

24- Log #6 AUT-PRI
(10.6.3.1 and A.10.6.3.1 (New))

Final Action:

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

Recommendation: Revise as follows:

10.6.3.1* Where fire service mains enter under the building no more than 10'-0" adjacent to the foundation, the requirements of 10.6.2(2) and 10.6.2(3) shall not apply.

Delete 10.6.4, 10.6.4.1 and A.10.6.4 as these changes address these sections

Add new Annex and Figure

A.10.6.3.1 The 10'-0" should be measured from the edge of the building or foundation to the center of the vertical pipe. Items such as sidewalks or patios should not be included as they are no different than roadways. See Figure A.10.6.3.1

****Insert Artwork Here****

Substantiation: Currently there is no specific requirement as to how far under the building is acceptable. During a task group in the last cycle during comments, it was agreed that 10'-0" was a logical value. However, it was new material so this is being submitted.

24- Log #7 AUT-PRI
(10.6.6 and A.10.6.6 (New))

Final Action:

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

Recommendation: Add new 10.6.6, 10.6.6.1, Annex A.10.6.6 and Figure A.10.6.6 and renumber accordingly:

10.6.6* Piping shall be run at least 12 in. (30.5 cm) below the bottom of foundations/footers.

10.6.6.1 The requirements of 10.6.6 shall not apply when piping is sleeved.

Add new Annex and Figure

A.10.6.6 Sufficient clearance should be provided when piping passes beneath foundations or footers. See Figure A.10.6.6

****Insert Artwork Here****

Substantiation: Currently there is no specific requirement as to how far under the footer the piping should be. 12" is a reasonable distance to account for settling of the building.

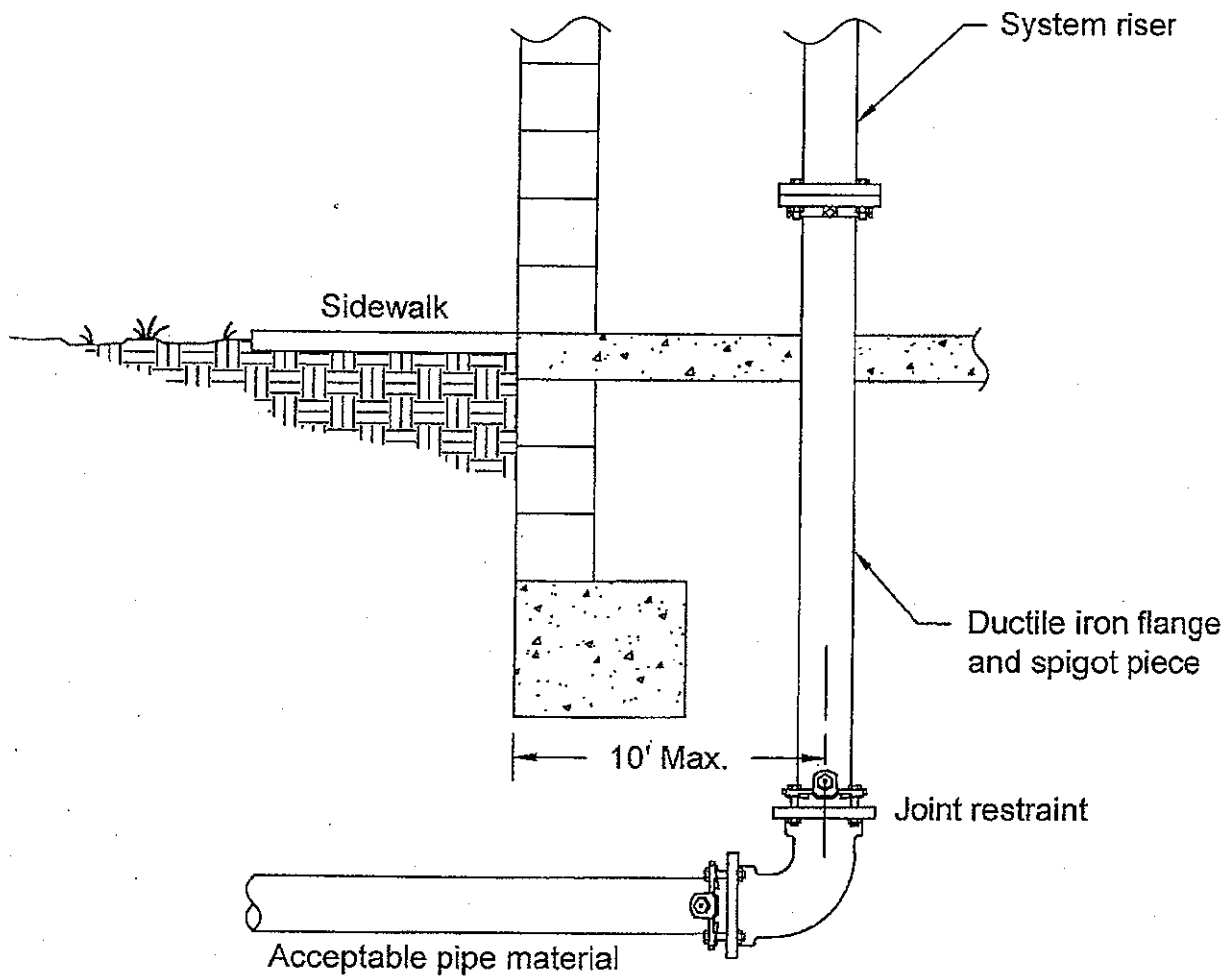


FIGURE A.10.6.3.1 Riser Entrance Location.

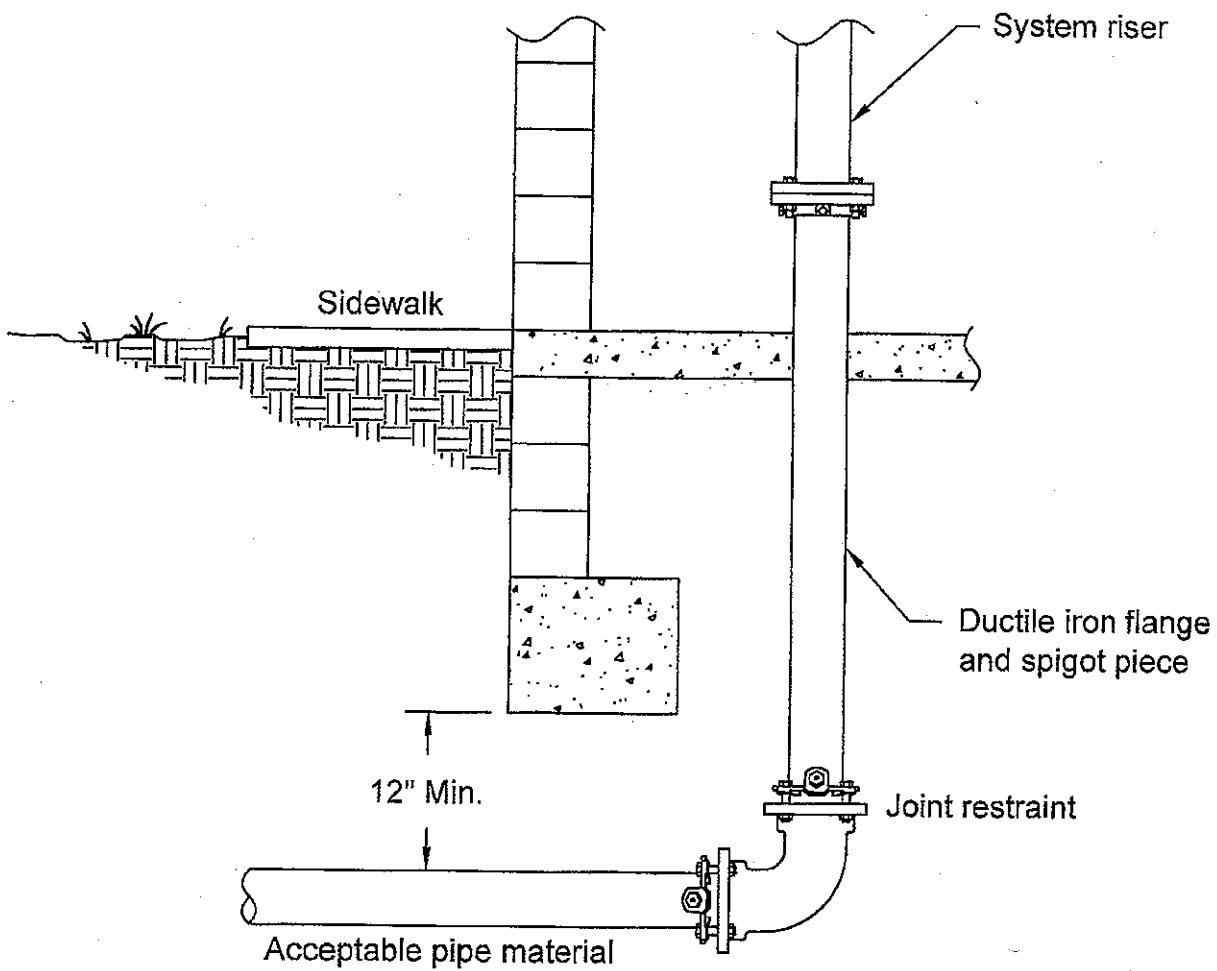


FIGURE A.10.6.6 Piping Clearance From Foundation.

24- Log #5 AUT-PRI
(10.8.3(6) (New))

Final Action:

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

Recommendation: Add new section and renumber accordingly:

6) Threaded or grooved joints

Substantiation: Section 10.8.1.2 specifically exempts these types of joints from additional restraint. They should be included in 10.8.3.

24- Log #35 AUT-PRI
(Table 10.10.2.1.3)

Final Action:

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

Recommendation: Change pipe size in Table 10.10.2.1.3 Flow Required to Produce a Velocity of 10 ft/sec (3 m/sec) in Pipes from inches, i.e., 4-in to 12-in to a actual inside diameters. When pipes with different inside diameters are used the flow to obtain 10 ft sec will change.

Substantiation: The intent of the flushing test is to obtain a flow of 10 ft sec and not a set gpm flow. Velocity, not gpm flow, is what is being expressed in Section 3.3.14.2 and 10.10.2.1.3.

24- Log #20 AUT-PRI
(A.5.4)

Final Action:

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

Recommendation: Modify as follows:

A.5.4 Where connections are made from public waterworks systems, such systems should be guarded against possible contamination as follows (see AWWA M14 or local plumbing code):

(1) For private fire service mains with direct connections from public waterworks mains only or with booster pumps installed in the connections from the street mains, no tanks or reservoirs, no physical connection from other water supplies, no antifreeze or other additives of any kind, and with all drains discharging to atmosphere, dry well, or other safe outlets, ~~no backflow protection is recommended at the service connection.~~ an approved double check valve assembly is recommended.

Substantiation: As much as I disagree with the need for backflow prevention on a simple sprinkler system, this change is needed to align the standard with the reality of what the real world is. Most water purveyors are now requiring a minimum of a double check. A trend has begun that if it is fire protection piping, it is automatically a reduced pressure device. The committee may even want to look at changing this section to reflect the language in the ICC Plumbing Code.

24- Log #37 AUT-PRI
(A.5.9)

Final Action:

Submitter: George M. Lanier, Georgia State Fire Marshal's Office

Recommendation: Add a second paragraph to A.5.9 to read as follows:

"Evaluating the location(s) of fire department connections and other components of fire protection systems may become complex due to new building development and construction methods. A major example is the sustainable or green building movement. Fire and building authorities having jurisdiction, as well as others involved in such programs, can learn more about the significant impacts of such programs on fire and safety to life considerations by referencing a 2010 publication by the National Association of State Fire Marshals (www.nasfm.org). The publication is titled *"Bridging the Gap: Fire Safety and Green Buildings."*

Substantiation: I was made aware of this new publication by Georgia State Fire Marshal Alan Shuman during discussions involving a suggested change to 5.9 of NFPA 24 by local fire authorities. After reviewing the publication, it is believed that reference to it in an annex note to 5.9 would provide valuable information to persons utilizing NFPA 24.

This is not original material; its reference/source is as follows:

The referenced publication is copyrighted by the National Association of State Fire Marshals.

24- Log #19 AUT-PRI
(A.10.3.2 (New))

Final Action:

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

Recommendation: Add new section:

A.10.3.2 The fittings and couplings should be specifically listed for underground use.

Substantiation: This annex language reinforces that the fittings should also be listed for underground use. As the section is written currently, it only references a listed combination. Not all listed grooved products are acceptable for use underground..

24- Log #22 AUT-PRI
(A.10.3.5.2 (New))

Final Action:

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

Recommendation: Add new annex section:

It is not necessary to coat mechanical joint fittings or epoxy coated valves and glands.

Substantiation: Many AHJ's require that any metallic part or piece be coated with asphalt. Many products already have adequate resistance to corrosion.

24- Log #24 AUT-PRI
(A.10.8.1.2)

Final Action:

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

Recommendation: Add new section:

A.10.8.1.2 CPVC piping and fittings are considered welded joints. They do not require thrustblocks.

Substantiation: Clarifies that thrust blocks are not required on CPVC.

24- Log #33 AUT-PRI
(Table A.10.8.2(b))

Final Action:

Submitter: Kenneth W. Wagoner, Parsley Consulting Engineers

Recommendation: Revise text to read as follows:

(2) Values listed are based on a 90 degree horizontal bend, an internal pressure of 100 psi, a soil horizontal bearing strength of 1000 lb/ft², a safety factor of 1.5, and ductile iron pipe outside diameters. (a) For other horizontal bends, multiply by the following coefficients: for 45 degrees, ~~0.414~~ 0.541; for 22¹/₂ degrees, ~~0.199~~ 0.276; for 11¹/₄ degrees, ~~0.098~~ 0.139

Substantiation: Formula used for conversion of bearing area for angles other than 90 degrees used equation which was not applicable to bearing area calculation. Correct equation takes angle of bend into account using the value of sine ($\Theta/2$), where Θ = angle of the bend. The formula used to calculate the coefficients mistakenly used tangent ($\Theta/2$) to account for the angle of the bend. This corrects the error.

See subsequent proposal to revise example.

Existing formula, and result in example:

****Insert Equation E24-22 Here****

Proposed revision to example formula and result:

****Insert Equation E24-23 Here****

$$Area = \frac{7.9 \text{ ft}^2 (0.414) \left(\frac{150}{100} \right)}{\left(\frac{3000}{1000} \right)} = 1.64 \text{ ft}^2$$

$$Area = \frac{7.9 \text{ ft}^2 (0.541) \left(\frac{150}{100}\right)}{\left(\frac{3000}{1000}\right)} = 2.1 \text{ ft}^2$$

24- Log #34 AUT-PRI
(Table A.10.8.2(b))

Final Action:

Submitter: Kenneth W. Wagoner, Parsley Consulting Engineers

Recommendation: Revise text to read as follows:

(2) Values listed are based on a 90 degree horizontal bend, an internal pressure of 100 psi, a soil horizontal bearing strength of 1000 lb/ft², a safety factor of 1.5, and ductile iron pipe outside diameters. (a) For other horizontal bends, multiply by the following coefficients: for 45 degrees, ~~0.414~~ 0.541; for 22¹/₂ degrees, ~~0.199~~ 0.276; for 11¹/₄ degrees, ~~0.096~~ 0.069

Substantiation: Formula used for conversion of bearing area for angles other than 90 degree used equation which was not applicable to bearing area calculation. Correct equation takes angle of bend into account using the value of sine ($\Theta/2$), where Θ = angle of the bend. The formula used to calculate the coefficients mistakenly used tangent ($\Theta/2$) to account for the angle of the bend. This corrects the error.

See subsequent proposal to revise example.

Existing formula, and result in example:

****Insert Equation E24-22 Here****

Proposed revision to example formula and result:

****Insert Equation E24-23 Here****

24- Log #1 AUT-PRI
(C.4.7.3)

Final Action:

Submitter: Richard Mack, Riverside Fire Authority

Recommendation: Add new text to read as follows:

The formula used to compute the discharge, Q in gpm from these measurements is as follows:

****Insert Equation E24-20 (Log #1) Here****

Substantiation: The formula ****Insert Equation E24-21 (Log #1) Here**** does not work without the constant 29.84 This is not original material; its reference/source is as follows:
NFPA 291 Recommended Practice for Flow Testing and Marking of Hydrants

$$\text{Area} = \frac{7.9 \text{ ft}^2 (0.414) \left(\frac{150}{100} \right)}{\left(\frac{3000}{1000} \right)} = 1.64 \text{ ft}^2$$

$$Area = \frac{7.9 \text{ ft}^2 (0.541) \left(\frac{150}{100} \right)}{\left(\frac{3000}{1000} \right)} = 2.1 \text{ ft}^2$$

$$Q = 29.84\omega d^2 \sqrt{\rho}$$

**NFPA 24 ROP A12 Log #1
Equation 24-20**

$$Q = \alpha d^2 \sqrt{\rho}$$

**NFPA 24 ROP A12 Log #1
Equation 24-21**

291- Log #CP1 AUT-PRI
(Entire Document)

Final Action:

Submitter: Technical Committee on Private Water Supply Piping Systems,
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.

291- Log #2 AUT-PRI
(Title)

Final Action:

Submitter: Kenneth C. McCann, Marion County Fire Rescue
Recommendation: Revise text to read as follows:
Recommended Practice Standard for Fire Flow Testing and Marking of Hydrants
Substantiation: Many fire departments use this as the standard for testing and marking of fire hydrants. The wording should be changed to a standard and not recommended practice to allow for uniform application in all locations. The Insurance Services Office (ISO) is considering changes to the Fire Rating schedule to include credit for marking of hydrants. This recommended practice needs to become a standard to allow all jurisdictions to benefit from the change.
Note: Supporting material is available for review at NFPA Headquarters.

291- Log #7 AUT-PRI
(1.2)

Final Action:

Submitter: Fred Grenning, Hydro Flow Products, Inc
Recommendation: 1.2 Fire flow tests are conducted on water distribution systems to determine the rate of flow available for fire sprinkler systems, municipal planning and fire fighting purposes.
The problem we recognize is that it is not uncommon for a fire department to arrive at the site of a burning building, hook up to a fire hydrant to discover that it does not work. e.g. no water, partially closed aux valve, broken valve stem. These catastrophes need not occur. The single-hydrant fire flow test determines the flow rate available from a hydrant as well as verifies the integrity of the system piping, valves and hydrant. Also, it is easier to perform and therefore more likely to be performed. NFPA 291 does not recognize this test, but we propose it should.
There are two ways a fire flow test can be conducted. Both tests are valid and discover valuable engineering information as well as test the integrity of the piping system components. It is important to perform the correct test. If you are evaluating the water supply of the underground fire main (sprinkler system), use the Fire Main Capacity Flow Test. (Residual hydrant + separate downstream flow hydrant). If you are evaluating the water supply available from the hydrant (fire fighting), use the Hydrant Capacity Flow Test. (Residual hydrant and flow hydrant are the same one).

Substantiation: In summary, the changes we propose would be to differentiate between the hydrant capacity flow test and the main capacity flow test and include them in this document. The original purpose of water mains was for fire fighting. They need to be tested regularly to ensure that they will work when needed.

291- Log #4 AUT-PRI
(4.13.1 and 4.13.2 (New))

Final Action:

Submitter: Kenneth C. McCann, Marion County Fire Rescue

Recommendation: Add new text to read as follows:

4.13.1 Fire hydrants shall have a flow test a minimum of once every five years to verify capacity and marking of the hydrant.

4.13.2 Fire hydrants shall be flushed at least annually to verify operation, address repairs, and verify reliability.

Substantiation: Insurance Services Office (ISO) is in the process of changing the Fire Suppression Rating Schedule to allow for additional credit for a 5 year interval flow testing. Also, fire hydrants need to be flushed and documented in the other years to receive full credit on the water portion of the ISO survey. This addition allows for the standard to be revised for uniform testing and frequency

Note: Supporting material is available for review at NFPA Headquarters.

291- Log #5 AUT-PRI
(5.2.1.1)

Final Action:

Submitter: Kenneth C. McCann, Marion County Fire Rescue

Recommendation: Revise text to read as follows:

~~All barrels are to be chrome yellow except in cases where another color has already been adopted~~

All barrels shall be painted to the color as adopted by the authority having jurisdiction. When the authority having jurisdiction has not formally adopted a color for hydrants than the barrels shall be painted red.

Substantiation: The fire service has evolved into painting hydrants red for easier identification and has become the industry standard. Revision of the standard still allows the individual AHJ to adopt its own color if desired. the default color allows for hydrants to be red.

Note: Supporting material is available for review at NFPA Headquarters.

291- Log #3 AUT-PRI
(5.2.1.3.1 (New))

Final Action:

Submitter: Kenneth C. McCann, Marion County Fire Rescue

Recommendation: Add new text to read as follows:

5.2.1.3.1 Fire hydrants on public roadways shall have a blue reflector placed on the roadway for easier night identification. The blue reflector shall be placed in the center of the travel lane in front of the hydrant.

Substantiation: No guidance or standard exists for the placement of the blue reflectors to identify the location fire hydrants. Many jurisdictions have difficulty providing code references for the placement of the markers. This will allow for a reference in a standard. Marking of fire hydrants with blue reflectors will assist in identification and reduce time locating a hydrant to secure a water source.

Note: Supporting material is available for review at NFPA Headquarters.

291- Log #1 AUT-PRI
(5.2.1.10)

Final Action:

Submitter: Donald H. J. Turno, Savannah River Nuclear Solutions

Recommendation: Revise text to read as follows:

Fire hydrants on nonpotable water sources such as drafting sites or feed by river pumps or other sources should ~~have~~ be marked with silver bonnets and caps or other color as designated by AHJ.

Substantiation: Fire hydrants can be connected to nonpotable water sources to assist with drafting (Draft Hydrant) and should be color coded from public hydrant and to tell the Fire Department that after each use their equipment should be flushed.

Currently at my industrial site we use river water piped to remote areas to assist with providing process water. We have taped onto this 26" line and installed regular fire hydrants that provide drafting points (steamer connection(5" (hard suction)) for the fire department to gain access to a water supply. These hydrants are not pressurized and the FD must draft from the hydrant. It works well and can provide well over 1,000 gallons a min. To ensure the FD knows the difference between these hydrants and one on a domestic system or pressurized system we have painted them silver (bonnets and caps). In the IFSTA manual on Fire Inspector they talk about NFPA 291 and the color code system and mention a different color for hydrant connected to nonpotable water supply; however, NFPA does not, hence my proposal.

291- Log #6 AUT-PRI
(5.2.5)

Final Action:

Submitter: Kenneth C. McCann, Marion County Fire Rescue

Recommendation: Revise text to read as follows:

Marking on private hydrants barrels within private enclosures is to be at the owner's discretion. The AHJ should be consulted to provide the best color for marking of private hydrants. When private hydrants are located on public streets, they should be painted red, to a color acceptable to the AHJ, or some other color, to distinguish from public hydrants. In any case the tops and nozzle caps shall be painted in accordance with the established colors referenced in 5.2.1.2

Substantiation: Allows for the AHJ to adopt a standard painting for private hydrants. Also, allows for the AHJ to be involved in the painting of barrels to a uniform standard. Addition of painting caps and tops to establish uniform guidelines.

Note: Supporting material is available for review at NFPA Headquarters.



Fire Suppression Rating Schedule (FSRS)

ISO has embarked on a project to review and update the content of its Fire Suppression Rating Schedule (FSRS). We have been engaged in discussions with a variety of stakeholders in organizations that deal with water, fire, and emergency communications. We have developed a list of potential modifications and additions to the current FSRS and will beta test the revisions and additions to assure reliability and consistent application. Following the test process, ISO will confer with stakeholders before finalizing the document and filing it in each state.

Possible revisions to the Fire Department section

Increased reference to National Fire Protection Association (NFPA) standards

Increase in minimum pump capacity for engines from 50 gpm to 250 gpm in communities with Public Protection Classifications (PPC™) of 9, as referenced in NFPA 1901

A corresponding increase in the minimum amount of water from 300 to 500 gallons delivered by all responding apparatus on the initial alarm

Increase in minimum pump capacity for engines from 250 gpm to 750 gpm for Class 1 to Class 8 communities, as referenced in NFPA 1901

A requirement that, for a PPC of 8 or better, the fire department must have sufficient membership to assure response by at least six members (including the chief) to fires in structures (Recognized automatic aid may contribute up to two of the responding members.)

Evaluation of pumper equipment and hose and ladder/service tools and equipment, as referenced in the current edition of NFPA 1901

Recognition of Initial Rapid Intervention Crew and Rapid Intervention Crew teams, as referenced in NFPA 1500 and 1710/1720

Reduction of the credit value for reserve pumper and ladder/service apparatus

Foam application system:

Credit for high-energy compressed air foam systems (CAFS)

Credit for low-energy Class A and Class B foam proportioning systems

Additional emphasis on firefighter safety and training:

Requirement for protective clothing ensemble for all fire-suppression personnel at structure fires, as referenced in NFPA 1001

No credit for training without proper documentation, as referenced in NFPA 1401

Credit for credentialing of fire officers, as referenced in the National Incident Management System (NIMS) recommendations and NFPA 1021, in addition to continuing education officer training

Increased credit for training of fire apparatus drivers and operators, as referenced in NFPA 1002 and NFPA 1451

Preincident building familiarization and planning surveys reduced to annual frequency, with up-to-date notes and sketches available to the incident commander, as referenced in NFPA 1620

Maximum automatic-aid plan credit expanded from 0.9 to 1.0 if the fire departments have standard operating procedures (SOPs) that outline the expectations and responsibilities for first-alarm response

Expanded credit for automatic-aid engine and ladder companies based on proximity coverage

Credit for responding automatic-aid personnel not previously included in the grading

Operational considerations:

Credit for an incident management system, as referenced in NFPA 1561

Credit for standard operating procedures/guidelines

New approach for fire department deployment analysis using a fire department's demonstrated performance analysis when there is adequate quality data available (Credit is based on the extent to

which the department meets the time constraints for the initial arriving engine company and deployment of full-alarm assignment, as outlined in NFPA 1710.)

OR

Revised approach to the existing 1½-mile and 2½-mile standard response evaluation of engine and ladder/service company coverage areas without establishing additional needed company locations, with an increased emphasis on the actual distribution (deployment analysis) coverage by existing companies

Possible revisions to the Water Supply section

Increased reference to American Water Works Association (AWWA) standards

Credit for a flow test program when conducted at 5-year intervals on all parts of the distribution system, as referenced in AWWA M-17 or NFPA 291

Credit for a fire hydrant marking program, as referenced in AWWA M-17 or NFPA 291

Water flow-test alternative including results of a properly balanced and tested hydraulic water-distribution system model

Credit for fire hydrant delivering up to 1500 gpm and meeting the head-loss criteria in AWWA C-502 or AWWA C-503

Revisions to the Emergency Communications section

Credit for communications facilities provided for the general public to report structure fires through enhanced 911 telephone service, wireless Phase I and Phase II, and Voice over Internet Protocol (VoIP) Static and Nomadic

Credit for computer-aided dispatch (CAD) facilities with management information systems (MIS), geographic information systems (GIS), and automatic vehicle location (AVL)

Credit for measurement of telecommunicator alarm receipt and processing performance at the communication center, as referenced in NFPA 1221

Credit for emergency dispatch protocols for the fire service

Credit for telecommunicator training and certification, as referenced in NFPA 1061 and/or APCO Project 33

Credit for telecommunicator continuing education and quality assurance

Credit for dispatch facilities used to alert fire department company members to report to structure fires, including voice radio (trunked and nontrunked), microwave carrier channel, polling or self-interrogating digital radio, dedicated telephone circuit monitored for integrity, or wired circuit including Internet Protocol (IP) dedicated to public safety or governmental use, as referenced in NFPA 1221

Reference to community risk-reduction programs

Credit for adoption and enforcement of a model building code

Credit for adoption and enforcement of a model fire-prevention code, including fire-prevention inspector certification and training

Credit for public fire-safety education, including:

Public fire-safety educator qualifications and training

Residential fire-safety education

Fire-safety education in schools

Juvenile firesetter program

Credit for fire cause and origin investigation, including fire investigator certification and training

Credit for use of the National Fire Incident Reporting System (NFIRS)

Additional revisions

Credit for current fire-service accreditation

Recognition of fire sprinklers in residential and dwelling properties for reduction of needed fire flows (NFF)

Reduction of NFF duration to one hour for one- and two-family standard-size dwellings

Application of the NFF formula to larger one- and two-family dwellings