

NATIONAL FIRE PROTECTION ASSOCIATION

ANNUAL 2009

ASSOCIATION TECHNICAL MEETING

Wednesday, June 10, 2009

STENOGRAPHIC REPORT OF PROCEEDINGS

had in the above-entitled matter held at the
McCormick Place Convention Center, Grand Ballroom,
Chicago, Illinois, commencing at 2:04 o'clock p.m.

PRESENT:

MR. RALPH GERDES, Member,

Standards Council

MR. MICHAEL NEWMAN, Member,

Standards Council

MR. JAMES PAULEY, Chair,

Standards Council

MS. AMY BEASLEY-SPENCER, Secretary,

Standards Council

MS. MAUREEN BRODOFF, General Counsel

MS. LINDA FULLER, Staff Coordinator

Reported by: Anna M. Morales, CSR, RMR

License No.: 084-002854

1 (Whereupon, the following
2 proceedings commenced at
3 2:04 o'clock p.m.)

4 MODERATOR GERDES: Good afternoon, ladies and
5 gentlemen. I'm Ralph Gerdes and I have the
6 distinct pleasure and privilege of being a member
7 of your Standards Council.

8 I now declare that a quorum exists and
9 convene the 2009 Annual Association Technical
10 Meeting. To assist me is Linda Fuller of the NFPA
11 staff who is serving as staff coordinator. I'd
12 also like to introduce Amy Beasley-Spencer,
13 Secretary of the Standards Council; Jim Pauley,
14 Chair of the Council; Maureen Brodoff, NFPA General
15 Counsel. This session will be recorded by McCorkle
16 Court Reporters, Chicago, Illinois.

17 First, let me address our safety issues.
18 Let's take a minute and note the exits from this
19 room. Now that you have noted the closest exit to
20 you, I would like to inform you that the fire alarm
21 signal for the McCormick Place Convention Center is
22 a voice announcement followed by orange and strobe
23 lights.

24 As with any organization, we have certain

1 rules and protocols. First, uses of video and/or
2 audio recording devices of any type are not allowed
3 during the Association Technical Meeting. I'd like
4 to call your attention to the Guide for the Conduct
5 of Participants in the NFPA Code and Standards
6 Development Process. As a participant in the
7 process, you should be familiar with this Guide.
8 I'd also like to call your attention to the NFPA
9 Convention Rules which set the process to be
10 followed today. Copies of both documents are
11 contained in the NFPA Directory which is posted on
12 the NFPA Web site with copies also available at the
13 NFPA registration desk.

14 The certified amending motions that
15 comprise the agenda for today's session will be
16 taken in the order as printed in the green handout
17 entitled Annual 2009 NFPA Association Technical
18 Meeting, Certified Amending Motions. The primary
19 regulations governing the NFPA Codes and Standards
20 Development Process, including processing of
21 amending motions at the Association Technical
22 Meetings, are the regulations governing committee
23 projects. These regulations are also posted on the
24 NFPA Web site and published in the NFPA Directory.

1 I would like to say a few words about the
2 actions that you will take today and the voting
3 procedures. At this session, you are being asked
4 to act on certain motions pertaining to the
5 Technical Committee reports. The Technical
6 Committee reports on three of these documents,
7 NFPA 52, 501, and 909 are contained in the 2008
8 NFPA Full Revision Cycle Report on Proposals and
9 Report on Comments, the white book. The other
10 documents can be found in the 2009 NFPA Annual
11 Revisions Cycle Report on the Proposals and the
12 Report on Comments, the blue books.

13 Under convention rules, before a motion
14 can be considered for action at this Association
15 Technical Meeting, the intended maker of the motion
16 must have filed a notice of intent to make a
17 motion, a NITMAM, prior to the established deadline
18 of April 3, 2009. These NITMAMs were reviewed by a
19 Motions Committee appointed by the Standard
20 Councils Chair. The Motions Committee certified
21 those NITMAMs in compliance with NFPA rules as
22 certified amending motions in the published report
23 on May 1, 2009.

24 Table A of this report, the green handout,

1 identified the certified amending motions for
2 consideration today. Only certified amending
3 motions, together with certain allowable follow-up
4 motions, that is, motions that become necessary as
5 a result of a successful certified amending motion,
6 will be allowed at this meeting.

7 There is a further requirement that a
8 person must sign in to indicate that they are here
9 in fact to pursue their motion. As part of these
10 procedures, statements for the record, that is,
11 statements concerning Technical Committee actions
12 for which no certified amending motion or allowable
13 follow-up motion is available, are not permitted.

14 In accordance with 4.6.10 of the
15 regulations, if a quorum is challenged and found to
16 be no longer present, that is, 100 members, the
17 session will be terminated without further action
18 on the reports. Any reports on documents that have
19 not been acted on shall be forward directly to the
20 Council without the recommendation of this meeting
21 for action in accordance with 4.8 of the
22 regulations.

23 If a quorum is lost during the
24 consideration of a report, any motions to amend or

1 return of that report that have passed prior to the
2 loss of a quorum will be processed and forward to
3 the Council in accordance with 4.6 and 4.7 of the
4 regulations. Any appeal based on the actions by
5 the Association of this meeting must be filed with
6 the Standards Council within 20 days of this
7 meeting, that is, by June 30, 2009.

8 Any amendment accepted at this meeting
9 that fails to pass the subsequent committee ballot
10 will be automatically docketed as an appeal on the
11 Standards Council agenda in accordance with
12 Section 1.6.2(b) of the Regulations. Note,
13 however, that if an automatically docketed appeal
14 is not pursued by a party, the Council need not
15 consider it.

16 The votes cast in this Association
17 Technical Meeting today and the discussions that
18 lead to that voting are an integral and important
19 part of the NFPA consensus process. The
20 Association Technical Meeting is the forum where
21 the membership considers changes to the reports
22 prepared by the NFPA Technical Committees
23 concerning proposed or revised NFPA Codes and
24 Standards when such changes are pursued via

1 certified amending motions. Through motions,
2 debate and voting at this meeting, the membership
3 makes recommendations to the Standards Council.
4 The Standards Council and NFPA Rules is the
5 official issuer of all NFPA Codes and Standards.

6 The majority of the persons present here
7 today is for the sole purpose of making
8 recommendations to the Standards Council on the
9 disposition of the report. The Standards Council
10 will meet on August the 4th through the 6th, 2009,
11 to make a judgment on whether or not to issue a
12 document. The Council's decision on document
13 issues is based on the entire record before it is
14 included -- including the discussion that is taken
15 at this NFPA meeting.

16 Limited review followed by the actions of
17 the Standards Council may also be available through
18 a petition to the Board of Directors. Any such
19 petition must be filed within 15 days of the
20 Council action in accordance with the regulations
21 governing petitions to the Board of Directors from
22 decisions of the Standards Council. The deadline
23 for notice of such petition is August 21, 2009.

24 With respect to the voting procedures, the

1 regulations state that voting at NFPA meetings
2 shall be limited to the following: Those present
3 who are voting members of the association, that is,
4 those with red badges and "Member" written across
5 the top. If you are not a voting member of record
6 of the Association registered at this meeting, I
7 ask that you refrain from voting. You need not be
8 a member of a NFPA section in order to vote. You
9 must, however, be a voting member. Only voting
10 members of record should be seated in the front
11 areas. Those seated in the back areas will not be
12 counted.

13 Voting will be undertaken in the following
14 manner: There will be no voice votes. The first
15 vote will be by raising of hands. If that is not
16 conclusive, we will proceed to a standing count of
17 regular voting members.

18 I want to say at the outset that I will
19 not cast a vote; therefore, in the event of a tie
20 vote, the issue automatically fails. Once a report
21 and certified amending motion is presented. It is
22 open for discussion and anyone in the room has the
23 privilege of participating. The Chair asks that
24 you preface your remarks with your name and company

1 or organization affiliation. Let me repeat that,
2 your name and company or organization affiliation
3 should be preface your remarks.

4 As you can see, we have red and green
5 signs on the mics in the rooms. The red signs
6 indicate opposition to a motion on the floor, and
7 the green signs indicate support of a motion on the
8 floor. I would also ask that you take a stand at
9 the appropriate mic and state at the beginning of
10 your remarks whether you are in support of or
11 opposition to the motion being debated.

12 Now a couple things to note during the
13 floor debate today. First, be aware that no one
14 participating in the floor motions and debate at
15 this motion is authorized to act as an agent of or
16 speak on behalf of the NFPA. And views expressed
17 during motions in debate, including those expressed
18 on behalf of NFPA Technical Committees or other
19 entities operating within the NFPA system, do not
20 necessarily reflect the views of NFPA.

21 Second, a note about NFPA sections. From
22 time to time, the chair or other representative of
23 any NFPA section may rise during the debate to
24 state the position of an NFPA section on a motion

1 that is under consideration. NFPA sections are
2 groups of NFPA members organized around particular
3 subjects, such as electrical, fire, service or
4 health care sections. Under the regulations
5 governing NFPA sections, a section may take a
6 position on an issue on the floor of an Association
7 Technical Meeting.

8 The position of a section does not
9 necessarily reflect the views of all section
10 members. Rather, a section may state a position on
11 a motion if the majority of section members
12 attending a section meeting have approved that
13 position and there are at least 25 votes cast at
14 the section meeting. The position of a section is
15 accorded no special status in the NFPA Codes and
16 Standards Development Process; and, just as you
17 would with any other position expressed during the
18 debate today, you as voting members of the
19 Association may weigh and assess such positions as
20 you deem appropriate.

21 Given the size of the agenda and the
22 amount of material we have to get through, we will
23 start out with five minutes per speaker, but it is
24 my plan to limit the time as appropriate in the

1 event that this becomes necessary. There will be a
2 timer that will appear on the middle screen to
3 indicate that you have one minute remaining on your
4 allotted time. The Chair reserves the right to
5 hear any new speaker before yielding the floor to
6 anyone wishing to address the same issue a second
7 time.

8 Motions that are in order, the certified
9 amending motions, are contained in the green
10 handout entitled Annual 2009 NFPA Association
11 Technical Meeting Certified Amending Motions which
12 are available at the registration desk and at the
13 back of the room today. The motions pertain to the
14 documents contained on Page 64 of the Annual
15 Meeting Program. As previously stated, this
16 meeting is conducted in accordance with the NFPA
17 convention rules that are available on the NFPA Web
18 site and there are copies at the NFPA registration
19 desk.

20 Upon completion of all certified amending
21 motions related to an NFPA document, the presiding
22 officer shall entertain any follow-up motions. A
23 follow-up motion is a motion that becomes necessary
24 as the result of a previous successful amending

1 motion. A motion to return a document or return --
2 or to return a portion of a document affected by a
3 previous successful amending motion is always in
4 order as a follow-up motion as long as it's not
5 repetitious.

6 The presiding officer shall make the
7 determination on whether a motion is a proper
8 follow-up motion. The maker of the motion shall be
9 required to explain why it is a proper follow-up
10 motion. A follow-up motion shall require two
11 seconders.

12 Finally, I would like to stress that the
13 rules that we are operating under today are
14 designed to improve the efficiency and the quality
15 of the Association Technical Meeting by eliminating
16 the need to present uncontested documents by giving
17 you, the NFPA membership, advanced notice of the
18 amending motions that are to be presented and by
19 giving me as the presiding officer greater
20 discretion in managing debate and assure that the
21 issues are fully debated as possible in the
22 available time.

23 It is my hope and expectation that
24 together we will make this Association Technical

1 Meeting a success, and I thank you in advance for
2 your cooperation, patience and, when we are done,
3 your comments and suggestions for the future.

4 At this point before we begin the
5 documents, I would like to introduce Jim Pauley,
6 Chair of the Standards Council, who will present
7 some Special Achievement Awards and Committee
8 Service Awards.

9 MR. PAULEY: Good afternoon. The Special
10 Achievement Award is presented to recognize the
11 significant contribution of a committee member to a
12 single project that has enhanced the NFPA Codes and
13 Standards-making process. We have two Special
14 Achievement Awards that will be presented today.

15 The first award goes to Art Black, and I
16 would like to ask Art to join me here on the
17 podium.

18 MS. BEASLEY-SPENCER: Art Black of the Carmel
19 Fire Protection Associates, Carmel by the Sea,
20 serves on the Technical Committee on Supervising
21 Station Fire Alarm Systems and has since 1990 and
22 has been the chair of this committee since 1998 and
23 has served on the Carbon Monoxide Detection
24 Committee since 1996 and was chair from 1996 to

1 2006.

2 These committees are responsible for one
3 of the chapters in NFPA 72, National Fire Alarm
4 Code, and for NFPA 720, Standards on the
5 Installation of Carbon Monoxide Detection and
6 Warning Equipment. As a member of these Technical
7 Committees, Art has been very active in helping the
8 committee develop requirements that assure the
9 performance and reliability of supervising station
10 fire alarm systems and the methods of communicating
11 fire alarm system signals to these supervising
12 stations.

13 Art's foresight and perseverance are, in
14 large part, responsible for the existence of
15 NFPA 720, a standard that continues to be
16 instrumental in reducing the risk of exposure to
17 carbon monoxide hazards. Art's knowledge and
18 expertise in these areas have played a key role in
19 the success of these committees and to the success
20 of the signaling projects as a whole.

21 Art also serves on the TCC Committee for
22 Signaling Systems for the Protection of Life and
23 Property and has since 1992. He has served on the
24 Commissioning Fire Protection Systems Committee

1 since 2007. He also served on the Cultural
2 Resources Committee from 2001 to 2003. And for any
3 of you that were asleep, it's Carmel, nor caramel,
4 right, Art? Thank you.

5 MR. PAULEY: This award recognizes not only
6 Art's leadership and personal contributions but
7 also the efforts of all involved with NFPA 72, the
8 National Fire Alarm Code at Signaling Systems
9 Project. Please join me in congratulating Art on
10 his Special Achievement Award. (Applause.)

11 The next Special Achievement Award is
12 presented to Robert James, and I would like to ask
13 Robert to join me here at the podium.

14 MS. BEASLEY-SPENCER: Robert James of
15 Underwriters Laboratories in Tampa, Florida, has
16 served on the Hazardous Chemicals Committee since
17 2005 and was appointed as secretary in 2006. This
18 committee is responsible for NFPA 400, Hazardous
19 Materials Code.

20 Bob is responsible for implementing
21 several task groups for NFPA 400. As committee
22 secretary, Bob has assisted the chair in managing
23 all task group work and facilitating committee
24 activities during ROP and ROC stages. His

1 involvement with the hazardous materials
2 requirements in NFPA 1 enabled him to establish and
3 maintain a vision for the committee in developing
4 the framework for NFPA 400. His previous
5 background as an enforcing official offers that
6 perspective on the use and implementation of
7 NFPA 400.

8 Bob has also served on the Fire Code
9 Committee since 1994. Other NFPA Technical
10 Committees on which Bob has served includes the TC
11 on Residential Occupancies, Ventings, and also
12 Venting Systems for Cooking Appliance, and the TC
13 on Pyrotechnics.

14 MR. PAULEY: This award recognizes not only
15 Bob's leaderships and personal contributions within
16 NFPA 400, but also the efforts of all involved with
17 the committee projects that Bob has participated
18 in. Please join me in congratulating Bob on his
19 Special Achievement Award. (Applause.)

20 On behalf of the Standards Council, we
21 thank you for your continued dedication to the
22 Codes and Standards-making process. This concludes
23 the Special Achievement Awards, but now we will
24 move on to the Committee Service Awards.

1 The Committee Service Award is given to a
2 Technical Committee member for continuous and
3 exemplary service on one or more committees over a
4 substantial period of time and in recognition and
5 appreciation of distinguished service to the NFPA
6 in the development of NFPA Codes and Standards.

7 I am pleased to present this award today
8 to the following very deserving individuals:

9 Our first recipient of the Committee
10 Service Award is Nathaniel Addleman. Nathaniel,
11 could you please join me here at the podium.

12 MS. BEASLEY-SPENCER: Nathaniel Addleman of the
13 RJA Group, Inc., in Houston, Texas, serves on the
14 Technical Committee on Aircraft Maintenance
15 Operations since 1978 and chair since 2000;
16 Technical Committee on Airport Facilities since
17 2000; and the Technical Committee on Helicopter
18 Facilities since 2004.

19 MR. PAULEY: Please join me in congratulating
20 Nathaniel on his many years of service to the NFPA
21 Codes and Standards-making process. (Applause.)

22 The next recipient of the Committee
23 Service Award is John Cholin. John, could you
24 please join me here at the podium.

1 MS. BEASLEY-SPENCER: John M. Cholin of
2 J. M. Cholin Consultants, Incorporated, out of
3 Oakland, New Jersey, currently serves on the
4 Technical Committee on Handling and Conveying of
5 Dust Vapors and Gases since 1992; the Technical
6 Committee on Initiating Devices for Fire Alarms
7 Systems since 1991; and the Technical Committee on
8 Wood and Cellulosic Materials Processing since 1992
9 and was chair from 1993 to 2003.

10 MR. PAULEY: Thank you to John for his service
11 in NFPA and the Codes and Standards-making process.
12 Please give John a round of applause. (Applause.)

13 The next recipient of the Committee
14 Service award is Steve Dryden. Steve, could you
15 please join me here at the podium.

16 MS. BEASLEY-SPENCER: Steve Dryden of Poole
17 Fire Protection, Inc., in Olathe, Kansas, serves
18 currently on the Technical Committee on Helicopter
19 Facilities since 1991 and chair since 1999;
20 Technical Committee on Airport Facilities, 1991 to
21 1995; Technical Committee on Clean Rooms since
22 1992; Technical Committee on Safety at Motor Sports
23 Venues, 1999 to 2005; Technical Committee on
24 Telecommunications, 2003 to present and was chair

1 since 2008.

2 MR. PAULEY: Please join me in congratulating
3 Steve on his service to the NFPA and the Codes and
4 Standards-making process. (Applause.)

5 The next recipient of the Committee
6 Service Award is Bruce Edwards. Bruce, could you
7 please join me here at the podium.

8 MS. BEASLEY-SPENCER: Bruce Edwards of Liberty
9 Mutual Property in Western Massachusetts currently
10 serves on the Technical Committee on Water Tanks
11 since 1996 and has been chair since 1999; the
12 Technical Committee on Building Construction, 1995
13 to 2008; and the Technical Committee on
14 Telecommunications, 1997 to 2008.

15 MR. PAULEY: Please join me in congratulating
16 Bruce on his service to the NFPA and the Codes and
17 Standards-making process. (Applause.)

18 The next recipient of the Committee
19 Service Award is Peter McMahon. Peter, could you
20 please join me here at the podium.

21 MS. BEASLEY-SPENCER: Peter McMahon of the town
22 of Grand Island, New York, currently serves on the
23 Technical Committee on Fire Service Organization
24 and Deployment since 1998 as chair; the Technical

1 Committee on Hazardous Materials Response Personnel
2 from 1991 to 2000 and served as chair from 1991 to
3 1997.

4 MR. PAULEY: It does not appear that Peter is
5 here this afternoon, but please give him a round of
6 applause for his service to the NFPA. (Applause.)

7 The next recipient of the Committee
8 Service Award is Paul Turnbull. Paul, could you
9 please join me here at the podium.

10 MS. BEASLEY-SPENCER: Paul Turnbull of Siemens
11 Building Technology, Incorporated, in
12 Buffalo Grove, Illinois, serves on the Technical
13 Committee on Smoke Management Systems since 1995.

14 MR. PAULEY: Please join me in congratulating
15 Paul on his service award. (Applause.)

16 I would now like to mention the names of
17 additional Committee Service Award recipients who
18 could not be here with us today and who we would
19 like to acknowledge and thank them for their
20 outstanding service.

21 MS. BEASLEY-SPENCER: The NFPA Technical
22 Committee members who are recipients of the 2009
23 Committee Service Awards but could not be with us
24 today are:

1 Sandy Egesdal of Egesdal Associates, PLC,
2 out of Minneapolis, Minnesota. E. C. Game of
3 E. C. Game Engineering out of Asheboro, North
4 Carolina. Chief Jack Krakeel of Fayette County
5 Fire and Emergency Services out of Fayetteville,
6 Georgia. J. Jeffrey Moore of Hughes Associates,
7 Incorporated, out of Cincinnati, Ohio.

8 MR. PAULEY: On behalf of the NFPA Standards
9 Council, I would like to thank all -- I would like
10 to congratulate and say thank you again to all of
11 these individuals. (Applause.)

12 I will now turn the session back over to
13 your presiding officer.

14 MODERATOR GERDES: The first report under
15 consideration this afternoon is that of the
16 Technical Committee on Manufactured Housing. Here
17 to represent the committee is Committee Chair
18 John Lake of the Gainesville, Florida, Fire
19 Department. The committee report can be found in
20 the white 2008 Fall Revision Cycle ROP and ROC.
21 The certified amending motions are contained in the
22 motions committee report and behind me on the
23 screen. We will proceed in the order of the motion
24 sequence number presented. Mr. Lake.

1 MR. LAKE: Mr. Chair, ladies and gentlemen, the
2 report of the Technical Committee on Manufacturing
3 Housing is presented for adoption and can be found
4 in the Report on Proposals and Report on Comments
5 for the 2008 Fall Meeting Revision Cycle.

6 The Technical Committee's report proposes
7 a partial revision of NFPA 501 Standard on
8 Manufacturing Housing. The presiding officer will
9 now proceed with the certified amending motions.

10 MODERATOR GERDES: Thank you. Let's now
11 proceed with the discussion on the certified
12 amending motions on NFPA 501. The first one is
13 motion sequence 501-1. Mic 5.

14 MR. HIRSCHLER: My name is Marcelo Hirschler,
15 GBH International, representing the American Fire
16 Safety Council, and I'm here to move the acceptance
17 of Comment 501-7.

18 MODERATOR GERDES: You are the submitter of the
19 certified amending motion?

20 MR. HIRSCHLER: Yes, I am.

21 MODERATOR GERDES: Is there a second?

22 A VOICE: Second.

23 MODERATOR GERDES: Proceed.

24 MR. HIRSCHLER: Thank you. What this is all

1 about is about testing interior finished materials.
2 In particular, we're talking about interior
3 finished materials on surface of plastic bathtub,
4 shower units, et cetera, et cetera, using the
5 ASTM E84 or UL 723 standard tunnel test. And what
6 this particular comment does is add a requirement
7 of the test specimen shall be self-supporting so it
8 remains in place during the test. This is
9 consistent with what it says in the ASTM E84 scope
10 which says that the material product or assembly
11 shall be capable of being mounted in the test
12 position during the test. The test specimen shall
13 either be self-supporting by its own structure and
14 quality, held in place by added supports along the
15 test surface or secured from the backside.

16 The problem is that very often this is not
17 done and very often lab test materials fall on the
18 floor and continue burning on the floor and assess
19 the flame spread index on the ceiling and not on
20 the floor.

21 In particular, we ran a test with a
22 bathtub type material and looked to see if it got
23 the appropriate 200 flames spread index. In the
24 ceiling, it got the appropriate 200 flames spread

1 index, but the test had to be stopped because the
2 material fell to the floor, burned vigorously on
3 the floor. The lab determined that it was danger
4 to the lab. They couldn't continue the test, and
5 the test had to be stopped. But the materials
6 officially passed the test.

7 This is a real problem with this type of
8 material. Materials do exist, and I have been in
9 contact with people who manufacture these
10 materials. The materials do exist that can pass
11 the test without falling to the floor, and I think
12 it's essential that that be put into the code --
13 sorry, standard in this case.

14 The committee stated that this is
15 something -- that we shouldn't highlight parts of
16 ASTM E84. Well, that's true, but this a part of
17 E84 which is just in the scope. It is not enforced
18 very often, and it is essential for an occupancy
19 where we know that problems occur and there have
20 been a number of fires with these type of products.
21 It is essential that we reinforce. Thank you.

22 MODERATOR GERDES: Does the committee chair
23 have any comments at this point?

24 MR. LAKE: We'll stand on the committee's

1 action.

2 MODERATOR GERDES: Any further discussion?
3 Seeing no one at the mics, we'll proceed with the
4 vote.

5 All those in favor of Motion Sequence
6 105-1 to accept Comment 501-7, raise your hands.
7 Those opposed. I'm not sure about this. Let's go
8 to a standing count. All those in favor of the
9 motion, please stand and remain standing until the
10 staff counts you. You can sit down. Those opposed
11 to the motion, please stand. You can sit down.
12 I'm sorry.

13 The motion carries. 63 to 35 with a few
14 abstentions.

15 Now we'll proceed to Motion Sequence
16 Number 501-2. Microphone 3.

17 MR. MARTIN: Hello. My name is Shawn Martin.
18 I'm from the Plumbing Manufacturers Institute. I'm
19 here to make a motion that Comment 501-8 be
20 accepted.

21 A VOICE: Second.

22 MODERATOR GERDES: Proceed.

23 MR. MARTIN: Mr. Chairman, assembly members,
24 thank you for the opportunity to present this

1 motion. I'm here to speak to you on behalf of the
2 Plumbing Manufacturers Institute on a number of
3 changes that were made with respect to plastic
4 bathtub and shower fixture flame spread indices
5 requirements.

6 Some of the changes that have been created
7 create the potential for misapplication for
8 confusion on their potential use on the part of
9 users of this standard. I would like to call your
10 attention to Log Number 20, in particular. Log 20
11 makes a number of changes to Section 5.3.2.6. It
12 adds the requirements for a flame spread index not
13 exceeding 50, and it applies these to interior
14 finishes -- finished materials on the surfaces of
15 plastic bathtubs.

16 I'd also call your attention to Log Number
17 22 which creates a new section, Section 5.4, which
18 indicates that materials used for plastic bathtubs
19 shall not have a flame spread index in excess of
20 200.

21 What is unclear to users of this document
22 is exactly what is a finished material on a plastic
23 bathtub and what is actually the plastic bathtub
24 itself.

1 These devices are made up of multiple
2 components. They are assemblies. Some of these
3 particular components are assembled on site. Some
4 of them are assembled in the factory. The
5 particular items I would call to your attention are
6 items such as grab bars, items such as shower
7 heads, the escutcheon plates on valves, the
8 decorative covers. It's unclear to users exactly
9 which requirement applies, 50 or 200. And I think
10 you'll agree that there's substantial differences
11 between those two numbers.

12 So what I'm asking for in this particular
13 comment is that more clarity be applied to the
14 situation so that users are sure when they need to
15 comply with which requirements.

16 The other point that I would note is there
17 is no substantiation provided for the change from
18 200 to 50. It simply changed. In fact, it's
19 erroneous in the substantiation. It says that
20 there are no changes in the requirements for Log 20
21 when, in fact, the changes are substantial. It's a
22 change from 200 to 50.

23 So on the basis of potential
24 misapplication, on the basis of confusion on the

1 definitions, and on the basis of the false
2 information about the change, I would please ask
3 your consideration in accepting Comment 501.8.

4 MODERATOR GERDES: Does the committee chair
5 have any comments?

6 MR. LAKE: We'll stand on the committee's
7 actions.

8 MODERATOR GERDES: Microphone 4.

9 MR. HIRSCHLER: Marcelo Hirschler,
10 GBH International, speaking for the American Fire
11 Safety Council.

12 Let me clarify a number of things. First
13 of all, if you look at Page 501-3 of the ROP and
14 Proposal 501-7, you see that there is a definition
15 of interior finished exposed surface of walls,
16 ceilings, and floors within buildings. So this
17 applies to the interior finish. It applies to
18 exposed surfaces of walls, ceilings, and floors
19 within buildings.

20 This particular comment seeks basically to
21 undo exactly what the floor just approved in the
22 motion before it. It deletes the entire section
23 that we just amended before. It is essential that
24 bathtubs and similar appliances that are interior

1 finished are significant for the amount of interior
2 finish in manufactured housing should meet the
3 flames spread index requirement. Thank you.

4 MODERATOR GERDES: So I assume you are speaking
5 against the motion?

6 MR. HIRSCHLER: I'm sorry.

7 MODERATOR GERDES: You are at the right mic. I
8 just wanted to get it into the record.

9 MR. HIRSCHLER: I'm speaking against the
10 motion.

11 MODERATOR GERDES: Microphone 5.

12 MR. LONG: Long, fire protection engineer with
13 Exponent, speaking in support of the motion.

14 I also agree that the substantiation is
15 not justified for these changes. There's a
16 75 percent decrease in the flames spread index with
17 absolutely no scientific justification or other
18 technical argument for making that change.

19 In addition, if you draw your attention to
20 Log 20 and then Log 22, Log 20 specifically states
21 that the -- and the committee accepted it -- that
22 the 162 radiant panel test was removed specifically
23 for interior finished materials because it does not
24 correlate well with ASTM E84. If you turn your

1 attention to Log 22, I believe, which is
2 Section 5.4, it does say, well, now you can use 162
3 or E84.

4 So you got two different test methods, two
5 different sets of requirements for one product and
6 now, on top of that, you got a definition that is
7 not sufficient for either a user or an enforcer to
8 determine what's supposed to be subjected to 162,
9 what's to be subjected to E84, which one should get
10 a flame spread of 50, which one should get a flame
11 spread of 200. Thank you.

12 MODERATOR GERDES: Any further comments?
13 Microphone 4.

14 MR. HIRSCHLER: Marcelo Hirschler, GBH
15 International, representing the American Fire
16 Safety Council, speaking in opposition to the
17 motion.

18 Let me clarify because the flames spread
19 index of 50 is for certain sections that are above
20 -- that are above kitchen cabinets. The rest
21 continue having the same thing. And if you look at
22 the overall section, it tells you that you have two
23 tests that you can use. You can use the ASTM E84
24 or you can use ASTM E162. If you use E162 for

1 those sections where you're allowed to do that, you
2 get a radiant panel index of 200. If you use E84,
3 you get a radiant panel index of -- flames spread
4 index of 200. In those sections where you are
5 required to have a flames spread index not
6 exceeding 50 above certain sections, then you need
7 to do that. That's all.

8 And basically this particular section that
9 we're talking about does address the section that
10 is under consideration. 5.3.2.6 explains just
11 simply that. And the smoke -- oh, this has typos
12 in here. This has typos. The flame spread index
13 is -- this is -- the section, what the -- the
14 section has been cut out by the -- the commenter
15 has typos in here. That is not what is
16 Section 5.3.2.6. What is 5.3.2.6, you can see it
17 in 501-7, the one that adds -- that we just voted
18 on. What is put in the comment by Mr. Martin is
19 not correct. It's not the text in the ROP.

20 MODERATOR GERDES: Mic 5.

21 MR. LONG: Long, Exponent, speaking in support
22 of the motion. I just wanted to draw your
23 attention to Log 20, 5.3.2.6. If you take a look
24 there, you can clearly see where the line is drawn

1 through the number 200 and you can see it's been
2 replaced with the number 50. If you look down
3 below to the substantiation, I direct you to the
4 last comment where it says, There are no changes in
5 requirements.

6 That's clearly not the case. The
7 requirements were changed from 200 to 50. So the
8 substantiation doesn't support the change.

9 MODERATOR GERDES: Closing comments by the
10 submitter, mic 3.

11 MR. MARTIN: Thank you, sir. One last point I
12 would like to leave with you: It is correct that
13 there is, indeed, a definition of interior finished
14 materials under 5.2.3. It's a rather lengthy one.
15 I encourage you to take a look at it. There is
16 absolutely no mention whatsoever of plumbing
17 products or, if there is anything that is
18 applicable to it, it's very tangential.

19 These are unique in that there are
20 multiple part assemblies, many of the parts coming
21 from different suppliers, meaning grab bars, soap
22 dishes, shower heads, escutcheon plates that could
23 come from several manufactures. So it is entirely
24 unclear how we would go about defining interior

1 finish in this application.

2 I urge you to support the motion.

3 MODERATOR GERDES: Could you state your name
4 and affiliation again?

5 MR. MARTIN: Yes, sir. My apologies, sir.
6 Shawn Martin, Plumbing Manufacturers Institute.

7 MODERATOR GERDES: Thank you. Seeing no
8 further discussion, we'll proceed to the vote. All
9 those in favor of Motion 501-2 to accept
10 Comment 501-8, please raise your hands. Okay. All
11 those opposed, raise your hands.

12 That motion fails.

13 We're now going to proceed with Motion
14 Sequence Number 501-3. Microphone 5.

15 MR. HIRSCHLER: Mr. Chairman, my name is
16 Marcelo Hirschler, GBH International, speaking on
17 behalf of the American Fire Safety Council, and I
18 move to accept Comment 501-10 which is on
19 Page 501-4 of the ROC for 501, and it asks for
20 acceptance of Comment 501-10.

21 MODERATOR GERDES: Is there a second?

22 A VOICE: Second.

23 MODERATOR GERDES: I have a second. Proceed.

24 MR. HIRSCHLER: Well, I'm not going to bore the

1 body with this. This is the exact same argument we
2 had in my first motion in another section.

3 MODERATOR GERDES: Any comments from the
4 committee chair?

5 MR. LAKE: No, sir.

6 MODERATOR GERDES: Any further discussion? All
7 those in favor of the motion to accept
8 Comment 501-10, please raise your hand. All those
9 opposed.

10 That motion passes.

11 Any further discussion on NFPA 501?

12 Hearing nothing, we'll move on to the next
13 document. Thank you, Mr. Lake.

14 The next report under consideration this
15 afternoon is that of the Technical Committee on
16 Hazardous Chemicals. Here to represent the
17 committee is Committee Secretary Robert James of
18 Underwriters Laboratories, Tampa, Florida. The
19 committee report can be found in the blue 2009
20 Annual Revision Cycle ROP and ROC. The certified
21 amending motions are contained in the motions
22 committee report and behind me on the screen.

23 We will proceed in the order of the motion
24 sequence number presented. Mr. James?

1 MR. JAMES: Thank you, Mr. Chair. Ladies and
2 gentlemen, the report of the Technical Committee on
3 Hazardous Chemicals is presented for adoption. It
4 can be found in the Report on Proposals and the
5 Report on Comments for the 2009 Annual Meeting
6 Revision Cycle.

7 The Technical Committee report proposes a
8 new document, NFPA 400, Hazardous Materials Code.
9 The presiding officer will now proceed with the
10 certified amending motions.

11 MODERATOR GERDES: We'll proceed. We're going
12 the start with 400-1. Microphone 5.

13 MR. WECHSLER: I am David Wechsler,
14 representing Michael Walls of the American
15 Chemistry Council.

16 MODERATOR GERDES: You are the submitter of the
17 certified amending motion?

18 MR. WECHSLER: I am the duly authorized
19 submitter, yes.

20 MODERATOR GERDES: Please state your motion.

21 MR. WECHSLER: My motion is to accept
22 Comment 400-12 which will add an exemption to
23 1.1.2.2, laboratories complying with NFPA 45.

24 MODERATOR GERDES: Is there a second?

1 A VOICE: Second.

2 MODERATOR GERDES: Proceed.

3 MR. WECHSLER: I am David Wechsler. I am
4 employed by the Dow Chemical Company. I have been
5 involved in Codes and Standards with NFPA worldwide
6 for more than 30 years. I was asked to participate
7 in the NFPA 400 project and have done so as a
8 voting member since its early inception, acting not
9 only as just a committee member but also as a
10 Technical Committee group member and chairperson;
11 and all during this process, we have actively
12 supported this overall work effort.

13 It has a number of good features. The
14 NITMAMs or CAMs that are being proposed now are
15 details that we feel are very important to correct
16 certain deficiencies that we have identified in the
17 document that will enhance its overall safety and
18 make it better -- better ability to be used by both
19 users and inspectors and other officials.

20 The specific aspects that we're talking
21 about here again is adding an exemption for
22 laboratories complying with NFPA 45. One of the
23 issues that you have to ask yourself is if you have
24 a laboratory, what is it? Where would you find

1 that information? The place you would find it
2 would be in a document, NFPA 45, which is known as
3 the Laboratory Standards.

4 The panel has suggested that perhaps
5 NFPA 45 does not cover the appropriate hazards of
6 materials. I think you should be recognizing and
7 aware that NFPA 400 only represents a small
8 significant -- a small sampling of some six groups
9 of materials far less than the number of materials
10 that are handled in most laboratories. In fact,
11 most laboratories, when they begin work and start
12 doing work, they handle so many different
13 chemicals. Some of them are beyond the normal
14 classification schemes because they have never
15 existed before. So it makes good sense to refer to
16 a document that's already handling these particular
17 conditions where we are.

18 You'll also hear some concerns about the
19 fact that what's called MAQ issues, maximum
20 allowable quantities, and that perhaps the fact
21 that the instructions given by the Standards
22 Council to a number of the code-making panels was
23 not followed in that they were asked to address the
24 MAQs in their standards.

1 The MAQ, the maximum allowable quantity,
2 is basically not a maximum but a threshold; and the
3 threshold has to do with the understanding of
4 whether occupancy or usage defined to be above a
5 certain level requires additional protection.
6 Whether or not NFPA 45 has done this or not we
7 don't feel is the -- in the control or purview of
8 NFPA 400. NFPA 400 has implemented this. In fact,
9 at this point in time, I believe NFPA 45 has also
10 carried out this, but I'm not a member of NFPA 45
11 and NFPA 45 is not the focus of discussion.

12 The point remains that the hazards that
13 are identified in laboratories are addressed. And
14 if you think about it, laboratories have gone back
15 to the early -- as far as I know, the early 1900s.
16 They have been able to identify and work easily
17 with all different chemicals.

18 The onset now of NFPA 400 -- which
19 officially does not exist, it has not been released
20 yet -- raises some interesting question if we now
21 say that it impacts laboratories. How can a
22 document that hasn't existed now impact
23 laboratories that have existed?

24 MODERATOR GERDES: You have one minute.

1 MR. WECHSLER: Therefore, I think it's
2 imperative that we retain the status quo and have
3 the people going to an appropriate standard,
4 NFPA 45, which again the data does not support that
5 there's any problem with NFPA 45, nor that NFPA 45
6 has not exercised, been able to give due diligence
7 to users and people who are building laboratories.

8 Again, laboratories continue to be built
9 all over the United States. This has not been an
10 issue. We don't need to develop a code which will
11 create problems where none exist. Thank you.

12 MODERATOR GERDES: Thank you. Does the
13 committee secretary have any comments?

14 MR. JAMES: I stand on the committee motion and
15 vote.

16 MODERATOR GERDES: Microphone 2.

17 MR. ORDILE: My name is Tony Ordile. I'm a
18 fire protection engineer. I work for Loss Control
19 Associates. I'm voting against the motion.

20 The history on this issue goes back to the
21 days of the development of NFPA 5000. 45 is not
22 its own separate occupancy, therefore, it falls in
23 line with the other occupancy groups. It needs to
24 follow MAQs; and, currently, the only MAQs

1 addressed in 45 deal with flammable and combustible
2 liquids. They do not have MAQs for the other
3 chemicals covered in that NFPA 400 such as
4 corrosives, toxins, and water reactives.

5 Back in the days of 5000, the NFPA 45
6 committee was asked to participate in developing
7 MAQs and they did not. This was carried over then
8 in that 5000 to not give an exception to NFPA 45.
9 As NFPA 400 was moving into development, they
10 looked upon the same issues and, again, 45 did not
11 do anything with the MAQs.

12 My understanding, it is only in their
13 future document which they're developing now for
14 vote at the end of this year that they are now
15 considering MAQs, either lowering MAQs for
16 flammable liquids, although my understanding is
17 they still have not developed MAQs for the other
18 hazardous materials that are covered in NFPA 400.
19 Thank you.

20 MODERATOR GERDES: Thank you. Microphone 6.

21 MR. FLUER: Larry Fluer. I'm representing the
22 Compressed Gas Association. I'm a principal member
23 on the NFPA 400 committee. I'm also a principal
24 member on the NFPA 5000 committee.

1 MODERATOR GERDES: Are you for or against the
2 motion?

3 MR. FLUER: I'm against the proposal and
4 therefore speaking from Microphone 6, painted red
5 here.

6 It should be pointed out that in
7 discussion and in the balloting process, the
8 Technical Committee voted 28 to 1 to reject the
9 proposal. There was one abstention.

10 The voting committee has a liaison member
11 from NFPA 45 on the 400 committee and he voted
12 against this proposal. And the 400 committee
13 expressed a desire to work further with 45 as 45
14 finished the process which Tony Ordile just
15 mentioned.

16 Some of these issues that are being worked
17 on for resolution I expect to see again before the
18 NFPA 5000 committee dealing with quantities and the
19 concept of control area. The hard point for
20 NFPA 45 has been how to work the control area
21 concept within the NFPA 45 document.

22 I would like to point out that the one
23 comment made by the proponent, Mr. Wechsler, was
24 that NFPA 45 would be the document that you would

1 go to for laboratories. We agree. In fact, in
2 Section 2.2 of NFPA 400, NFPA 45 is listed as a
3 reference document, and compliance is required with
4 45. So you'll look at 45 and you're looking at
5 400.

6 Similarly, if you were dealing in a
7 NFPA 5000, you would need to first comply with the
8 building code and then comply with 45. So 45 is
9 not being ignored. It's being integrated in that
10 form. Thank you.

11 MODERATOR GERDES: Microphone 2.

12 MR. KEY: My name is Hal Key with Mesa Fire
13 Department, principal member of the NFPA 400
14 Committee and also principal member of the
15 Industrial Storage Committee. I'm speaking against
16 the motion.

17 Just one comment in relationship to
18 exempting laboratories from NFPA 400. Laboratory
19 is a very broad term when you're talking about
20 various occupancies. It's not just an industrial
21 occupancy like Mr. Wechsler is trying to make us
22 believe where we're doing research only in these
23 labs. This would also apply to a high school. It
24 would apply to hospitals, any place where there's a

1 laboratory.

2 MODERATOR GERDES: Closing comments from the
3 submitter, Mic 5. I'm sorry, you are not the
4 submitter. Go ahead.

5 MR. ROGERS: My name is Sam Rogers with
6 Honeywell. I'm speaking for the motion, and I go
7 back to what Mr. Wechsler said that there's no
8 history of significant issues with the current
9 application of 45. Instead, this proposal by the
10 committee seems to amount to, they're not following
11 our rules so we're just going to try to ignore
12 them.

13 On the other hand, there are many -- there
14 are organizations such as OSHA which specifically
15 define laboratories, identify them as a specific
16 separated group based on the size of the equipment,
17 the expertise of the supervision, and a number of
18 other terms and, by doing that, set them a part
19 from other occupancies where the control of that
20 occupancy is basically handled according to a
21 standard operating procedure or by less qualified
22 persons.

23 I believe it's the skill of this
24 supervision, the personnel who are in fact

1 inventing and working with these previously unknown
2 compounds that gives them a higher level of
3 understanding of what, in fact, they need to do
4 with regard to the things that were not mentioned.

5 As one of the speakers against the motion
6 said, well, they cover flammability, but they don't
7 cover toxicity or these sorts of things. Well, I
8 think those are generally the properties that are
9 most unknown about new materials, so classifying
10 them as to hazard during the time they're being
11 developed would be quite difficult.

12 So I think that ends up being a catch-22
13 where, in fact, we have to depend upon the
14 qualifications of the extremely talented
15 supervision in laboratories, the Ph.D.s who are
16 leading that work, to make these kind of decisions.
17 So by not exempting 45, the committee has
18 determined that their general guidance is more
19 appropriate than that of someone who is involved
20 deeply in specialized research.

21 So, again, I believe that we should accept
22 this motion and include the exemption for NFPA 45.

23 MODERATOR GERDES: Thank you. Microphone 6.

24 MR. McLAUGHLIN: Pat McLaughlin, McLaughlin &

1 Associates. I sit on NFPA 400 as the liaison
2 within NFPA 5000, the Building Code Committee.

3 I just wanted to point out after the last
4 testimony that the decision not to exempt
5 laboratories was made not basically because the
6 MAQs weren't there, but we compared the
7 requirements in 45 and in 400 to ensure that they
8 were comparable.

9 There are three main issues where we found
10 differences. One was where sprinklers were
11 required. Sprinklers are required in 400 almost in
12 all cases when you exceed the maximum allowable
13 quantity. At the time, they weren't required in
14 many laboratories. I think 45 has worked toward
15 resolving that issue.

16 The other big issue was how much material
17 you could have in high buildings. There is, as you
18 know, a lot of labs in university settings that
19 have materials in high-rise or upper floors.
20 400 uses the control area concept which reduces
21 quantities as the building gets higher. This is a
22 problem, and we tried to resolve the problem by a
23 solution where you can have unlimited control areas
24 in labs and take advantage of how a lab is built,

1 how it's compartmentalized and, therefore, you can
2 have your high-rise lab. NFPA 45 either missed the
3 point or failed to follow up on that issue.

4 The last issue is there are a lot of
5 materials that NFPA 45 doesn't regulate the
6 quantities and, therefore, doesn't kick in the
7 controls that you get out of NFPA 400. So until
8 those differences are resolved, it's premature to
9 do this.

10 It's also appropriate for this decision to
11 be made at the 5000 committee level and I'm sure it
12 will be before them again. I think they're working
13 towards it. I think they're very close, but
14 they're not there yet.

15 MODERATOR GERDES: Microphone 2.

16 MR. KEY: Hal Key with the Mesa Fire
17 Department. I just want to address the one issue
18 having to do with OSHA. As a local AHJ, OSHA or
19 federal regulations, and I don't have the
20 opportunity to enforce OSHA regulations, and this
21 code gives me that opportunity.

22 MODERATOR GERDES: Thank you. I'm going to go
23 to Mic 3.

24 MR. LOWERALL: My name is Pete Lowerall. I

1 work for Eastman Chemical Company in Kingsport,
2 Tennessee. What I want to say is that listening to
3 all the comments for and against -- and I am
4 speaking in favor of the amendment.

5 If you have an issue with NFPA 45, NFPA 45
6 is the appropriate place to deal with that, not
7 write possibly conflicting standards into a
8 different NFPA document and then slug it out in the
9 future. So I speak in favor of this. If there are
10 issues with 45, take them up with 45.

11 MODERATOR GERDES: Microphone 5.

12 MR. WECHSLER: David Wechsler, representing the
13 American Chemistry Council. I am speaking in favor
14 of the motion.

15 I don't know how many of you have had an
16 opportunity to review the NFPA 400 document, but
17 there are basically the following areas: It
18 addresses corrosives, solids and liquids, flammable
19 solids, organic peroxide formulations, oxidizes
20 powerful toxic and highly toxic, unstable and water
21 reactive solids and liquids. Clearly, in the scope
22 of what a laboratory handles, this is only a small
23 subset.

24 It's recognized that building codes exist

1 out there, and there may be some issues with
2 NFPA 45 in determining where it fits. Quite
3 appropriately, I believe it's California that's
4 made a separate area to regulate the laboratories
5 by creating a laboratory occupancy type L.

6 The question before us is, yes, that
7 exists, but is NFPA 400 the place to correct this?
8 NFPA 400 is a chemicals code. It is not a building
9 code. If we're trying to make NFPA 400 a building
10 code, then I think we need to go back to the
11 drawing board because that's not what this was
12 about. This has the same status as any of the
13 other small code terminologies. There are only two
14 codes officially in NFPA that I'm aware of. One is
15 the electrical code and one is the life safety
16 code. The others are small C codes. So these have
17 a lower status.

18 The issue again we're talking about is
19 does NFPA 45 and has it continued to be able to
20 address the hazards in laboratories? Does it do
21 that completely and does it recognize what -- the
22 small list that we've had here? Clearly to say it
23 does not would mean, in my opinion, I have got to
24 go back and re-evaluate every single one of my

1 laboratories to see what's going on and does it
2 comply with this.

3 I think you'll find out when you're done
4 is that you're below the MAQ quantities and,
5 therefore, this is an academic question except for
6 those laboratories that don't comply with 45, and
7 then those are not what we're talking about.

8 So I'm not talking about industry
9 laboratories. I am talking about laboratories that
10 are defined in the laboratory standard. There's
11 nothing in 400 that defines what a laboratory is.
12 NFPA 400 is dealing with an occupancy. Thank you.

13 MODERATOR GERDES: Microphone 2.

14 MR. ORDILE: Tony Ordile, Loss Control
15 Associates. I'm a member of -- principal member of
16 400, again, talking against the motion.

17 In response to Dave's recent testimony,
18 there was never any intent of making NFPA 400 a
19 building code. It is considered part of a fire
20 code. It would work hand in hand with the building
21 code, that being NFPA 5000; therefore, that's why
22 it carries similar MAQs to what is in 5000. Thank
23 you.

24 MODERATOR GERDES: Microphone 5.

1 MR. ROGERS: Thank you. My name is Sam Rogers
2 with Honeywell, and I am again speaking in favor of
3 the motion.

4 One of the comments that was made back at
5 Mic 6 was that laboratories don't do anything
6 differently. You know, they don't have any
7 different criteria or reasons for different
8 criteria. In a laboratory, the hood is not
9 electrically classified. They're dealing with
10 flammable materials, but the hood is not
11 electrically classified. The reason is when you're
12 dealing in a laboratory hood, you have to have a
13 lot of ventilation. You only have small quantities
14 in a laboratory hood; therefore, you do not get
15 above the LEL.

16 Okay. There are very specific things that
17 happen in a laboratory because of the scale, and
18 this is what I find most objectionable about the
19 way 400 is written. It does not recognize those
20 differences in scale and what is appropriate
21 because of that. Many of the things that are
22 talked about in the standard deal -- for instance,
23 the ventilation is to be designed according to the
24 Mechanical Code. Well, if I'm dealing in

1 laboratory apparatus, my ventilation may be through
2 a piece of rubber tubing which clearly does not
3 comply with anything in the Mechanical Code.

4 So I think there are any number of
5 situations where the scale, the cleanliness
6 requirements, the fact that it is in fact an
7 unknown material cause additional things to happen
8 and cause the construction to be entirely different
9 in a laboratory, and we need to leave this up to
10 the people who know it best as opposed to what we
11 have to do for the general community which is to
12 write something that applies to 99 percent of the
13 installations.

14 So, again, I am in favor of this motion to
15 provide an exemption for NFPA 45.

16 MODERATOR GERDES: Thank you. Microphone 4.

17 MR. BLACK: Mr. Presiding Officer, Art Black,
18 Carmel Fire Protection. I call the question.

19 A VOICE: Second.

20 MODERATOR GERDES: I have a call for the
21 question with a second. We'll vote on closing
22 discussion on this item. All those in favor, raise
23 your hands. Opposed.

24 Motion carries.

1 We go to the question. The motion is to
2 accept Comment 400-12. All those in favor, raise
3 your hands. Opposed, raise your hands.

4 That motion fails.

5 We're going to move on to Motion Sequence
6 400-2. Microphone 5.

7 MR. WECHSLER: David Wechsler, representing
8 Michael Walls, the American Chemistry Council,
9 speaking in support of Motion 400-16.

10 MODERATOR GERDES: You are the designated
11 representative of the certified amending motion?

12 MR. WECHSLER: Yes.

13 MODERATOR GERDES: Please state your motion.

14 MR. WECHSLER: The motion is to modify the
15 existing 1.3.1.1 text to read, "Where requirements
16 between this code and a referenced NFPA document
17 differ, the determination shall be made by the AHJ
18 or a qualified person based on the hazard present
19 as to which specific requirements shall apply."

20 MODERATOR GERDES: Do we have a second to this
21 motion?

22 A VOICE: Second.

23 MODERATOR GERDES: Proceed.

24 MR. WECHSLER: Thank you, Mr. Chairman. The

1 current section we're trying to look at is
2 Section 1.3.1. It's called Conflicts. The text
3 reads as follows: "Where requirements between this
4 Code and a referenced NFPA document differ, the
5 requirement of this code shall apply."

6 Now if we take those words, and I'm not a
7 lawyer, and we just read the words for what they
8 say, let me paraphrase it. When requirements
9 between NFPA 400 and a referenced NFPA document
10 such as, for example, NFPA 30, which is a reference
11 document, differ, the requirements of NFPA 400
12 shall apply.

13 Let me point out that chemicals are very
14 complex. And suppose I have, just as an example, a
15 material such as hydrogen sulfide. Hydrogen
16 sulfide would be considered toxic under NFPA 400.
17 However, it's also considered flammable under
18 NFPA 30. If we look at, as an example, a
19 requirement for grounding, we would find there's no
20 requirement for grounding of a toxic in NFPA 400
21 but there would be a requirement for grounding in
22 NFPA 30. If we follow this specific text, we would
23 say there would be no requirement to ground which
24 would be not what we would want to have happen.

1 The importance of this text cannot be
2 understated as to what's going on. Now it's
3 understood that perhaps in the efforts to use
4 boilerplate language and extract certain text from
5 other documents that the panel became overzealous
6 and misapplied what they wanted; but, clearly, what
7 the words are on this paper, in the context of the
8 NFPA 400 document, what's proposed here is a
9 confusion and, if it's not carefully applied, could
10 represent an unsafe and possibly dangerous and
11 disastrous situation. Thank you.

12 MODERATOR GERDES: Any comments from the
13 committee secretary?

14 MR. JAMES: I only have one comment. One is
15 that this issue has been in front of the committee
16 since it started. I believe we've looked at this
17 issue from start to finish, and I don't believe the
18 committee was confused, and I believe the motion
19 should stand.

20 MODERATOR GERDES: I am going to go to
21 Microphone 2.

22 MR. ORDILE: Tony Ordile, Loss Control
23 Associates, principal member 400, principal member
24 and next Technical Committee chair of NFPA 30,

1 speaking against the motion.

2 400 does not cover NFPA 30. It even
3 states that where you're dealing with flammable
4 liquids, you go to NFPA 30. Therefore, where you
5 have chemicals with multiple properties that have
6 to use separate documents to attain all the
7 requirements, you go to the separate documents.

8 This boilerplate language on conflicts
9 does not overrule the fact that you go to separate
10 documents. There's no problem with the boilerplate
11 language. Thank you.

12 MODERATOR GERDES: 5.

13 MR. KRAUS: Dick Kraus, API, member of the 400
14 committee representing NFPA 30 and a proponent of
15 this motion. I am speaking in favor of my motion.

16 In answer to Tony, to start with,
17 Section 1.1.9, flammable and combustible liquids
18 having no other, no other physical or health
19 hazards products are exempt; but if the flammable
20 liquid happens to have either a health hazard or
21 it's a corrosive besides being inflammable or it
22 has any other hazard covered by this code, then it
23 is covered by this code.

24 So then what happens is you get into a

1 condition like this: For example, a flammable
2 liquid -- a chemical may be both flammable and
3 toxic. NFPA 400, for example, in certain cases,
4 mandates increased ventilation because of the
5 health hazards. So you want to dilute the vapor.
6 However, when you increase the ventilation, now you
7 change the flammability of the vapor, and you can
8 get into the explosive levels.

9 If you would go to 30, in the case of a
10 spill of flammable liquid that's also toxic, say
11 benzene or xylene or toluene, if you go into 30, 30
12 would say, either shut it down so you don't dilute
13 it with air and bring it into the flammable level,
14 or get it out of there totally, bring enough air to
15 dilute it so it's well outside the explosive limit.
16 But that's not what 400 is. 400 is telling you we
17 want to ventilate it from a health hazard
18 standpoint.

19 So the proposal and comment provides for
20 the AHJ to make a determination as to the specific
21 use of that material and how it's stored and what
22 the hazard is depending on its use, storage, and
23 handling, and then determine what are the proper
24 protective measures. Not just the one that 400

1 says. The determination may include both 400 and
2 30 requirements. And this is what we think is
3 important.

4 Another example talks about outdoor
5 storage in Section 6.2.7. When a corrosive
6 chemical governed by Chapter 12 in NFPA 400 is also
7 flammable, the distances for safe storage in 400
8 says 15 feet, but we all know, those of us who are
9 familiar with NFPA 30, safe distances for flammable
10 liquids from a source of ignition is typically
11 25 feet or more. What do we do? Do we separate it
12 by 15 feet or 25 feet? The AHJ has to make that
13 decision.

14 That's what we're offering in this
15 comment. We're giving the AHJ the opportunity to
16 make the proper decision depending how the material
17 is used, handled, and stored.

18 Finally, the committee response when I put
19 in my proposal was, Oh, this is boilerplate, we
20 took it out of NFPA 1. That's true. The words in
21 400 are exactly the same words that are in NFPA 1
22 and in NFPA 5000. However, in NFPA 1, you then
23 jump over to NFPA 1, Chapter 60, that basically has
24 the same requirements that are in Chapter 5 and 6

1 of NFPA 400.

2 But then NFPA 1 incorporates a whole
3 chapter on flammable and combustible liquids. And
4 the first statement in that chapter says that where
5 there's a conflict between the requirements of this
6 chapter and NFPA 30 and any of the general
7 requirements in NFPA 1, then the specific
8 requirements are 30 --

9 MODERATOR GERDES: One minute.

10 MR. KRAUS: -- or this chapter apply.

11 So all we're trying to do here is when you
12 have a flammable liquid, unlike what Tony said,
13 it's not exempt if it has two characteristics.
14 When you have this flammable liquid with two
15 characteristics, let somebody who has the knowledge
16 to look at the use of it, look at the handling of
17 it, look at the storage, determine what the
18 specific hazard is under those conditions and make
19 a determination. Thank you.

20 MODERATOR GERDES: Thank you. Microphone 4.

21 MR. HIRSCHLER: Marcelo Hirschler, GBH
22 International. I just require a clarification from
23 staff. The sentence as written in this comment has
24 the word "shall apply" twice. I'm assuming that is

1 incorrect and that that will be corrected?

2 MODERATOR GERDES: If it's editorial, it will
3 be corrected, yes.

4 MR. HIRSCHLER: Thank you.

5 MODERATOR GERDES: Microphone 6.

6 MR. McLAUGHLIN: Pat McLaughlin, McLaughlin &
7 Associates, representing the Semiconductor Industry
8 Association, speaking against this comment.

9 Read the language that they're trying to
10 substitute. First, let me say that all the model
11 building codes in the United States for the last
12 50 years have used this premise that presently is
13 in 400, and it's worked. They want to change that
14 because of the uncomfortable nature of it. And
15 they want to now change it to say that a
16 determination can be made by the AHJ or a qualified
17 person. I'm a qualified person. So if I design
18 this system and I think that, in fact, some number
19 is appropriate, one or the other, that that makes
20 it then code compliant? I don't think so.

21 I think that what they're trying to do
22 here is dangerous and will backfire and is unsafe.
23 So I think this should be rejected.

24 MODERATOR GERDES: Microphone 6.

1 MR. FLUER: Larry Fluer representing Compressed
2 Gas Association, member of the NFPA 400 Technical
3 Committee in opposition to the motion on the floor.

4 I have just two points. One is that the
5 technical assistance that they're requesting is
6 found in Section 1.15.1. It reads, "The AHJ shall
7 be permitted upon notification to the applicant
8 building owner or owner's agent to require a review
9 by an independent third party with expertise in the
10 matter to be reviewed at the submitter's expense."
11 NFPA 1, 5000, 400 all have that ability to seek
12 technical assistance for these problems they're
13 alluding to.

14 My final comment is, again, the vote on
15 the part of the Technical Committee was 28 to 1.
16 Thank you.

17 MODERATOR GERDES: Thank you. Any closing
18 remarks by the submitter? We'll go to Mic 5.

19 MR. KRAUS: Dick Kraus, API, submitter of the
20 proposal, speaking in favor.

21 I call your attention to Section 1.5.3,
22 those of you who have a copy of the draft, and I'm
23 going to read that. It's exactly what we said
24 because if you look at what we talked about,

1 Section 1.3.1, and then you go down to 1.5.3, what
2 do you do? 1.5.3, Alternatives, The specific
3 requirements of this code shall be permitted to be
4 altered by the AHJ to permit alternate methods that
5 will secure equivalent fire safety, but in no case
6 shall the alternative afford less fire safety --
7 fire safety now -- than in the judgment of the AHJ
8 which would be provided by compliance with the
9 provisions contained in the code.

10 This is exactly what we proposed up front.
11 I'm an AHJ. If I have adopted NFPA 1 and I have
12 also -- which tells me that if I have a flammable
13 liquid I go to 30 because that's what it says in
14 Chapter 66, and I adopt this that tells me, hey, if
15 the flammable liquid also is toxic, I can't go to
16 30, what do I do? I have to make a determination.
17 And this tells you we have to make a determination.
18 And all we did is put it back up front again so you
19 don't have a conflict in the code, and I just
20 didn't understand why the committee never
21 understood that. Thank you very much.

22 MODERATOR GERDES: Thank you. Hearing no
23 further discussion, we'll proceed with the vote.
24 The motion is to accept Comment 400-16. All those

1 in favor of the motion, raise your hands. Okay.

2 All those opposed, raise your hands.

3 Motion fails.

4 We're on to Motion Sequence Number 400-3.
5 Microphone 5.

6 MR. WECHSLER: Dave Wechsler representing
7 Mike Walls, the American Chemistry Council. Move
8 to accept 400-60.

9 MODERATOR GERDES: You are the designated
10 representative for the certified amending motion?

11 MR. WECHSLER: I am. I'm sorry.

12 MODERATOR GERDES: Do we have a second on the
13 motion?

14 A VOICE: Second.

15 MODERATOR GERDES: Proceed.

16 MR. WECHSLER: This particular motion is
17 attempting to resolve some issues with tables that
18 are called the MAQ tables that are extracted from
19 basically NFPA 5000 and placed into Chapter 5 of
20 the current code. What we are trying to do here is
21 recognize the fact that the MAQ tables, the maximum
22 allowable quantity tables which are threshold
23 amounts, are extracted from NFPA 5000; and they
24 represent quantities, in some cases, that need

1 correction.

2 The committee in its development of this
3 standard had the golden opportunity to take action
4 to correct those values and effectively generate an
5 NFPA 400 table; and, instead, they elected not to
6 do that but simply to work by extraction. In an
7 earlier version of the standard, we used to
8 reference that the occupancies should be in
9 accordance with NFPA 5000 that was later changed to
10 be occupancies in accordance with the building
11 code.

12 If you look at building codes or what's
13 out there as building codes, you'll find that they
14 are not identical, that there are differences. And
15 so what we have proposed is really a condition
16 where we're going to modify the general
17 requirements that simply say one of the starting
18 points is you look at your building code, whichever
19 building code you're looking at, and if you don't
20 have a building code for some strange reason, then
21 you can look in the annex of the document which is
22 where these existing tables will reside.

23 Now you will hear some arguments that
24 says, well, you know, there's subtle differences

1 between the building codes of how these are
2 addressed and they are very similar in terms of
3 what they're looking at. But if you look at the
4 IBC which is another building code in 2009 and you
5 look at NFPA 5000 or effectively what's in NFPA 400
6 by extraction, you'll see that corrosives have a
7 value of 9,750 pounds, but the NFPA 5000 uses 5,000
8 pounds. Conversely, Class 1 oxidizers are
9 permitted at 18,000 pounds, whereas NFPA 5000 only
10 allows 4,000.

11 So we're saying that there are differences
12 in the MAQs in these tables. They need to be
13 applied, but the extraction is not going to be the
14 way to do this. The way to do this is the
15 requirement and by applying the appropriate
16 standard so that we are using the appropriate
17 values for what the jurisdiction is requiring.
18 Thank you.

19 MODERATOR GERDES: Thank you. Microphone 6.
20 I'm sorry. First I want to ask the committee
21 secretary if he has any comments?

22 MR. JAMES: I stand on the committee action.

23 MODERATOR GERDES: Thank you. Microphone 6.

24 MR. FLUER: Larry Fluer representing Compressed

1 Gas Association, speaking in opposition to the
2 motion on the floor.

3 The NFPA Standards Council asked that
4 special hazards standards, and this would be one of
5 them, coordinate with NFPA 5000. There's a variety
6 of special hazards standards. The NFPA 5000
7 committee polled those committees asking for MAQs
8 and recommendation on MAQs.

9 It's a chicken/egg kind of a problem.
10 Right now, the egg was in the 5000 process. The
11 400 committee extracted from 5000 as the starting
12 point. There's a convergence of chemical interest
13 on the 400 committee, and the Standards Council's
14 expectation is that the 400 committee examine these
15 MAQs and, if changes were to come about, that those
16 changes get funneled back up through the 5000
17 committee.

18 So it's a coordination effort. It's not
19 an effort of competition between committees. We're
20 looking for harmonization. That harmonization goes
21 beyond the NFPA Codes and Standards and out into
22 the I codes as well. The converged interest in
23 this play in both arenas. The industry is watching
24 the MAQ tables. All of us are working towards

1 harmonization.

2 You'll never have a day where everything
3 matches exactly. Just ripping Chapter 5 out of
4 NFPA 400 doesn't help the code, it guts the code.
5 So it's a motion that should not be supported. I
6 ask you to support your committee and, again, 28 to
7 1 was the vote.

8 MODERATOR GERDES: Hearing no further
9 discussion, we'll move to the vote to accept
10 Comment 400-60. All those in favor of the motion
11 to accept, raise your hands. Thank you. All those
12 opposed.

13 Motion fails.

14 Moving onto Motion Sequence Number 400-4.
15 Microphone 5.

16 MR. KRAUS: Dick Kraus representing API, member
17 of the 400 committee representing NFPA 30, and I am
18 the proponent of Comment 400-89 which I move to
19 accept.

20 MODERATOR GERDES: Please state your motion.
21 Your motion is to accept Comment 400.

22 MR. KRAUS: That's what I said. I'm a
23 proponent of 400-89 which I move to accept.

24 MODERATOR GERDES: Do I have a second?

1 A VOICE: Second.

2 MODERATOR GERDES: Okay. Proceed.

3 MR. KRAUS: What the motion is is the
4 requirements of this section, and we're talking
5 about Section 5.41, "Outdoor control areas shall
6 not apply to outdoor storage and materials in
7 approved" -- and this is a key word -- "in approved
8 stationary aboveground tanks or underground tanks."

9 When we evolved 400, we had a big problem
10 with definition, what is a container. We ended up
11 with, we have a broad definition of container and
12 it happens to include both underground and
13 aboveground storage tanks. So now you jump into
14 this section that talks about outdoor control areas
15 for containers, and it's really talking about small
16 containers, drums, IBCs, things of that nature.
17 And when you get into a large aboveground storage
18 tank, storing a hazardous chemical, the quantity --
19 the requirements are just not applicable.

20 I am going to read you a couple of the
21 sections that say it. First of all, it says, It
22 shall apply to the requirements in Chapter 6, 11
23 and 21 as well as 5.4.2 and 5.4.1 which somehow
24 comes under 5.4.2. Don't ask me why, the numbering

1 is wrong. But anyhow, the first thing it says, if
2 I have a property that has 35,000 square feet,
3 pretty small for a refinery or a chemical plant,
4 but, anyhow, if I have tank farms on this property
5 which are control areas, these must be separated by
6 a minimum distance of 300 feet.

7 Those of you who are in the room familiar
8 with refineries, tank farms, et cetera, know that
9 we are allowed to have dikes in lieu of separation.
10 There's other means of separation other than
11 distance. Also, I don't think I have ever seen in
12 my 55 years being in this business where there have
13 been individual tank farms within refineries if
14 they're in a tank farm area separated by 300 feet.

15 But that's a requirement of this. So if
16 I'm storing again toluene, xylene, benzene, any of
17 these hazardous chemicals falling under the code,
18 forget about flammable altogether, let's just talk
19 about hazardous chemicals, I have to put them in
20 this kind of separation distance, these huge
21 storage tanks. And then when you get within
22 control areas in the process area and we said this
23 code doesn't cover process, but still you have
24 storage within the process area because you're

1 going in and out of these tanks during the process,
2 how do you keep the separations? Okay.

3 The next thing it does, it gets you back
4 into Chapter 6, and Chapter 6 starts talking about
5 outdoor dispensing and use and outdoor open
6 systems. Well, these are closed systems. So we'll
7 skip that, but we'll go down to spill control
8 requirements. What's one of the spill control
9 requirements in here? Cut a hole in the dike so it
10 can pass through. Because it says cut a hole in
11 the dike but make sure that you don't have any
12 openings in the hole where the liquid can go
13 through. You know, we just don't do things like
14 that.

15 There's so many things in here. Closed
16 capacity of an individual container that exceeds
17 55 gallons shall be provided with secondary
18 containment. Tanks are all provided with secondary
19 containment. We agree with that. But the fact is
20 when you get into how do you develop the secondary
21 containment, you go -- it gets you into the chapter
22 that talks about indoor storage with floors,
23 putting gutters around, putting a base under the
24 storage area that's impermeable which is done under

1 OSHA and under EPA in many circumstances, but, in
2 many other circumstances, it's not required because
3 there's alternate means of containment or capture
4 in case of a spill.

5 So I just -- you know, I would hope the
6 AHJ wouldn't try to apply this to outdoor storage
7 and large aboveground storage tanks, but talk about
8 them being approved tanks --

9 MODERATOR GERDES: One minute.

10 MR. FLUER: -- use that word approve for the
11 AHJ to say, hey, depending again upon the use of
12 the tank, what it's storing, how it's located, that
13 it's fine as situated. Thank you very much.

14 MODERATOR GERDES: Thank you. Any comments
15 from the committee secretary?

16 MR. JAMES: Stand on the committee action.

17 MODERATOR GERDES: Thank you. Microphone 2.

18 MR. KEY: Hal Key of the Mesa Fire Department,
19 speaking against the motion.

20 Just a reminder, we're dealing with an MAQ
21 issue and a control area issue. You only get into
22 some of these requirements once you exceed the MAQs
23 within a control area. One of the ways to control
24 whether you get into a more extensive requirement

1 is to create the control areas and, in this case,
2 that they're outside and they're separated by
3 distance. And if you go into the document, there's
4 very extensive criteria on how those are created
5 based upon square footage of the outside area.

6 In addition, a lot of things that
7 Mr. Kraus brought up are NFPA 30 issues and not 400
8 issues.

9 MODERATOR GERDES: Microphone 6.

10 MR. McLAUGHLIN: Pat McLaughlin, representative
11 of the Semiconductor Industry Association. I might
12 add to that, also opposed to what Dick is trying to
13 accomplish here.

14 I think he's confused because what he's
15 created is a double exception. What this section
16 does is it exempts, I will read it to you,
17 5.4.1.1.2, Where storage or use as an outdoor
18 control area, compliance with the outdoor storage
19 and use requirements in Chapter 11 through 21 shall
20 not be required. Now he's exempting aboveground
21 tanks from that, so I read that that now he's
22 requiring that you comply. So, as written, I think
23 it solves Dick's problem.

24 MODERATOR GERDES: Thank you. Microphone 2.

1 MR. ORDILE: Tony Ordile, Loss Control
2 Associates. Chapter 6 of 400 covers general
3 requirements --

4 MODERATOR GERDES: Are you for or against the
5 motion?

6 MR. ORDILE: Against the motion. There's a
7 Section 6.1.19 covering installation of tanks. It
8 covers aboveground tanks. It indicates that it has
9 to follow the requirements in Chapters 11 through
10 20, and that's all it says. Right now, Chapters 11
11 through 20 do not cover stationary tanks with
12 distances or any other requirements. This is kind
13 of a place holder for further development. Those
14 chapters, 11 through 20, are the specific chapters
15 dealing with each of the hazardous materials
16 covered by the scope of NFPA 400. Thank you.

17 MODERATOR GERDES: Thank you. Hearing no
18 further discussion, we'll proceed to the vote. The
19 motion is to accept Comment 400-89. All those in
20 favor of the motion, please raise your hands.
21 Thank you. All those opposed.

22 Motion fails.

23 Moving onto Motion Sequence Number 400-5.
24 Microphone 5.

1 MR. WECHSLER: David Wechsler, representing
2 Mike Walls, the American Chemistry Council. I am
3 the person pushing this motion forward.

4 MODERATOR GERDES: That is correct. Would you
5 state your motion?

6 MR. WECHSLER: To accept Comment 4002-18.

7 MODERATOR GERDES: Do I have a second?

8 A VOICE: Second.

9 MODERATOR GERDES: I have a second. Proceed.

10 MR. WECHSLER: This proposal is dealing with
11 Chapter 21. Chapter 21 has extracted a text coming
12 across from NFPA 55. It's kind of unusual in the
13 sense that when NFPA 400 was being formulated, we
14 received a request, at least we were told we
15 received a request, that NFPA 55 wanted to
16 participate in the NFPA 400 work and would we
17 assign for them a place that they could put their
18 material into this standard. It was attempted to
19 discuss what they would put in there, but there was
20 nothing to discuss because it was just a proposal
21 and would we consider, and the panel acted to
22 consider that aspect.

23 Later in the ROC stage, we were given an
24 extracted set of information and was told this is

1 what we want you guys to put into 400. 400 has no
2 control over this. It's all extracted material.
3 And we said, Well, we don't have any control of
4 this, what are we discussing? Is it the question
5 of utilizing or not? And the question was raised
6 by several of us, Why are we doing this? What's
7 the motivation? What does Industrial Gases,
8 Chapter 21, have to do with the aspect of our
9 consolidation of our existing codes 430, 432, 434,
10 et cetera, with the work process?

11 Well, one idea, it makes it easier to use
12 a document. Well, how does it make the document
13 easier? Most people, when you carry memory sticks,
14 if you know, you put another PDF file on there, it
15 doesn't get any heavier. If you are carrying
16 around the document like what I'm carrying in my
17 hand, more pages or not doesn't it make any less
18 portable.

19 So the question is, What are we trying to
20 do? We don't think it's appropriate to include
21 Chapter 21 in this document and also have a
22 standing NFPA 55 document. Is it the intention
23 that this extracted material represents the whole
24 sum total of compliance with 55? If that is, well,

1 then we have two documents addressing the same
2 materials. And oh, by the way, Chapter 21 is
3 influenced by the whole front end of Chapters 1
4 through 4 in NFPA 400. So there's a potential that
5 we're going to get conflicting requirements.

6 We don't see this as serving anybody's
7 best interest, and we suggest to you we delete
8 Chapter 21 and its auxiliary items because of that
9 potential conflict. Thank you.

10 MODERATOR GERDES: Thank you. One thing I
11 wanted to clarify is, also on Motion Sequence
12 Number 400-6, it's being treated as a related
13 motion. So we're discussing that issue with this
14 one at the same time. We're only going to consider
15 this motion.

16 Comment from the committee secretary?

17 MR. JAMES: Stand on the committee action.

18 MODERATOR GERDES: Thank you. Microphone 6.

19 MR. FLUER: Larry Fluer, representing the
20 Compressed Gas Association, principal member of
21 NFPA 400 and also NFPA 55. I chaired a task group
22 for NFPA 55 to prepare the submittal for Chapter 21
23 in NFPA 400. And I'm speaking against the motion.

24 Dave first started out with a comment that

1 alluded to the committee might have been
2 hoodwinked. They were told at least the Industrial
3 Medical Gas Committee wanted this change. Well,
4 that was under Proposal 400-7, Log 120 in the ROP.
5 It was issued by Michael St. Clair, Chair of the
6 NFPA 55 committee. We didn't have the detail in
7 hand because the task group didn't finish the work.

8 We put in a place marker, code proposal,
9 and many of you involved in the process understand
10 what's done then, and during the ROP phase that was
11 developed further.

12 Dave made the comment that if this
13 represents the sum of NFPA 55, then why have two
14 documents? Well, it doesn't represent the sum of
15 NFPA 55. It doesn't include anything outside the
16 fundamental rules for compressed gases. This
17 approach is the identical approach to that used in
18 NFPA 1. NFPA 1, Chapter 63, is extract material
19 from NFPA 55.

20 Without compressed gases in NFPA 400 for a
21 hazardous materials code, you might as well call it
22 HazMat Light, sort of like Budweisers, it's not all
23 there. It's hard to imagine why use of extract
24 text is objectionable because it's the same concept

1 that we're used to seeing. Sure, codes change in
2 different cycles. Right now, we'll be fully
3 coordinated with the 2009 version of NFPA 55. The
4 responsibility on the part of the committees are to
5 maintain extract text. That's an ongoing process
6 whenever extract text is used.

7 There's also an effort made to coordinate
8 that chapter with the administrative and emergency
9 planning provisions in other chapters of NFPA 400.
10 So it's not that compressed gases won't be required
11 to comply with general requirements, emergency
12 planning, concepts of control area, application of
13 definitions and other elements of NFPA 400.

14 My final comment is, again, the vote was
15 28 to 1. Thank you.

16 MODERATOR GERDES: Thank you. Microphone 5.

17 MR. KRAUS: Dick Kraus representing API,
18 speaking in favor of the comment, and I'm also a
19 proponent by this comment by the way. It's a dual
20 comment and that wasn't mentioned up there. I made
21 the same comment.

22 MODERATOR GERDES: I understand.

23 MR. KRAUS: Thank you. I agree with everything
24 that Larry had to say. There's no question here.

1 The main question is 55 is already extracted into
2 1. So now we're extracting it into two different
3 documents that are in two different cycles. So,
4 again, you're a jurisdiction who's adopting both 1
5 and adopting 400. Which do you turn to?

6 Well, you really should go back to 55
7 because that will be the most accurate or whatever
8 edition of 55 you've adopted in your jurisdiction
9 which, again, may conflict with what's in 400 and
10 what's in 1.

11 The other thing I wanted to call your
12 attention to is in putting Chapter 21 in here, we
13 stuck an extraordinary large number of definitions
14 specific only to Chapter 22 into the general
15 definitions, and my comment also proposed that
16 these definitions be taken out of the general
17 definition section and put back into Chapter 21
18 since they apply only to Chapter 21. Hey, we're
19 confusing the enemy enough. Why do it even more?
20 Thank you very much.

21 MODERATOR GERDES: Thank you. Microphone 6.

22 MR. FLUER: Larry Fluer, Compressed Gas
23 Association, speaking against the motion.

24 Dick Kraus had submitted his own demand in

1 addition to the one by Dave Wechsler. The vote on
2 Kraus's was 29 to 1. Thank you.

3 MODERATOR GERDES: Thank you. Any further
4 discussion? Hearing none -- I'm sorry,
5 Microphone 5. Okay.

6 We will proceed to the vote. The motion
7 is to accept Comment 400-218. All those in favor
8 of the motion, please raise your hands. Thank you.
9 All those opposed.

10 Motion fails.

11 Is there any further discussion on
12 NFPA 400? Hearing nothing, we'll move on to the
13 next document. Thank you, Mr. James.

14 MR. JAMES: Just one quick comment. I'm
15 sending a thank you from the chair to the committee
16 and all those members and guests that were
17 participating in this new document. Unfortunately,
18 he was not able to be here but he does send his
19 gratitude. Thank you.

20 MODERATOR GERDES: Thank you. The next report
21 under consideration this afternoon is that of the
22 Technical Committee on Fire Pumps. Here to
23 represent the committee is Committee Chair
24 Gayle Pennel of Schirmer Engineering Corporation,

1 Glenview, Illinois. The committee report can be
2 found in the Blue 2009 Annual Revisions Cycle ROP
3 and ROC. The certified amending motions are
4 contained in the motions committee report and
5 behind me on the screen. We will proceed in the
6 order of the motion sequence number presented.

7 Mr. Pennel.

8 MR. PENNEL: Mr. Chair, ladies and gentlemen,
9 the report of the Technical Committee on Fire Pumps
10 is presented for adoption and can be found in the
11 Report on Proposals and the Report on Comments of
12 the 2009 Annual Meeting Revision Cycle. The
13 Technical Committee's report proposes a partial
14 revision of NFPA 20, Standard for the Installation
15 of Stationary Pumps for Fire Protection. The
16 presiding officer will now proceed with the
17 certified amending motions.

18 MODERATOR GERDES: Thank you. The first item
19 we have is Motion Sequence 20-1. Microphone 5.

20 MR. ISMAN: Thank you, Mr. Chair. My name is
21 Ken Isman with the National Fire Sprinkler
22 Association, and I move to return to committee
23 Section 4.3.1 which appears on Comment 20-2 in the
24 top of the right-hand column of Page 20-2 in the

1 ROC.

2 MODERATOR GERDES: Thank you. Do we have a
3 second?

4 A VOICE: Second.

5 MODERATOR GERDES: Having a second, proceed.

6 MR. ISMAN: Thank you. The issue here is pumps
7 in series which are pumps that take their suction
8 from the discharge water of previous pumps in
9 high-rise buildings. And what the committee has
10 done is created a whole new chapter on pumps for
11 high-rise buildings which we opposed, but we
12 decided not to argue the whole issue of the broad
13 scope of a whole new chapter, but we decided,
14 instead, to take the one issue that we were most
15 concerned with and just deal with that on the floor
16 today.

17 We don't believe that the committee has
18 adequately substantiated the requirement to put all
19 of the pumps in series in the same pump room. The
20 committee, in doing so, has eliminated the design
21 option to separate pumps and series that has
22 existed for decades. There are many valid reasons
23 for engineers to desire separation of the pumps in
24 series. Three of these reasons are to control

1 pressure; to deal with the concern for a single
2 event taking out all of your fire protection
3 equipment, which is a security concern these days;
4 and to deal with campus arrangements where a fire
5 pump might serve a larger group of buildings but an
6 individual building within that campus arrangement
7 might need an additional fire pump to meet a higher
8 demand.

9 I'm going to discuss each of these three
10 options very quickly. First, the pressure control
11 option, which is pretty obvious. If you can
12 elevate the second pump in series above the level
13 of the first pump, you can decrease the discharge
14 pressure from the second pump. This helps you to
15 reduce cost in a high-rise building installation
16 and reduce the use of pressure-reducing valves and
17 then you get rid of all of the issues that go along
18 with those pressure-reducing valves.

19 Now the second reason that you might want
20 to separate your pumps is this concern about a
21 single event taking all of the pumps out of
22 service. That's a design issue that really needs
23 to be left to the engineer to decide for security
24 reasons and not left up to the Fire Pump Committee

1 to decide for all buildings.

2 You can increase the reliability of a fire
3 protection system by separating pumps because a
4 single event can't take everything out of service.
5 The second pump at a higher level can be fed from a
6 fire department pumper or a redundant separate pump
7 at the lower level in another location.

8 The third reason you might want to
9 separate pumps is this issue of the campus
10 arrangement -- oh, I'm sorry, I want to go back to
11 the second reason for just a second and say that
12 the committee did do a reliability analysis which
13 does not appear in this Comment 20-2, but it
14 appears in the committee action on Comment 20-13
15 which also dealt with the subject. So you might
16 want to take a look at the committee's reliability
17 analysis that's in Comment 20-13, but you will see
18 that they did not take this reliability of
19 separating the pumps into account in that analysis.

20 Then to go on to the third reason that you
21 might want to separate pumps is if you have a
22 campus arrangement where you have a fire pump house
23 feeding a series of loops and fire mains around a
24 campus feeding many buildings. If you have a

1 higher fire protection demand in one of those other
2 buildings and that other building happens to be a
3 high-rise building, then that meets the definition
4 of high-rise under this chapter which is only
5 75 feet between the lowest level of fire department
6 vehicle access and the floor of the highest story
7 in the building. That's not a very big building.

8 Then what the committee is saying is you
9 can't put a single fire pump in this high-rise
10 building that's being fed from a campus loop
11 because that meets their definition of pumps in
12 series which is in Comment 20-1 of your ROC.
13 Instead, you would have to put that pump back at
14 the pump house that's feeding the campus loop and
15 then run separate piping all the way to that
16 high-rise building to deal with that separate
17 situation and that slightly higher demand in that
18 high-rise building.

19 In summary, this change will increase the
20 cost of fire protection. This change will take an
21 important security issue of separating important
22 components of a system out of the hands of the
23 design engineer and the committee has not
24 substantiated this proposal with any loss data.

1 And you would think that since this installation
2 practice has been used for decades that they might
3 have been able to find some loss experience if this
4 technique is so bad that it needs to be prohibited.

5 The reliability analysis that the
6 committee unveiled at the common stage is flawed,
7 and so we urge you to vote in favor of our motion
8 which returns this issue to the 2007 edition of the
9 standard where pumps in series were allowed to be
10 separated.

11 MODERATOR GERDES: Thank you. Any comment from
12 the committee chair?

13 MR. PENNEL: Yes. I did do an informal poll of
14 the committee before this meeting, and of the
15 responses, 27 were opposed to this motion, 4
16 supported it, and 1 is neutral. And we did add, as
17 Ken has indicated, we did add a new chapter for
18 high-rise. And the primary reason we did that was
19 that we observed a lot of different ways that
20 people were using fire pumps in high-rise
21 buildings, some which we felt would not provide the
22 level of reliability needed.

23 The guidance on this issue is previously
24 missing from NFPA 20; and, to be truthful, in my

1 years, in my career up until two or three years
2 ago, I never saw what would be referred to as a
3 vertically stage fire pump. The Sears Tower, the
4 John Hancock, the Aon Building, 80-story Aon
5 Building in Chicago, are all built with the fire
6 pumps in the same room.

7 While this practice was not specifically
8 prohibited by NFPA 20, it was always my assumption
9 that the intention was there to prohibit it because
10 they had a requirement in there that you had to
11 keep the controller in the pump within view of each
12 other.

13 There's several significant disadvantages
14 to vertical staging. First of all, the probability
15 analysis was put in the ROC, and I have never heard
16 anybody tell me that it was inaccurate. The
17 statements about it being separated, being more
18 reliable are not true. Separated pumps are more
19 reliable if they are independent. They are less
20 reliable if they are interdependent, which these
21 are.

22 What that means is that if you take out
23 either location, you lost all of your pumps. In
24 addition, you have got control wiring between the

1 pumps which would have to transverse multiple
2 floors, and there's no requirements currently for
3 protecting that. There are significant operational
4 and testing disadvantages. There's really no way
5 to test a vertically staged fire pump unless you
6 run an express drain all the way down to the
7 ground; and that, when you get into the super
8 high-rise, can present significant pressure issues.

9 Fire department operations become quite --
10 much more complex when you're trying to monitor
11 your water supply when your fire pumps are in two
12 different levels. It means one person can no
13 longer monitor those pumps. You now have to have
14 communication between two noisy rooms, and
15 communication between those rooms has proved to be
16 problematic in the situations where they have been
17 installed.

18 In addition, if you lose your low zone
19 while the high zone is running, you will destroy
20 the high zone. It will cavitate and the pump will
21 destroy the impeller in it.

22 So for these and many other reasons -- or
23 other reasons, the committee opposes this motion.
24 Thank you.

1 MODERATOR GERDES: Thank you. Microphone 2.

2 MR. FULLER: Thank you. David Fuller,
3 FM Global. I'm a principal on NFPA 20. I wanted
4 to speak today in opposition to the motion.

5 FM Global has recommended against the
6 installation of pumps in series with the high zone
7 pump located in the upper building floors, also
8 known as vertical staging pump as Gayle explained.
9 We've done this for many years.

10 Requiring a pump in series to be in the
11 same room ensures the following: It ensures
12 qualified personnel can respond and assess the pump
13 operation during a fire. It eliminates the need
14 for radio communication to assess the condition of
15 that pump. It maintains the interconnecting of the
16 pump control wiring within the two-hour envelope of
17 the fire pump room, and this improves the
18 reliability of the system.

19 It makes testing the pump much easier, and
20 Gayle did an excellent job of addressing those
21 issues. Having pumps in a very high elevation in a
22 high-rise building makes testing enormously
23 difficult. We've had several cases where pumps are
24 ignored in those levels. They're not tested per

1 NFPA 25; and, therefore, those pumps cannot be
2 relied upon to operate properly during a fire.

3 Fire department operations should be kept
4 as simple as practical. Vertical staging of pumps
5 greatly complicates fire-fighting operations.

6 Keeping pumps in series together and
7 locating pumps in lower building floors reduces the
8 fire department connection complexity and provides
9 additional options for firefighters to pump water
10 into the building sprinkler systems. When pumps in
11 series are located in upper building floors, the
12 fire department connections are often not provided,
13 and the high zone pump is out of reach of the fire
14 department or manual intervention. This is a sole
15 means of providing water to those higher building
16 floors. This is poor fire protection design.

17 There are several U.S. cities with tall,
18 high-rise buildings that do not allow the vertical
19 staging of these fire pumps. Fire protection water
20 supplies in these buildings utilize direct pumping,
21 gravity tanks or some combination. Thank you.

22 MODERATOR GERDES: Thank you. Microphone 5.

23 MR. LEYTON: I am Steve Leyton from Protection
24 Design and Consulting in San Diego, California,

1 principal member of the NFPA 14 committee, and I am
2 speaking on my own behalf today.

3 MODERATOR GERDES: Are you in favor of the
4 motion?

5 MR. LEYTON: I favor the motion. The NFPA 14
6 did correspond with the 20 with regard to this
7 issue. I speak only for myself, but I do believe
8 it is a majority opinion of the 14 that we do not
9 necessarily agree with the belief that this is a
10 mandatory or significant requirement. We're not
11 aware of a body of evidence that suggests the
12 impediment or impingement on fire-fighting
13 operations as just suggested by Mr. Fuller. We're
14 also not aware of database that suggests that there
15 is a high chance of or an enhanced chance of
16 failure from vertically staged pumps.

17 I would like to discuss more proactively
18 some of the perceived benefits of allowing this
19 design option to remain. We have worked
20 extensively on Chapter 7.9 of NFPA 14 which is the
21 provisions for zoning; and, in the 2007 Cycle
22 preceding this current one, we also took a long
23 look at and included language that allows the
24 arrangement of pressure-reducing valves to create

1 zones.

2 The language of 7.22 of 14 and 7.9 of 14,
3 the section in its entirety, are subject to
4 complete rewrite and basically deletion or
5 elimination because it will be rendered moot by
6 this. The 14 committee has given a considerable
7 amount of thought and did, in fact, call a task
8 force specifically to address the issues of zoning,
9 and the language proposed for the 2010 for zones
10 takes all of that work into consideration. Issues
11 of redundancy of supply pipes, the use of lower and
12 intermediate zones to feed upper pumps, all of
13 these configurations, the functionality of them,
14 the cost impacts and costs benefits both ways have
15 all been considered.

16 Very thoughtfully, the 14 believes that
17 allowing vertically staged pumps with the
18 requirements that we have provided for in the 2010
19 or as proposed in the 2010 will address the issues
20 of reliability. The harmonizing of 14 and 20 is
21 critical and I don't think that enough
22 correspondence did occur between our groups.
23 Admittedly, I and at least one other member of the
24 14 did participate in the NFPA 20 high-rise task

1 group, but this issue wasn't discussed and it has
2 caught us somewhat by surprise.

3 We have also in 14 allowed for, for the
4 first time in terms of putting the language into
5 the standard, I believe it may be annex material,
6 allowing for fire departments to pump into upper
7 pumps for auxiliary water supplies, whether they're
8 lower or upper pumps, to create a vertically staged
9 fire department connection type of auxiliary water
10 supply to help offset issues that could occur
11 should a lower stage pump fail that's feeding into
12 an upper stage. There's a number of ways that can
13 be mitigated.

14 But, again, nothing in the series pump in
15 the single-room requirements suggests that the
16 lower zone pump is fail-safe. If it fails within
17 the same room, the upper zone pump is still
18 impinged. It will not work and it will cavitate
19 and fail just as surely as if they were vertically
20 separated.

21 There are some costs, first cost benefits
22 to vertically staging pumps. The cost of
23 structural improvements, some of the consequences
24 of this may, in fact, be that should upper zones

1 require pumps that cannot be vertically staged from
2 these -- or series staged from the same room, then
3 a separate water supply should be provided in an
4 upper elevation to serve another pump. And the
5 cost of elevating those water supplies structurally
6 in areas subject to the strictest seismic
7 engineering standards could cost millions of
8 dollars in structural steel upsizing. Monies saved
9 or the perceived savings of monies in inspections
10 testing and maintenance of pumps in the same room
11 will be spent in addition to having to deal with
12 auxiliary water supplies. The reliability of
13 auxiliary water supplies is not particularly
14 well-known.

15 MODERATOR GERDES: Less than a minute.

16 MR. LEYTON: There are offsetting cost benefits
17 and inspections testing and maintenance logistical
18 benefits.

19 I don't think that there's a compelling
20 reason one way or another that we should say that
21 this is absolutely mandatory. I favor preserving
22 designer options.

23 The last thing that I would like to speak
24 to then with time running out is the comment that

1 there is an impingement of fire-fighting operation.
2 Fire pumps, regardless of where they're located,
3 are required to report to a fire alarm control
4 panel in a central fire control room in a high-rise
5 building. The responding fire chief has the
6 resources in the building under current code to
7 monitor these pumps' functions regardless of where
8 they are in the building. Thank you.

9 MODERATOR GERDES: Thank you. Microphone 6.

10 MR. STELTER: Bill Stelter, Master Control
11 Systems. I speak against the motion on the floor.

12 A series pump in a high-rise, I have been
13 involved in some of these jobs that were separated
14 by vertical zoning. Some of the problems that are
15 involved is if you have series pumps that are
16 substantially separated in elevation and the low
17 zone pump does not start, the high zone pump may
18 seize in minutes due to lack of water.

19 However, if the series pumps are located
20 in the same room, the high zone pump will still
21 have sufficient suction pressure to prevent damage
22 of the high zone pump even if the low zone pump is
23 not running. This allows for manual operation of
24 the low zone pump while still having a fully

1 functional high zone pump.

2 Further, there are significant
3 communications, testing, and maintenance issues
4 with the proposed amendment. I speak against the
5 motion on the floor.

6 MODERATOR GERDES: Thank you. Microphone 5.

7 MR. ISMAN: Ken Isman with the National Fire
8 Sprinkler Association. Just very briefly.
9 Everything you have heard from the committee in
10 support of the committee action has been about
11 vertically staged pumps, but I want to remind you,
12 the committee has done more than prohibit
13 vertically staged pumps. They have prohibited all
14 pumps in series from being separate wherever they
15 are in the world. So if you have pumps even on the
16 same elevation that happen to be in a high-rise
17 building that are series -- in series order for
18 some reason, the committee has prohibited them from
19 being separated, and that's a position that I don't
20 think has been substantiated at all.

21 MODERATOR GERDES: Thank you. Microphone 6.

22 MR. NASBY: My name is James Stanley Nasby. I
23 am with Columbia Engineering. I am also principal
24 recently on NFPA 20. I am speaking in opposition

1 to the motion.

2 I wanted to point out a couple of things
3 with regards to the problems that can occur with
4 series staging of pumps up in the building. One
5 example is One Meridian Tower in Philadelphia a
6 number of years ago. Just for orientation, I think
7 it's important for the members here to realize that
8 the upper zone in the building, often the third
9 zone, is what's known as a protection-in-place zone
10 because it's too high for the fire department to
11 supply water pressure to. So the top of the
12 building is utterly dependent on all the series
13 pumps working properly.

14 The trade-off here in whether you put a
15 pump up in the building or leave it in the basement
16 with the other pumps is an issue of the trade-off
17 between supplying the properly protected
18 conductors, power conductors 2R rated, which is
19 what they're going to be, versus the amount of high
20 pressure piping required to some portion of the
21 building and, as Chairman Gayle Pennel mentioned, a
22 requirement for a large drain riser that's open to
23 the atmosphere to prevent siphoning which often
24 does not occur.

1 My last point is where a municipality or a
2 jurisdiction deems that this is okay, the AHJ can
3 always allow this, and ditto for exceptional cases.
4 However, I think the general standard of NFPA 20
5 absent of an AHJ determination should give us the
6 best fire protection particularly on top of a
7 building where people are utterly dependent on that
8 equipment for their fire protection. Thank you.

9 MODERATOR GERDES: Thank you. Microphone 5.

10 MR. SHAPIRO: Jeff Shapiro, fire protection
11 engineer from Austin, Texas, former member of the
12 14 committee for more than 20 years, sometimes
13 referred to as standpipe man. I'm in agreement
14 with the motion on the floor here.

15 Many years on 14 has shown me that all of
16 the issues being discussed today are not new
17 issues. These issues, all of them, have existed
18 for many years and yet we have permitted the
19 separation of fire pumps. I don't hear anything
20 that compels me to believe that there is a pending
21 problem of doom that has changed recently to cause
22 me to change the standard in the way that it's
23 proposed by the 20 committee, particularly given
24 the fact that the 14 committee was not really given

1 the opportunity to weigh in on what is a huge issue
2 in the design of these systems.

3 So I stand before you today encouraging
4 you to support the motion on the floor. I think
5 that Kenny and the NFSA got it right on this one,
6 and I hope you vote in favor of the motion.

7 MODERATOR GERDES: Thank you. Any further
8 comments? We'll proceed to the vote, hearing none.
9 We're dealing with Motion Sequence 20-1. The
10 motion is to return a portion of a report in the
11 form on identifiable part of Proposal 20-3 and
12 related Comment 20-2. All those in favor of the
13 motion, please raise your hands. All those --
14 thank you. All those opposed.

15 That motion passes.

16 Moving onto Motion Sequence 20-2.

17 Microphone 5.

18 MR. SCHNEIDER: Thank you, Mr. Chairman. I am
19 Dick Schneider, speaking for myself. The issues
20 brought before this group in the motion are all
21 true and stand. However, I believe that the
22 resolution is too complex to be handled at this
23 stage of the approval process and therefore should
24 be addressed on a more comprehensive basis in the

1 next code cycle. I therefor rescind my motion.

2 MODERATOR GERDES: Thank you. Is there a
3 second to that withdrawal? You are not pursuing
4 the motion then. Thank you.

5 Okay, the next two motions are related
6 motions. We're going to discuss them both at the
7 same time. Motion Sequence 20-3 and 20-4.
8 Microphone 5.

9 MR. ISMAN: My name is Ken Isman. I am with
10 the National Fire Sprinkler Association, and I move
11 my Comment 20-66 which appears on Page 20-16 of the
12 ROC.

13 MODERATOR GERDES: Is there a second?

14 A VOICE: Second.

15 MODERATOR GERDES: Thank you. Proceed.

16 MR. ISMAN: Thank you. The issue here is
17 limited service controllers. In the 2007 edition
18 and in previous editions of NFPA 20, in fact, going
19 back almost 60 years, we have been allowed to use
20 limited service controllers; and in the ROP for
21 this cycle, the committee has said, Well, we're not
22 going to use limited service controllers anymore,
23 and so we submitted this comment to try and bring
24 the limited service controllers back.

1 The committee has actually been debating
2 this item for at least three cycles or nine years;
3 and at no point in time during those nine years has
4 any loss experience ever been brought to the
5 committee. We've been using limited service
6 controllers for more than 60 years; and, during
7 that time frame, they have good experience records.

8 According to NFPA 25, fire pumps are
9 required to be tested weekly. Now you can debate
10 whether that really happens exactly on a weekly
11 schedule, but we know there's a lot of fire pumps
12 out there with limited service controllers, and
13 they're being tested and used on a frequent basis,
14 and you would think that if there really truly was
15 a problem out there, we would have some loss
16 experience that could be documented.

17 The only real argument that the committee
18 has made is that full-service controllers are now
19 available for all of the horsepower options where
20 limited service controllers used to have to be
21 used. And that is certainly a true statement.
22 There was a time when you didn't have full service
23 controllers available for certain horsepower motors
24 and so you had to use the limited service

1 controllers. But just because this new more
2 expensive option is available, it doesn't mean that
3 we have to throw away the less expensive option
4 that we've used for years.

5 During the committee discussion on this
6 item, I asked what the cost differences are between
7 the limited service controller and the full-service
8 controller. And I know I have been using this term
9 "full-service controllers" and the controller
10 manufacturers get a little upset when we use that
11 term because technically there's no such thing as a
12 full-service controller. We don't have that
13 definition anywhere in our system, but I need to
14 call the other controllers something that are not
15 limited services controllers, so I will refer to
16 them as full-service controllers.

17 I was told during the meeting that there's
18 a \$400 difference between the limited service
19 controller and these other controllers. Now since
20 then, other numbers have popped up. I guess
21 different manufacturers have different differences
22 in costs; but, basically, the committee seems to
23 think that this whole cost differential issue is
24 insignificant.

1 But our experience with small commercial
2 and residential systems is that cost differentials
3 even as small as \$400 do make a difference with
4 building owners; and if they have a choice of
5 limited service controller and can save a few
6 hundred dollars, it sometimes makes the difference
7 between getting a sprinkler system in a building
8 and not getting that sprinkler system into a small
9 commercial or residential occupancy.

10 Please vote in favor of this motion to
11 bring back the use of limited service controllers
12 in accordance with the same rules that were in the
13 2007 edition of NFPA 20.

14 MODERATOR GERDES: Thank you. Any comments
15 from the committee chair?

16 MR. PENNEL: Yes. The informal poll before
17 this meeting, 23 were opposed, 5 supported, and
18 3 were neutral. I stand by the committee's action.

19 MODERATOR GERDES: Thank you. Microphone 6.

20 MR. SCHNEIDER: Thank you, Mr. Chairman. I am
21 Dick Schneider, and I speak on behalf of NEMA on
22 this issue.

23 MODERATOR GERDES: Are you for or against the
24 motion?

1 MR. SCHNEIDER: I am against the motion.

2 MODERATOR GERDES: I understand the color. I
3 just want to get it on the record.

4 MR. SCHNEIDER: I speak against the motion.
5 Before the time the limited service controller was
6 conceived, the fire pump controller industry did
7 not offer what's known as full-service controllers
8 rated less than 50 horsepower. In response to one
9 or more fatal fire losses at small premises, the
10 industry responded with a more affordable
11 controller design and fire pump limitations such as
12 30 horsepower max and one acceptable to the ASJ was
13 placed into the code.

14 Incidentally, the fire that really caused
15 the design of this controller was when -- was in
16 Chicago where we are now, and a number of children
17 perished in that particular fire.

18 In order to achieve better affordability,
19 the committee permitted the omission of the
20 isolating switch and the use of thermal magnetic
21 circuit breakers. In granting this permission, the
22 committee recognized, number one, in many
23 instances, the user's choice was either the limited
24 service controller or nothing. Number two, the

1 limited service controller was never considered a
2 true fire pump controller by the NFPA 20 committee
3 since it is affected by ambient temperature. It
4 has a long circuit breaker reset time. It has
5 larger circuit breaker trip window and potentially
6 longer downtimes for repairs.

7 Over the years, the industry has made
8 full-service controllers available in all
9 horsepower and voltages served by the limited
10 service controller. Additionally, this committee,
11 the NFPA 20 committee, has included the limited
12 service controller in its newer safety-based
13 requirements, thus reducing the price difference as
14 compared to the full-service controllers.

15 Factory Mutual concluded that their
16 minimum cost benefit ratio was reduced -- of
17 reduced fire protection was exceeded and decided
18 not to approve the limited service controller in
19 the future.

20 The fire pump controller industry has
21 publicized the limitations of the limited service
22 controllers in magazines generally read by
23 inspectors and AHJs. Despite the dissemination of
24 this information, limited service controllers are

1 now being used in critical applications including
2 foam pumps which normally should demand fire
3 protection equipment having the highest
4 reliability.

5 Nowadays, the choice is not the limited
6 service controller or nothing, but the limited
7 service controller or full-service fire pump
8 controller. Who will step forward to accept the
9 responsibility for a tragedy blamed on the
10 transgression of one of those limitations that I
11 mentioned before?

12 NFPA 20 requirements, as stated in
13 Paragraph 1.2, is not based on body count, but
14 rather "for fire protection based on sound
15 engineering principles, test data, and field
16 experience." The committee should remain with its
17 exempt decision. Thank you.

18 MODERATOR GERDES: Thank you. Microphone 3.

19 MR. RAY: Hello. My name is Rich Ray. I am a
20 licensed fire protection engineer in the State of
21 Illinois. I'm representing myself and my company,
22 Cybor Fire Protection. I'm here to speak in favor
23 of the motion.

24 For 25 years in this industry, the biggest

1 obstacle to fire sprinklers is always cost. Kenny
2 is right. Sometimes on a small residential job, a
3 little condo, a little townhome that needs a small
4 pump, 4, \$500 can kill a job. It can take the
5 sprinklers out. And considering that NFPA 25 now
6 requires these fire pumps to be churn tested on a
7 weekly basis, and considering the fact that the
8 NFPA 20 committee could come up with no empirical
9 data at all that showed that they were seeing
10 losses of these limited service controllers, I see
11 no reason to throw them out the window just because
12 the controller manufacturers have finally figured
13 out a way how to make a smaller controller. Thank
14 you.

15 MODERATOR GERDES: Thank you. Microphone 2.

16 MR. KRANENDOCK: I am Tony Kranendock, and I
17 work for Eaton Cutler Hammer. We are a
18 manufacturer of fire pump controllers. And I wish
19 to speak against the motion.

20 It's often a big question who can clearly
21 state when you are allowed to use a limited service
22 in the place of the full-service fire pump
23 controller. The easiest way is to use less or
24 equal to 30 horsepower. But there is no sound

1 technical basis for having these two products in
2 existence.

3 Elimination of the limited service
4 controller is the best guarantee against
5 misapplication. NFPA 20 is the global leadership
6 standards document for fire pump controllers. The
7 North American representatives who sat around the
8 IEC 17B Working Group II table in their ten-year
9 effort to get IEC 62091 published did not want to
10 jeopardize their success by giving a confusing
11 rationale for two different types of fire pump
12 controllers to meet the same functional
13 requirements. The IEC 62091 does not have limited
14 service in it.

15 In summary, defeating the motion
16 eliminates confusion and misapplication and
17 enhances having global fire pump control standards
18 based on NFPA 20 principles. Thank you.

19 MODERATOR GERDES: Thank you. Microphone 3 in
20 the back.

21 MR. DeLERNO: Manny DeLerno of St. Charles,
22 Illinois, and I rise to speak in support of the
23 motion on the floor. I am also the submitter of
24 companion NITMAM Log Number 459, Motion Sequence

1 20-4 resulting from my Public Comment 20-67
2 appearing on Page 20-17.

3 As a former long time member of the
4 NFPA 20 Fire Pump Committee, I wish to call to your
5 attention that a similar committee recommendation
6 to remove the limited service controller from
7 NFPA 20 was rejected at the Association Annual
8 Meeting in Denver, Colorado, a number of years ago.
9 At that time, I, as the representative of the
10 Illinois Fire Prevention Association, an
11 organizational member, made the motion to reject
12 this recommendation.

13 At the present time, I speak as a retiree.
14 Nevertheless, with the support of the Illinois Fire
15 Prevention Association secured at their meeting on
16 April 14, 2009, at which time they authorized me to
17 make this statement of support of my position.

18 The committee's rejection of my public
19 comment appears on Page 20-16 as the public comment
20 of Dick Schneider of Joslyn Clark Controls, the
21 NEMA principal representative on the NFPA 20
22 committee. Now to my response to statements
23 appearing in the committee response to my public
24 comment which incidentally was summarized by

1 Dick Schneider just now.

2 Number one, the opening sentence about
3 50 horsepower minimum rating is misleading. The
4 controllers at that time were used on lower motor
5 horsepowers by substituting circuit breaker trip
6 elements calibrated to the lower horsepowers full
7 load currents, the components still having 50
8 horsepower ratings. This misconception seems to be
9 intimated further with the statement, "In granting
10 this permission, the committee recognized, one, in
11 many instances, the user's choice was the LSC or
12 nothing."

13 Two, the matter of the limitations of the
14 LSC circuit breaker as the issue was rejected in
15 Denver. John Kovacik, UL, Incorporated, as a
16 committee member in his abstention vote says that
17 UL will continue to list these controllers until
18 they are no longer recognized by NFPA 20.

19 Three, the removal of approval by Factory
20 Mutual is rebutted by R. Leicht's authority having
21 jurisdiction committee member in his negative vote
22 on Public Comment 20-66, Log Number 68 as follows:
23 "Just because FM does not need to recognize them,
24 that is a business decision on their part. They

1 are not the only insurer nor are they the only
2 AHJ."

3 Note further that the Factory Mutual's
4 representative on the committee elected not to
5 further clarify their position in this matter which
6 he could have done as a comment to his affirmative
7 vote.

8 Number four, in Mr. Leicht's negative
9 comment just cited, he rejects the rationale that
10 the information provided in magazines by the fire
11 pump controller industry is justification for
12 taking the decision away from the authority having
13 jurisdiction as to the suitability for use of a
14 limited service controller.

15 Number five, the remainder of the
16 rationale is fluff sprinkled with some fiction. As
17 a professional electrical engineer now in
18 retirement with no financial interest in the
19 outcome, I believe that the economic issues, some
20 of which are unstated, far outweigh the fire
21 protection issues involved.

22 I challenge the committee to state why
23 after 50 plus years the limited service controller
24 is no longer a minimum acceptable product as

1 currently prescribed in NFPA 20. Thank you.

2 MODERATOR GERDES: Thank you. Microphone 5.

3 MR. KHEIR: Hatem Kheir, Kheir Group, Cairo,
4 Egypt, I'm representing myself and Egyptian Fire
5 Protection Association. I am speaking in favor of
6 the motion.

7 Limited surface controllers do exist for
8 more than 50 years without a single record of
9 failure or safety issues. UL is willing to list
10 the controllers. There are many applications
11 existing now including the full pumps are using
12 this type of controller. There are still
13 manufacturers still willing to keep manufacturing
14 and building this controller. There are no solid
15 facts or record for the reason of removing this
16 type of controller. Thank you, Mr. Chairman.

17 MODERATOR GERDES: Thank you for your
18 participation. Microphone 6.

19 MR. STEVENS: Good afternoon. My name is
20 Doug Stevens. I am the Director of Engineering for
21 Fire Control. We're a manufacturer of fire pump
22 controllers. We oppose this motion.

23 Good fire protection means removing all
24 the limitations and obstacles to our equipment we

1 can possibly remove. It means using an electric
2 fire pump controller, not a limited service
3 controller, a fire pump controller that is
4 consistent with today's philosophies of the experts
5 and NFPA 20 electrical task forces and the experts
6 in the NEMA Subcommittee 10 on Electric and Diesel
7 Fire Pump Controllers. Thank you.

8 MODERATOR GERDES: Thank you. Microphone 5.

9 MR. KLEIN: Marshall Klein, fire protection
10 engineer from Eldersburg, Maryland, representing
11 the National Multi-Housing Council. I stand up in
12 support of the motion on the floor.

13 Ladies and gentlemen, for the past
14 25 years, many multi-family builders have been
15 sprinklering new and existing apartment buildings,
16 and they have been extremely cooperative in that
17 endeavor. Many of these types of buildings have
18 low-flow requirements as far as water demand, but
19 they do sometimes have pressure requirements. They
20 have successfully used through the years limited
21 service fire pumps and limited service fire
22 controllers, which are all UL listed, might not be
23 Factory Mutual, but they are UL listed. They have
24 performed quite admirably.

1 In fact, if you take a look at the NFPA
2 statistics, the latest statistics on sprinkler
3 properties, you will notice that highest on the
4 list are the residential sprinkler properties with
5 close to, well, by their calculations, 98 percent
6 operational reliability, 98 percent effectiveness
7 of sprinklers which equates, when you multiply them
8 together, on 96 percent performance reliability for
9 these type of properties.

10 Price does matter, and if you save a few
11 dollars using the limited service types of devices,
12 that's what you should allow the public to use.
13 They have been used in the past successfully. I'm
14 sure they'll be used in the future successfully.
15 We support the motion on the floor. Thank you.

16 MODERATOR GERDES: Thank you. Microphone 6.

17 MR. HARVEY: Mr. Chairman, I am Bill Harvey,
18 Harvey & Associates, sprinkler contractor from
19 South Carolina. I would like to speak in
20 opposition to the motion on the floor.

21 I have been in this business 55 years.
22 We've been doing things a different way I guess in
23 the last few years than we did years ago. The
24 products change and we should change.

1 Now to bring up the cost of one
2 controllers versus another, full-service versus
3 limited service, it is much closer to what has been
4 reported here today. Now we have situations where
5 the misapplication of the product is really the
6 problem. It is not residential sprinklers which
7 the LSC would be fined for, but when you have a
8 limited service controller protecting a billion
9 dollar B-1 Bomber, then that is a different
10 application.

11 So I am speaking in opposition and I think
12 we should reconsider the application of the product
13 rather than the cost. Thank you.

14 MODERATOR GERDES: Thank you. I will go to
15 Microphone 4.

16 MR. HIRSCHLER: Marcelo Hirschler, GBH
17 International. I call the question.

18 MODERATOR GERDES: We have a call for the
19 question. Is there a second?

20 A VOICE: Second.

21 MODERATOR GERDES: We'll raise hands. All in
22 favor of the motion to close discussion. Thank
23 you. Those opposed.

24 That motion passes.

1 afternoon is that of the Technical Correlating
2 Committee on Automatic Sprinkler Systems. Here to
3 represent the committee is Correlating Committee
4 Chair Ed Budnick, Hughes Associates, Baltimore,
5 Maryland. The committee report is being presented
6 in two parts and can be found in the blue 2009
7 Annual Revision Cycle ROP and ROC. The certified
8 amending motions are contained in the motions
9 committee report and behind me on the screen.

10 We will proceed in the order of the motion
11 sequence number presented in your green handout.
12 Mr. Budnick.

13 MR. BUDNICK: Thank you. Mr. Chair, ladies and
14 gentlemen, the report of the Technical Correlating
15 Committee on Automatic Sprinklers is presented for
16 adoption in two parts. Part 1 of the Technical
17 Correlating Committee's report can be found in the
18 Report on Proposals and Report on Comments for the
19 2009 Annual Meeting Revision Cycle, and proposes a
20 partial revision of NFPA 13, Standard for the
21 Installation of Sprinkler Systems. The presiding
22 officer will now proceed with the certified
23 amending motions.

24 MODERATOR NEWMAN: Thank you, Mr. Budnick. Our

1 first certified amending motion is Motion Sequence
2 13-1. Microphone Number 5, please.

3 MR. SWANTEK: Good afternoon. My name is
4 Leonard Swantek. I represent the Victaulic
5 Company. My motion is to reject Comment 13-34.

6 MODERATOR NEWMAN: Thank you. Mr. Swantek is
7 the person authorized to make this motion. Do I
8 have a second?

9 A VOICE: Second.

10 MODERATOR NEWMAN: I have a second. Please
11 proceed, Mr. Swantek.

12 MR. SWANTEK: Thank you, sir. Our comments
13 only this particular proposal are actually somewhat
14 based on an abstention that we recently became
15 aware of from George Laverick of Underwriters
16 Laboratories. In the text of the abstention, if I
17 may read this, it says, "As adopted by the
18 committee, the intent of the wording in A.6.5.3.1
19 suggested that all couplings are capable of being
20 used with any fitting."

21 This statement may not be accurate.
22 Actually George is very correct in his comment.
23 Cross-compatibility of grooved mechanical piping
24 components may not be feasible in practice. It may

1 sound like a good idea, but in practice, it may be
2 a little more difficult as a function of each
3 manufacturer's design and/or proprietary
4 technology. This raises concern for unnecessary
5 risk or liability if one manufacturer's, let's say,
6 coupling is installed with a second manufacturer's
7 fitting where the design and installation
8 differences are either mistakenly assumed
9 negligible or they're assumed to be equal.

10 Also, due to real-world manufacturing
11 tolerances and from what we see as varying quality
12 assurance practices throughout the world, the
13 assumption cannot be made that any combination of
14 mixed components will fit properly.

15 Unfortunately, in our case, we've actually
16 experienced warranty claims where one of our
17 products was used in combination with another
18 manufacturer's and they did not function properly.
19 Because of those unfortunate situations, we have
20 been forced to take the position that we will no
21 longer warrant such mixed combinations of
22 mechanical joints.

23 I want to refer back also to
24 Mr. Laverick's comments. There's a second part of

1 this that's extremely important and I'm sure it's
2 important to other manufacturers as well. I'm
3 going to, if I may, read this as well. It says,
4 "If this is the case, the standard would then
5 restrict other proprietary groove-joining methods."
6 That's a particular concern to us as well because
7 any move towards specifying dimensional
8 requirements or approved combinations could impose
9 unfair restrictions on new product development. We
10 feel that any manufacturer should have the option
11 to develop a complete and unique system within the
12 scope of the standard and be able to market that as
13 a system.

14 Also we have, I guess, some competitive
15 issues here I want to try to tread lightly on. If
16 the intent of the standard is to have unified
17 dimensions in cross-compatible fittings and
18 couplings and grooves, obviously our field support
19 people, our competitors' field support people are
20 going to get telephone calls from contractors, and
21 the question is going to be, does your fitting work
22 with X, Y, Z fitting or X, Y, Z groove?

23 Quite frankly, I don't think we're going
24 to be supporting and I don't believe our

1 competitors would support promoting each other's
2 products. So we're automatically going to take the
3 position, if you want your installation warranted,
4 you use a Victaulic coupling on a Victaulic fitting
5 assembled with pipe that's roll grooved or cut
6 grooved with a Victaulic tool. And you'll have
7 full warranty coverage, you'll have full field
8 support, and you'll have a system that is actually
9 guaranteed.

10 While we're not looking to reject the
11 concept of harmonizing the standard, I think all
12 we're really looking to do today is ask that this
13 issue be taken back to committee for a closer
14 review in terms of what's actually being produced
15 at the manufacturing level today, not just looking
16 at numbers or drawings, but what is actually coming
17 out of the different manufacturing locations.
18 Thank you.

19 MODERATOR NEWMAN: Thank you, Mr. Swantek. Any
20 comment, Mr. Budnick?

21 MR. BUDNICK: I don't believe this is a
22 correlation issue, so I would like to defer to the
23 Technical Committee Chair, Joe Noble.

24 MODERATOR NEWMAN: Microphone 4.

1 MR. NOBLE: Good afternoon. Joe Noble. I am
2 the Chair of the Installation Committee for
3 NFPA 13.

4 I would just want to point out that the
5 committee did look at this issue, and obviously I'm
6 opposed to the motion on the floor. The committee
7 vote on this was -- of the 25 votes cast, 24 were
8 affirmative and there was one abstention. Thank
9 you.

10 MODERATOR NEWMAN: Thank you. Any further
11 comment? Microphone Number 2.

12 MR. BILBO: Thank you. Cecil Bilbo with the
13 National Fire Sprinkler Association, and I speak in
14 opposition to the motion.

15 I was involved in a task group that
16 discussed this topic, and I would just like to read
17 the substantiation from the committee statement
18 into the record. "The committee does not intend to
19 require listed combinations of couplings, fittings
20 or valves. We are encouraging the development of a
21 standard that would create compatible groove
22 connections for a fire sprinkler system. The
23 manufacturers, laboratories, and installers have
24 agreed to pursue a standard for groove

1 compatibility. Currently, groove connections can
2 be made with various manufacturers' valves, and we
3 do not understand as a committee why the
4 manufacturers cannot come to a conclusion in the
5 standard that would allow the use of couplings
6 across different fittings as well." Thank you.

7 MODERATOR NEWMAN: Seeing no further comment,
8 we will now proceed to a vote on Motion Sequence
9 Number 13-1 which is to reject Comment 13-34.
10 Those in favor, please raise your hands. Those
11 opposed.

12 Motion fails.

13 We'll now proceed to Motion Sequence 13-2.
14 Microphone Number 5.

15 MR. BILBO: Cecil Bilbo on behalf of the
16 National Fire Sprinkler Association, and I would
17 propose that we accept Comment Number 13-46.

18 MODERATOR NEWMAN: Mr. Bilbo is the authorized
19 maker of this motion. Do I have a second?

20 A VOICE: Second.

21 MODERATOR NEWMAN: We have a second. Please
22 proceed, Mr. Bilbo.

23 MR. BILBO: Thank you very much. This proposal
24 calls for the installation of quarter inch pressure

1 relief valves -- the committee made or accepted a
2 proposal to require quarter inch pressure relief
3 valves on every type of system being installed.
4 Currently, they are only required on gridded
5 systems, and that's for a reason that we had loss
6 data for and a phenomena in gridded systems where
7 air was evacuated during a system fill. It's a
8 natural result of the arrangement of piping that
9 does not happen on tree or loop systems. In fact,
10 the air on tree and loop system is actually
11 beneficial to not having a phenomena of
12 overpressurization that happens when water heats or
13 a gridded system starts to trap additional
14 pressure.

15 Additionally, there is an inspection
16 requirement from NFPA 25 that requires on a vast
17 majority of the systems these days for a main drain
18 test to be done every three months in a system, a
19 sprinkler system. That allows the overpressure --
20 or excess pressure on a system that may have built
21 up to be relieved from a system every time it's
22 inspected when it's inspected and maintained
23 properly. Assuming that's going to happen, which
24 is what we do because we have written those

1 standards and codes, we believe that tree and loop
2 systems should not need -- do not need to have the
3 quarter inch relief valve on them. Thank you.

4 MODERATOR NEWMAN: Mr. Budnick, any comment?

5 MR. BUDNICK: Again, I would like to have
6 Mr. Noble speak to that as the Technical Committee
7 Chair.

8 MR. NOBLE: As the Technical Committee Chair, I
9 stand behind the committee's actions. I would like
10 to point out that there were 25 votes cast. 24
11 were affirmative. One was negative. Thank you.

12 MODERATOR NEWMAN: Microphone Number 2.

13 MR. KIRN: My name is Mike Kirn. I represent
14 Code Consultants, Incorporated, as well as Fire
15 Protection Systems Corrosion Management, Inc. I
16 speak in opposition to the motion on the floor.

17 I have a few points to make. A pressure
18 relief valve should be added to all wet pipe
19 systems, not just gridded systems, to protect all
20 systems from overpressurization. Today, the fire
21 sprinkler industry is endeavoring to become more
22 proactive about limiting the damaging effects of
23 internal corrosion in water-based fire protection
24 systems.

1 One such proactive measure is venting
2 trapped air from wet pipe systems. While not a
3 requirement of NFPA 13, venting is a method
4 commonly used by professionals and recommended by
5 FM Global's Data Sheet 2-1 to limit the corrosive
6 species, the oxygen, in the trapped air.

7 The proposal was submitted to speak to
8 concerns of the industry over removing enough of
9 the trapped air to create the possibility of
10 overpressurization. To ensure that even looped or
11 tree systems are protected from overpressurization,
12 a listed pressure relief valve, a 15 to \$20 item,
13 is proposed to become a part of the standard.

14 Speaking to the issue of the need for
15 failure data, the change overwhelmingly supported,
16 as already mentioned here by the committee, 24 to
17 1, is intended to prevent failure of these
18 important systems due to over pressurization.

19 MODERATOR NEWMAN: Seeing no further comment,
20 we will now proceed to a vote. We're voting on
21 Motion Sequence 13-2 which is to accept
22 Comment 13-46. Those in favor, please raise your
23 hands. Those opposed.

24 The motion fails.

1 We'll now proceed to Motion Sequence 13-3.
2 Microphone 5, please.

3 MR. ISMAN: Mr. Chair, Ken Isman with the
4 National Fire Sprinkler Association. We're
5 actually going to skip Number 3 and decide not to
6 make that motion. So we would like to proceed to
7 13-4, if that's okay.

8 MODERATOR NEWMAN: That's okay.

9 MR. ISMAN: Ken Isman. I am with the National
10 Fire Sprinkler Association. I'm the duly
11 authorized representative of Cecil Bilbo for this
12 issue. I would like to move that we accept our
13 Comment 13-84.

14 MODERATOR NEWMAN: Ken is the authorized maker
15 of this motion. Do we have a second?

16 A VOICE: Second.

17 MODERATOR NEWMAN: We have a second. Ken,
18 please proceed.

19 MR. ISMAN: Thank you. This issue is largely
20 editorial, but you're going to have to hang with me
21 to get there.

22 You need to look at the ROP 13 --
23 Page 13-44 in the ROP. There's a new table at the
24 bottom of the page; and the committee was doing

1 some rewriting of the rows and the table, and I
2 applaud what the committee was doing because they
3 really did a good job of trying to straighten out a
4 problem with the table; but, unfortunately, when
5 they moved some information from one row to another
6 to separate it out, they didn't quite cross out all
7 of the old language that they moved from one row to
8 another and, therefore, they have created a
9 conflict within the table.

10 Now to actually see the conflict, the
11 easiest way to see it is to look at the third row
12 of the table. The third row of the table currently
13 reads or as it's proposed to read, it would read,
14 "Noncombustible obstructed and unobstructed and
15 combustible unobstructed." The committee struck
16 the words "with members 3 feet or more on center"
17 because they moved that to the next row down.

18 However, the committee also needed to
19 strike those three words on the second line there,
20 "and combustible unobstructed". Since the
21 committee did not strike those three words in the
22 third row down, what the committee set up was a
23 situation where all combustible unobstructed
24 construction on that -- exists on that row of the

1 table which allows a spacing of 225 square foot per
2 sprinkler, and that's a problem when you go down
3 and read the fifth row of the table where we want a
4 certain type of combustible unobstructed
5 construction to be restricted to 130 square foot
6 per sprinkler.

7 So we really think this is just a
8 typographical issue that the committee really
9 needed to strike those extra three words from the
10 third row of the table, "and combustible
11 unobstructed", and then you see the same issue
12 happening on the first row of the table with the
13 pipe schedule. It's just easier to see it's a
14 problem if you look at the hydraulically calculated
15 situation.

16 So we hope you agree with us that this is
17 largely editorial and that straightens out a
18 problem within the table.

19 MODERATOR NEWMAN: Any comment, Mr. Budnick?

20 MR. BUDNICK: Again, Joe Noble is the technical
21 chair.

22 MODERATOR NEWMAN: Microphone 4.

23 MR. NOBLE: As the technical chair, I am
24 compelled to stand behind the committee action.

1 However, I have reviewed the editorial comments and
2 I believe they are appropriate and they certainly
3 would not violate the intention of the committee.
4 Thank you.

5 MODERATOR NEWMAN: Seeing no further comment,
6 we'll proceed to a vote. We're voting on Motion
7 Sequence 13-4 which is the motion to accept
8 Comment 13-84. Those in favor, please raise your
9 hand. Those opposed.

10 The motion passes.

11 We'll now proceed to Motion Sequence 13-5.
12 Microphone Number 1.

13 MR. BURKHART: My name is David Burkhart. I am
14 with Code Consultants, Incorporated, representing
15 the New York State Office of Mental Health. I move
16 Comment Number 13-136 for approval.

17 MODERATOR NEWMAN: Mr. Burkhart is the
18 authorized maker of the motion. Do I have a
19 second?

20 A VOICE: Second.

21 MODERATOR NEWMAN: I have a second. Please
22 proceed.

23 MR. BURKHART: Thank you, sir. This proposal,
24 what it will do is allow the removal of the

1 sprinkler at the top of the stair shaft and the
2 bottom of the stair shaft for an exterior stairwell
3 that is separated from the building by an exterior
4 balcony.

5 Presently, the standard allows these
6 sprinklers to be removed from an exterior stair
7 tower when it is presently 50 percent open and
8 attached to the building. What we are asking for
9 is a stair tower that is remote from the building,
10 connected by an open balcony, and protected by
11 combustible construction. The other factors that
12 we've put into this particular proposal is that the
13 balcony has to be open at least equal to 50 percent
14 of the perimeter of the stair; and, if you do the
15 mathematics, that pulls the stair quite a distance
16 away from the building.

17 What it does is it presents a real problem
18 in not only sprinkling the stair because you're
19 going into a cold space but also the fact that
20 there's a maintenance issue, a long-term
21 maintenance issue.

22 As we all know, the code does not allow
23 storage in the stairwell, but the reality of the
24 situation, everybody knows that they have seen

1 storage in stairwells. The thing is, though, is if
2 you do have a fire in the stairwell, the amount of
3 combustibles in that stairwell are not going to be
4 able to penetrate that noncombustible stair shaft,
5 travel the distance across the separation of the
6 balcony, and then penetrate through the building;
7 and, therefore, we don't believe that these
8 sprinklers are necessary for these stair shafts,
9 and they're very similar to provisions that are
10 already allowed in the code under
11 Section 8.15.3.2.4.

12 Now when I originally submitted this, I
13 was hoping I would get some feedback from the
14 committee on, you know, why they rejected it in the
15 first place. Under the ROP, the committee comment
16 was, "Sprinkler protection should be required for
17 these spaces." It didn't really give me a lot of
18 guidance on where to go with what the committee was
19 thinking. So when I resubmitted it for the
20 comment, the comment from the committee was,
21 "Stairways are required to be protected regardless
22 of their location or separation or construction."
23 That's fine and dandy except you already have an
24 exception in the code that allows it under

1 8.15.3.2.4 for a stairway with 50 percent open on
2 the exterior of the building.

3 I'm asking for something that is actually
4 safer than what is already allowed by the code.
5 Thank you.

6 MODERATOR NEWMAN: Mr. Budnick, any comment?

7 MR. BUDNICK: I'd have Mr. Noble speak to this.

8 MODERATOR NEWMAN: Microphone Number 4.

9 MR. NOBLE: As the chair of the Technical
10 Committee, I would ask you to not vote for the
11 motion. The committee did look at this issue. Of
12 25 votes that were cast, there were 25 that were
13 affirmative. Thanks.

14 MODERATOR NEWMAN: Thank you. Microphone
15 Number 5.

16 MR. ROSENBAUM: I'm Eric Rosenbaum with Hughes
17 Associates representing the New York State Office
18 of Mental Health also.

19 In supporting the motion, the purpose of
20 the motion is to allow the omission of sprinklers
21 from the top and the bottom of a noncombustible
22 stair shaft if separated from the building by
23 noncombustible exterior landing. Noncombustible
24 stairs only require sprinklers at the top and the

1 bottom; however, NFPA 13 allows sprinklers to be
2 omitted in noncombustible exterior stairs with
3 50 percent open sides. In this case, fire products
4 are expected to vent and not affect the building.

5 Well, this motion simply continues this
6 concept. The exterior balcony allows venting and
7 access. The fire products will not expose the
8 building since the products will vent by the
9 exterior balcony.

10 The motion also recognizes the
11 implications, cost and maintenance and otherwise of
12 providing automatic sprinklers in unheated space to
13 address a fire that should not expose the building
14 occupants, similar to what a current provision
15 allows relative to omission of sprinklers.

16 For that reason, I support the motion to
17 allow the omission of sprinklers within this
18 stairway.

19 MODERATOR NEWMAN: Thank you. Seeing no
20 further comment, we'll proceed to a vote. We're
21 voting on Motion Sequence 13-5 which is a motion to
22 accept Comment 13-136. Those in favor, please
23 raise your hands. Those opposed.

24 I would like -- we're going to do a

1 standing count on this one. That's a little close.
2 All those in favor, please stand. Okay. You can
3 be seated. All those opposed, please stand.

4 The motion passes. You can please be
5 seated. Thank you. The motion passes, 78 to 56.

6 I'd now like to proceed to Motion Sequence
7 13-6. Microphone Number 5.

8 MR. KLEIN: Mr. Chairman, my name is
9 Marshall Klein, fire protection engineer from
10 Eldersburg, Maryland. I am representing the
11 National Multi-Housing Council. I stand to make
12 the motion to reject code Comment 13-141.

13 A VOICE: Second.

14 MODERATOR NEWMAN: Mr. Martin -- Mr. Klein is
15 the authorized maker of the motion, and I have a
16 second. Please proceed, Mr. Klein.

17 MR. KLEIN: Thank you, Mr. Chairman. This code
18 comment basically will reverse 8.15.8.1.1, okay.
19 What the committee has done basically has
20 eliminated the bathroom sprinkler requirement for
21 apartment dwelling units. That has been in the
22 code for over three decades. However, they left in
23 the same exception for small bathrooms in hotels
24 and motel units.

1 For over 33 years, first with NFPA 101 and
2 then NFPA 13, the NFPA codes have permitted
3 sprinkler in apartment buildings the opportunity
4 for the omission of sprinklers in the dwelling
5 units bathrooms that are less than or equal to
6 55 square feet. This three-decade-old exception
7 was based on reasonable small amounts of fires in
8 such small bathrooms, and it was an incentive to
9 sprinkler multi-family structures, both new and
10 existing.

11 In the committee's rejection statement of
12 the original proposal, if you take a look in the
13 ROP, Page 13-55, the original Proposal 13-202, it
14 was originally rejected and the rejection was 27
15 members out of 27, and they said there was -- no
16 technical data was provided to support this
17 comment. Then in the ROP -- I'm sorry, the ROC,
18 the comment came back identical with the same
19 justification that we think we have a larger fire
20 load in bathrooms and apartment units than we do in
21 motels and hotels, and the committee reversed their
22 position; but then, again, to the two negative
23 votes said, what's going on, again, there was no
24 technical justification or data provided to reverse

1 that.

2 Now let's understand the history of this.
3 Back in 1976, the Life Safety Code, in order to
4 encourage sprinklers in apartment buildings well
5 before we required mandatory sprinklers in
6 residential types of structures, under
7 Section 11.3.8.4.1 provided an exception: Provided
8 the bathroom didn't exceed 55 square feet within
9 the individual dwelling unit. You put in your full
10 13 system. In the '91 edition of NFPA 13, this
11 exception was added to the 13 code in
12 Section 4.4.1.7.7.1 with the understanding that the
13 NFPA 101 Residential Committee at their next
14 edition of the code, which is the '94 edition, they
15 would take the exception out of the Life Safety
16 Code because it was put in the 13 code.

17 Well, lo' and behold, from '91, 15 years
18 later, all of a sudden this code change comes up
19 with no justification, takes it out of now 13.

20 Well, the upshot here is that bathrooms,
21 fires in apartments, hotels and motels just aren't
22 a major fire problem, whether you're sprinklered or
23 nonsprinklered. And this was an important
24 incentive on why the NFPA codes and also the model

1 building codes permitted this exception for small
2 bathrooms.

3 You have to ask yourself, if apartment
4 bathrooms within the unit, these small bathrooms,
5 are so hazardous to the occupant safety, wouldn't
6 one think in the past 33 years or past three
7 decades the fire data would have reflected this
8 major deficiency created in the code? Why is the
9 multi-family industry which has been major
10 supporters of sprinklers through the past 25 years,
11 why are they being singled out on sprinkler
12 performance when, as I had said on a previous code
13 comment when I got up here, the NFPA data has shown
14 that for all the occupancies in the code, the
15 residential sprinkler occupancies have the best
16 sprinkler record of any of them. 96 percent
17 performance reliability for apartments. That's the
18 highest of any occupancy group under the code.

19 Therefore, with no technical
20 justification, I am standing here asking you to
21 please support my motion to reject this comment and
22 return the code to what has been for the past 33
23 years. Thank you.

24 MODERATOR NEWMAN: Thank you, Mr. Klein. Any

1 comment, Mr. Budnick?

2 MR. BUDNICK: Thank you, Mr. Chairman. Joe,
3 would you please speak to this?

4 MODERATOR NEWMAN: Microphone Number 4.

5 MR. NOBLE: Yes, sir. Essentially, the
6 committee did look at this particular issue and we
7 elected to move forward, go ahead and move forward
8 with it. With respect to the votes, there were 23
9 affirmative and 2 negative. Thank you.

10 MODERATOR NEWMAN: Microphone Number 5.

11 MR. BALLANCO: Julius Ballanco,
12 J. B. Engineering Code Consulting, PC. I would
13 like to support this motion and encourage you to
14 vote to keep the standard as it is with not
15 requiring the sprinklers in these small bathrooms.

16 May I address the practical difficulty.
17 Most of you would think with a 55 square foot
18 bathroom that it would only require one additional
19 sprinkler; but I can tell you, as a design
20 professional dealing with architects, I pulled this
21 set of plans of a recent one that I had, that I
22 just submitted the plans about two months ago. To
23 get that 55 square foot bathroom sprinkler would
24 have required three sprinklers because of all the

1 obstructions in the bathroom.

2 To do that, I would have to have a put a
3 sprinkler over the bath tub to avoid being within 8
4 feet separation. Kind of silly when you think
5 about it. It's not easy to do.

6 And it's not only these bathrooms that are
7 55 square feet. We have a lot of powder rooms.
8 Some of these powder rooms are 4 feet by 5 feet.
9 Some are as small as 3 feet by 5 feet. There's
10 nothing more than a water closet and lavatory in
11 there. There's no storage. There's nothing
12 combustible that's going to burn, and there hasn't
13 been a fire problem.

14 So I would encourage you to keep it as is.
15 Go along with what we had in the Life Safety Code
16 and in the model building codes for many years and
17 remove -- and allow the requirement for the removal
18 of the sprinkler in these small bathrooms. Thank
19 you.

20 MODERATOR NEWMAN: Microphone 2.

21 MR. RAY: Hello. Richard Ray, Cybor Fire
22 Protection Company, licensed fire protection
23 engineer in the State of Illinois, sprinkler
24 contractor in Chicago, Illinois. I'm speaking

1 against the motion.

2 I know I keep hearing about for 33 years
3 and three decades or whatever, but, you know,
4 current trend: Big propensity of use of candles.
5 Where do you see candles? In the bathroom on top
6 of the toilet tank right next to the towel.

7 Also, if I'm not mistaken, it was last
8 year I believe that NFPA sent out some type of a
9 technical bulletin about these plug-in type air
10 fresheners. Where do you find those? They were
11 starting on fire. Where do you find those?
12 Bathrooms.

13 I guess the last comment I will make is it
14 seems strange to me that the current edition, if we
15 took the current wording in 13, you can wind up
16 with a sprinkler head in an apartment or a condo in
17 a closet in a bathroom but not in a bathroom. To
18 me, that makes no sense, that you might sprinkler a
19 linen closet in a bathroom but not sprinkler the
20 bathroom. Thank you.

21 MODERATOR NEWMAN: Microphone Number 4.

22 MR. HIRSCHLER: Marcelo Hirschler, GBH
23 International, speaking for myself. I'm not
24 necessarily in favor or against, but I want to

1 rebut one of the things that was just said, there's
2 nothing combustible in bathroom. Most appliances
3 in bathrooms such as bathtubs are combustible. So
4 there are a significant amount of combustible
5 things in the bathroom. Thank you.

6 MODERATOR NEWMAN: Microphone Number 5.

7 MR. KLEIN: Marshall Klein, fire protection
8 engineer from Eldersburg, Maryland, speaking --
9 representing the National Multi-Housing Council.

10 I knew the issue of -- this candle issue
11 was going to come up; but, you know, NFPA has done
12 study about candles. And when you take a look at
13 the fire data, the problem we're having with
14 candles is in the bedrooms. NFPA even, their
15 report and all, where they have bulletins also,
16 that most of the fires are people burning candles
17 in the bedrooms and not in the bathrooms.

18 The fact of the matter is, to answer the
19 other question about combustibles, yes, you have
20 other fixtures, but they're not burning. The issue
21 that the committee brought up is that you could
22 have additional combustible likes towels and all in
23 the bedroom -- in the bathrooms of the apartments.

24 But, ladies and gentlemen, proof is in the

1 pudding. When was the last time you heard on the
2 news that an apartment building burnt down because
3 of fire in a little bathroom? It's just not
4 happening.

5 And particularly since you're talking
6 about retrofit. Many retrofits of buildings over
7 four stories are going to be 13. The multi-family
8 builders have been very cooperative in retrofitting
9 existing apartment buildings. Now retrofitting, by
10 the time you figure the piping and then the
11 patching and everything else, you're talking about
12 potentially, easily, \$150 for a sprinkler head in a
13 bathroom by the time you get it over there. You
14 ordinarily have two bathrooms in most apartment
15 units. So you're talking about an extra \$300.

16 Well, just as we talked about limited
17 service controllers for fire pumps and fire pump
18 controllers, these make a difference. You add \$300
19 to an apartment unit and you might have 80, 90
20 units in a building, you're talking about a
21 break-even where you might not get an existing
22 apartment sprinkler.

23 We're talking about here saving lives, and
24 certainly we've seen in three decades putting in

1 these sprinklers in apartment buildings, we're
2 saving lives and property, and there was no
3 technical justification to do this. So this is
4 hard facts that we've got to live with that if we
5 want our residential building sprinklered, we got
6 to be reasonable about this. It's a reasonable
7 trade-off that we've allowed it for three decades.
8 Let's continue allowing it. And if the sprinkler
9 committee has technical data, they should have
10 brought it forth, but they didn't. It was all
11 touchy-feely. So please support the motion on the
12 floor. Thank you.

13 MODERATOR NEWMAN: Microphone Number 5.

14 MR. BALLANCO: Julius Ballanco,
15 J. B. Engineering again. I spent a lot of my time
16 in the plumbing end of the business, and I get
17 frustrated when I hear people talk about plastic
18 fixtures being a combustibility problem.

19 I happened to be a member of the
20 ANSI Z-124 committee and we regulate all plastic
21 plumbing fixtures, and the plumbing code requires
22 all plastic plumbing fixtures to meet those
23 standards. In those standards, we have a torch
24 test. That torch test is you have to take an

1 acetylene torch, direct it on the plastic fixture
2 and hold it there for a period of time and then
3 take the torch away and the fixture cannot burn,
4 cannot glow, cannot smoke after a period of time.
5 Why? Because plumbers use torches all the time and
6 we were burning buildings down by lighting up
7 plastic fixtures.

8 So for the past 35 years, we've had
9 requirements where these plastic fixtures, you can
10 be there all day and you'll never ignite them. I
11 don't care what plastic fixture it is. When I was
12 at Operation San Francisco which became Operation
13 Life Safety, I laughed at the fire protection guys
14 who were trying to ignite the plastic lab basin. I
15 went up to them and I said, Guys, you'll be there
16 all day. Take a torch to it. It's not going to
17 ignite. They could not get the sprinkler to
18 activate starting a trash can fire in the bathrooms
19 during Operation San Francisco. That kind of told
20 of you the story that no matter what do you with
21 that fire, you still couldn't get the sprinkler to
22 go off.

23 So the plastic plumbing fixtures are not
24 an issue. They are protected. They are loaded,

1 and I would challenge all of you to go home and do
2 it yourself. Take a torch to your plastic fixture.
3 You will never ignite it. All right.

4 For you smokers, the other thing we do is
5 we have a cigarette test. If you lay the
6 cigarette, it's not allowed to leave a mark because
7 they look ugly. And some of you remember the old
8 fixtures that did that.

9 So that's part of the testing that's
10 require in the standards today and a part of the
11 plumbing code. So I would encourage you to support
12 this motion.

13 MODERATOR NEWMAN: Thank you. Microphone
14 Number 4.

15 MR. HIRSCHLER: Marcelo Hirschler,
16 GBH International.

17 Plastic plumbing fixture is not a
18 noncombustible fixture. Whatever the
19 performance -- and we can discuss this and I am not
20 in the business of discussing it -- the issue is,
21 the gentleman said, we have nothing that's
22 combustible.

23 A plastic plumbing fixture, and I
24 represent very often the plastic industry, a

1 plastic plumbing fixture is not noncombustible. It
2 is combustible. Thank you.

3 MODERATOR NEWMAN: Thank you.
4 Microphone Number 5.

5 MR. KEEPING: Larry Keeping, Vipond Fire
6 Protection. I speak in favor of the motion.

7 I am the author of one of the negative
8 ballots on this issue. And this is a Technical
9 Committee, and if we are going to step back
10 15 years, I think we need substantial technical
11 substantiation. And all we have is a comment that
12 bathrooms are different today. I honestly don't
13 think that 55 square foot bathrooms with a
14 15-minute thermal barrier are different today than
15 they were in 1991 when we allowed this exemption of
16 sprinklers in those small bathrooms. Thank you.

17 MODERATOR NEWMAN: Microphone Number 4.

18 MR. BILBO: Cecil Bilbo, National Fire
19 Sprinklers Association, speaking in opposition to
20 the motion.

21 We've heard from the opposition or from
22 the proposals that bathrooms have indeed changed
23 and that a 55 square foot bathroom might require
24 three sprinklers. Construction in bathrooms is

1 different these days. The combustible loading in
2 bathrooms is different these days. The fixtures
3 being used to create heat and light in bathrooms
4 are different these days.

5 And, finally, while, yes, most of the data
6 is anecdotal, and speaking with fire service
7 personnel, they can speak to how many times they
8 respond to bathrooms starting mostly from candles
9 and in bathrooms -- or fires in bathrooms. Thank
10 you.

11 MODERATOR NEWMAN: Thank you. Microphone
12 Number 5.

13 MR. SHAPIRO: Jeff Shapiro, fire protection
14 engineer in Austin, Texas, with the National
15 Multi-Housing Council. I would like to encourage
16 Julius and Marcelo to go out in the hall and debate
17 the issue of combustibility.

18 MODERATOR NEWMAN: For or against the motion?

19 MR. SHAPIRO: I'm speaking for the motion.

20 The issue here, two things. One the
21 comment was made with regard to you don't have to
22 sprinkler the bathroom but you do have to sprinkler
23 the closet. With respect to the entirety of the
24 NFPA standards, that's not correct. NFPA 101 today

1 contains an exception that says you don't have to
2 sprinkler that small linen closet. So, in fact,
3 you sprinkler neither the closet nor the bathroom
4 in that particular case.

5 When you are looking at 55 square foot
6 bathrooms, it's not the kind of place where people
7 are going to go have a party. It's a very small
8 space. It's big enough for a small sink, a toilet,
9 and a tub. So, yeah, you may have a candle in
10 there, but you're going to be pretty much sitting
11 next to it while you're on the throne.

12 I truly believe that this change is not
13 justified, and the committee itself said the change
14 is not justified. By a 27 to zero vote on the
15 initial proposal, they said there's no
16 substantiation. How can you come back and change
17 your vote in the ROC process based on somebody
18 saying the fire problem in bathrooms today is
19 different than what it was 30 years ago?

20 Ladies and gentlemen, my bathroom is the
21 same as it was 30 years ago. Yours probably is,
22 too, and this change is not warranted. I urge you
23 to support the motion on the floor.

24 MODERATOR NEWMAN: Thank you. Microphone

1 Number 4.

2 MR. WEBB: Bill Webb, fire protection engineer,
3 and I call the question.

4 A VOICE: Second.

5 MODERATOR NEWMAN: We have a motion to call the
6 question. That's a nondebatable motion. We will
7 proceed to a vote. All those in favor, please
8 raise your hand. All those opposed.

9 Motion passes.

10 We'll now proceed to a vote on Motion
11 Sequence Number 13-6 which is the motion to reject
12 Comment 13-141. All those in favor, please raise
13 your hands. All those opposed.

14 I'm going to call for a standing count.
15 All those in favor of the motion, please stand.
16 Please be seated. Those against the motion, please
17 stand. You may be seated. Thank you.

18 The motion passes, 86 to 63. Thank you.

19 We'll now proceed to Motion Sequence 13-7.
20 My apologies. Please proceed.

21 MR. BURKHART: Mr. Chairman, I'm David Burkhart
22 with Code Consultants, representing the New York
23 State Office of Mental Health. I move
24 Comment 13-104.

1 MODERATOR NEWMAN: Mr. Burkhart is the
2 authorized maker of the motion. Thank you, sir.
3 Do I have a second?

4 A VOICE: Second.

5 MODERATOR NEWMAN: I have a second. Please
6 proceed, Mr. Burkhart.

7 MR. BURKHART: When I first submitted this
8 comment, I didn't think it was going to be a big
9 deal. I thought it was a clear editorial change,
10 but I found out otherwise. And basically what this
11 change would do would change the name that's
12 presently in the code of a main drain test to a
13 water supply test.

14 Now if you go back to the early '90s, it
15 was always referred to as a test, and when you
16 defined a main drain, you said the main drain can
17 be used to test the system, but it never called it
18 a main drain test until the 1994 standard. I guess
19 at that point in time, somebody just said, well,
20 it's industry standard, everybody calls it the main
21 drain test, let's do the main drain test.

22 Well, since then, we've required full flow
23 testing of backflow preventers, so now there are
24 systems that are installed with other test devices

1 on there. We have fire pump test headers. There's
2 no reason to use just the main drain to do the
3 testing of the underground water supply.

4 My client is extremely concerned about
5 this, because I have a client, the only client that
6 I have who goes out of his way to do everything in
7 NFPA 72 and NFPA 75 required for testing. He
8 spends upwards of \$10 million a year testing and
9 inspecting all of his systems. He's dedicated, but
10 he doesn't like being cited by the authority having
11 jurisdiction when he has five risers on one header
12 and he doesn't test all five main drains. And he's
13 got a backflow preventer sitting right there and
14 he's got to do a backflow -- a full flow, backflow
15 preventer test on the system. So now -- he's very
16 green oriented, so now he's got six water flow
17 tests going when only one is really necessary.

18 So the committee originally on their
19 comment to me said that they were afraid that was
20 requiring something more than they thought was
21 necessary. And I looked at the way I worded it,
22 and they were right. I was a little bit off on my
23 wording. So I changed the wording for the comment
24 period. And the comment I got back from the

1 committee was kind of strange because the committee
2 says, The committee feels it is necessary -- it is
3 not necessary to revise the name -- the
4 nomenclature of the main drain, and the standard is
5 clear regarding its purpose.

6 Well, I'm not trying to change the name of
7 the main drain. I'm just trying to change the name
8 of the test. It's not a main drain test. We're
9 not testing the main drain. You're testing the
10 water supply.

11 My client has been required to test main
12 drains on standpipe systems and all sorts of
13 things. There's no water main close to where he's
14 being required to test. He's spent a lot of money
15 and a lot of time and wasted a lot of water doing
16 these tests that aren't required -- may not be
17 required depending on who the AHJ is but are not
18 needed. Thank you.

19 MODERATOR NEWMAN: Thank you. Any comment,
20 Mr. Budnick?

21 MR. BUDNICK: I believe this is a correlation
22 issue. So, Joe, it's yours again.

23 MODERATOR NEWMAN: Microphone 4.

24 MR. NOBLE: I get a break after this one,

1 though. Basically the committee is opposed to
2 accepting Comment 13-104 by a vote of 25 to
3 nothing.

4 MODERATOR NEWMAN: Microphone Number 5.

5 MR. ROSENBAUM: I'm Eric Rosenbaum with Hughes
6 Associates representing the New York State Office
7 of Mental Health, and I'm speaking in favor of the
8 motion.

9 The purpose of the water supply test is to
10 provide a comparative method for testing the
11 adequacy of water supply to a building. The motion
12 recognizes that the main drain test is just one of
13 the methods of achieving this purpose. Other test
14 connections are also suitable for such a test
15 including the fire pump test header.

16 The change strictly recognizes other
17 comparable methods are acceptable. For that
18 reason, I support this change to recognize this as
19 a water supply test connection.

20 MODERATOR NEWMAN: Thank you. Microphone
21 Number 3.

22 MR. KIRN: My name is Mike Kirn. I represent
23 Code Consultants, Inc., and Fire Protection Systems
24 Corrosion Management. I just want to take a couple

1 of minutes here. I'll be brief, but hang with me
2 here because I think this is more editorial than
3 substance.

4 But Section 8.16.2.4.7 says, and I quote,
5 "The test connections required by 8.17.4.1 shall be
6 permitted to be used as main drain connections."
7 Section 8.17.4.1 says, and I quote, "Main drain
8 test connections shall be provided at the locations
9 that will permit flow tests of water supplies and
10 connections."

11 Last, take a look at Figure A.8.17.4.1.
12 The reference in that document or in that figure is
13 to test connection, not main drain test connection.

14 MODERATOR NEWMAN: Thank you. Microphone
15 Number 4.

16 MR. ISMAN: Ken Isman with the National Fire
17 Sprinkler Association speaking against the motion.

18 I don't normally like to stand up and
19 oppose things Dave is making, but I have a lot of
20 heartburn over this particular issue. It seems to
21 me that the folks that have spoken beforehand have
22 missed the point of the main drain test. The point
23 of the main drain test is not to test the water
24 supply. The point of the main drain test is to

1 make sure that the water supply can get water past
2 the control valve in the system into the system.
3 And so we run the main drain test on a certain
4 basis, either quarterly or annually, depending on
5 the equipment in the system, and every time after a
6 control valve has been closed and then opened again
7 to make sure that you actually have opened the
8 valve.

9 And you can't do that with any of the
10 other connections on the system. They're too small
11 to make sure that the valve is actually fully
12 opened all the way. If you have a header with a
13 whole bunch of main drains on it, it means you've
14 got a whole bunch of control valves on it, too.
15 And, yes, you need to run a main drain test
16 periodically to make sure the valves are open.

17 Now folks who have opposed this in the
18 past have said, oh, well, we've got the indicating
19 device on the valve that lets us know it's open
20 whether it's a butterfly valve with an arrow
21 pointing or an OS&Y valve that's got the stem
22 showing; but the reality is that those valves can
23 break. The stem doesn't necessarily always stay
24 connected to the gate in an OS&Y valve. And even

1 though the stem backs out, you don't know for sure
2 that the gate has pulled out of the water flow
3 path.

4 The only way to make sure is to run the
5 main drain test. It's not an onerous test. It's
6 not a test that takes a long time. You open the
7 main drain. You see that you get flow. You look
8 at the gauge. You close the valve.

9 We need to maintain this terminology to be
10 consistent with all of the other standards that are
11 in the NFPA system.

12 MODERATOR NEWMAN: Thank you. Microphone
13 Number 2.

14 MR. KOFFEL: Bill Koffel, Koffel Associates,
15 speaking in opposition to the motion, speaking for
16 myself.

17 Just to expand a little bit on what Ken
18 just said, the intent is to ensure that you have
19 water at the base of the riser. Now in some system
20 installations, yes, all of this is together. You
21 got a backflow preventer. You got a fire pump.
22 You got the system riser. They're all in very
23 close proximity, and one might say there's no big
24 difference.

1 But there's a lot of installations where
2 the fire pump is in one location, the system riser
3 is hundreds of feet away. And you have no
4 knowledge. If you only use the fire pump test
5 header or the backflow preventer test assembly, you
6 have no knowledge that you have water to the base
7 of the riser.

8 This is a substantial technical change and
9 I don't think the proponent has given us adequate
10 substantiation to make the change.

11 MODERATOR NEWMAN: I didn't miss this time.
12 Microphone Number 1.

13 MR. BURKHART: Thank you. This is an example
14 of what I believe is what happens in the course of
15 a career where people believe one thing and what I
16 call code-creep over a course of years and years
17 and years that the main drain test was done by
18 insurance companies to ensure the integrity of the
19 underground water supply. Now we're extending it
20 by our own thought processes into other things it
21 wasn't originally intended for. That's all.
22 Thanks.

23 MODERATOR NEWMAN: Thank you. Microphone
24 Number 1.

1 MR. SMITH: Will Smith with Code Consultants,
2 Incorporated, and I'm speaking in favor of the
3 change -- or in favor of the motion.

4 To address Ken Isman's -- or Ken's
5 position about this is not a water supply test,
6 you're right. However, there are other means to
7 test to make sure we have flow. There's an
8 inspector's test that's available to make sure that
9 there's still flow in the system that we are still
10 getting by.

11 The main drain, in most cases -- and
12 warehouses or big box retails will not support the
13 amount of water that's going to be flowing through
14 the system. So you will actually have no idea how
15 much water you're actually getting in the system or
16 if the valve is completely open or not with the
17 exception of a full flow, backflow prevention test.

18 So I'm still in favor. You know, again,
19 it's a water supply test. It's not a main drain
20 test, and that the test should be called after the
21 test itself and not the valve that is used.

22 MODERATOR NEWMAN: Microphone Number 2.

23 MR. KOFFEL: Bill Koffel, Koffel Associates.

24 Just on that point alone, the inspector's

1 test can actually flow not nearly enough water to
2 determine the position of the valve. There was a
3 fire a number of years ago in a health care
4 facility in Arkansas where quarterly inspector's
5 test connection tests were conducted for a period
6 of about two years. The main control valve was
7 closed the entire time. By the time the fire
8 occurred, there was basically no water left in the
9 branch lines, and the main control valve was
10 closed. There was no water supply to the system.

11 MODERATOR NEWMAN: Thank you. Seeing no
12 further comment, we'll proceed to a vote. We're
13 voting on Motion Sequence Number 13-7 which is a
14 motion to accept Comment 13-104. Those in favor,
15 please raise your hands. Those opposed.

16 The motion carries. That was an easy one.
17 My apologies. The motion fails. I'm sorry. The
18 motion fails. Sorry. Just testing you. Sorry,
19 sorry.

20 We'll now move to Motion Sequence 13-8.
21 Microphone 5.

22 MR. ISMAN: Thank you. Ken Isman with the
23 National Fire Sprinkler Association. We move to
24 reject Comment 13-173 on Page 13-38 of the ROC.

1 MODERATOR NEWMAN: Mr. Isman is the authorized
2 maker of the motion. Do I have a second?

3 A VOICE: Second.

4 MODERATOR NEWMAN: I have a second. Please
5 proceed.

6 MR. ISMAN: Thank you. We recognize that the
7 committee was trying to introduce consistency in
8 how close the flexible coupling below a support on
9 a riser needs to be, but the 24 inch value that
10 they have come up with is fairly arbitrary and
11 creates a problem. Just because the coupling above
12 the support on the riser needs to be within
13 24 inches of the support does not mean the coupling
14 below the riser has to be the same distance away.

15 If you put the coupling on a very tall
16 riser, 24 inches below the intermediate support,
17 the rest of the riser above your wet alarm valve or
18 dry pipe valve hangs from that flexible coupling if
19 you need to take that valve out of the riser and do
20 any work on it or replace it. That's a problem.
21 The coupling is not made to support the weight of
22 the riser, and there's nothing else to hold the
23 weight of the riser because you've put this
24 flexible coupling below your point of support.

1 So it would be better to put the flexible
2 coupling at the top of the wet alarm valve or the
3 top of your dry valve so that when you remove one
4 of those valves from the riser, the intermediate
5 support higher up actually supports the riser
6 piping.

7 Please return the language to the 2007
8 edition which requires a flexible coupling below
9 the point of support but doesn't tell you exactly
10 how many inches away it has to be. Just somewhere
11 in that line, there has to be a flexible coupling.
12 And that's worked for years. We would like to
13 return to that language.

14 MODERATOR NEWMAN: Thank you. Any comments,
15 Mr. Budnick?

16 MR. BUDNICK: Yes, Mr. Chairman. I would ask
17 Tony Braga, the Chairman of Hanging and Bracing
18 Technical Committee, to speak to this issue.

19 MODERATOR NEWMAN: Thank you. Microphone 4,
20 please.

21 MR. BRAGA: I'm Tony Braga with FM Global and
22 Chair of the Technical Committee on Hanging and
23 Bracing. I speak in opposition of the motion and
24 in support of the committee action.

1 The intent of the committee was to clarify
2 the location of these flexible couplings. And this
3 issue passed in the committee with a vote of 26 out
4 of 28 with two abstentions.

5 MODERATOR NEWMAN: Thank you. Microphone
6 Number 5.

7 MR. PATEL: My name is Janak Patel. I am
8 representing Savannah River Nuclear Solutions, and
9 I'm speaking against this motion.

10 The reason to provide this location was to
11 clarify where the coupling should be, and it also
12 was for the purpose of seismic reason. If there is
13 a valve on the riser, then the design shall take
14 care of that, but the coupling provides a seismic
15 reason for that. Thank you.

16 MODERATOR NEWMAN: Thank you. Seeing no
17 further comment, we'll proceed to a vote. We're
18 voting on Motion Sequence 13-8 which is a motion to
19 reject Comment 13-173. All those in favor, please
20 raise your hands. All those opposed.

21 The motion fails.

22 We'll now proceed to Motion Sequence 13-9.
23 Microphone 5.

24 MR. ISMAN: Thank you. Ken Isman again with

1 the National Fire Sprinkler Association. We move
2 to return Proposal 13-510(b), as in baker, and the
3 related Comment 13-291.

4 MODERATOR NEWMAN: Mr. Isman is the authorized
5 maker of the motion. Do I have a second?

6 A VOICE: Second.

7 MODERATOR NEWMAN: I have a second. Please
8 proceed, Mr. Isman.

9 MR. ISMAN: Thank you. The committee has
10 inserted the issue of making sure that pipes that
11 drop from the ceiling to feed in-rack sprinklers
12 have enough flexibility to move 5 percent of the
13 height of the racks. Then the committee went on to
14 say that the way to do this is with either multiple
15 flexible couplings or seismic separation
16 assemblies.

17 This is overkill. The current provisions
18 in the 2007 edition of NFPA 13 for a single
19 flexible coupling at the top of the drop along with
20 additional flexible couplings when drop supports
21 are placed within the rack structure is sufficient
22 flexibility. We don't need the additional
23 flexibility discussed in this proposal and comment.
24 So we ask that you return to the 2007 edition

1 language.

2 MODERATOR NEWMAN: Thank you, Mr. Isman. Any
3 comment, Mr. Budnick?

4 MR. BUDNICK: Yes, Mr. Braga will speak to the
5 matter.

6 MODERATOR NEWMAN: Microphone Number 4, please.

7 MR. BRAGA: Tony Braga with FM Global, Chair of
8 the Technical Committee. The intent of the --
9 first of all, this is appendix language in the
10 committee -- in the standard. The intent here was
11 to have some guidance in the standard that would be
12 consistent with the displacements provided by
13 ASCE-7. So I speak in opposition of the motion, in
14 support of the committee action, and the vote on
15 this matter by the committee was 23 with 3
16 opposing.

17 MODERATOR NEWMAN: Thank you. Seeing no
18 further -- I'm sorry. Microphone Number 5, please.

19 MR. PATEL: My name is Janak Patel. I am
20 representing Savannah River Nuclear Solutions
21 Company. I am speaking against this motion.

22 Along the same line, the guidelines were
23 given for the seismic reason. There was data
24 presented there that the racks can move more than

1 1 foot to 2 feet in seismic action; and, if you do
2 not provide this flexible coupling device, the
3 piping can rupture, and that's the reason we have
4 provided this guideline. Thank you.

5 MODERATOR NEWMAN: Thank you. Seeing no
6 further comment, we will now proceed to a vote.
7 We're voting on Motion Sequence 13-9 which is a
8 motion to return a portion of the report in the
9 form of Proposal 13-510(b) and related
10 Comment 13-291. All those in favor, please raise
11 your hands. All those opposed.

12 The motion fails.

13 We'll now proceed to Motion Sequence
14 Number 13-10. Microphone 5, please.

15 MR. ISMAN: Thank you, Mr. Chair. Ken Isman
16 with the National Fire Sprinkler Association, and
17 we move to reject Comment 13-47.

18 MODERATOR NEWMAN: Mr. Isman is the authorized
19 maker of this motion. Do I have a second?

20 A VOICE: Second.

21 MODERATOR NEWMAN: I have a second. Please
22 proceed, Mr. Isman.

23 MR. ISMAN: Thank you. The goal of this
24 comment is to get the air out of sprinkler systems

1 to help control corrosion. And while we agree that
2 we want to help control corrosion, we are concerned
3 with advising people to remove the air for two
4 reasons:

5 First, air is good to have in sprinkler
6 systems. Trapped air gives water somewhere to go
7 when the water expands during thermal changes.
8 Without the trapped air in a sprinkler system,
9 pressures go up when the temperature increases and
10 can blow apart systems.

11 The other methods -- or there are other
12 methods that can be used to control corrosion that
13 are not being given credit by the committee in this
14 comment. For example, a building owner can control
15 corrosion by leaving the system in service and not
16 draining it down frequently and introducing new
17 oxygen. By leaving the system in service, the
18 small amount of oxygen that's in the piping forms a
19 thin layer of oxide on the pipe and then the
20 corrosion process stops because no new oxygen is
21 being introduced.

22 Yes, we agree that there are systems that
23 would benefit from having these air vents on them,
24 like shopping malls where you're constantly taking

1 the system down and out of service to do some
2 tenant refit and then putting the system back in
3 service and reintroducing more oxygen; but the
4 blanket encouragement of air vents on all wet pipe
5 systems is going farther than is necessary.

6 We understand that this issue is in the
7 annex, but if anything ever goes wrong, the
8 contractor will be held accountable if they didn't
9 put an air vent on the system even if the problem
10 has little or nothing to do with specific
11 corrosion. We hope that you will vote in favor of
12 our motion and return to the 2007 edition language.

13 MODERATOR NEWMAN: Thank you, Mr. Isman. Any
14 comment, Mr. Budnick?

15 MR. BUDNICK: Joe would like to speak to this.

16 MODERATOR NEWMAN: Microphone 4.

17 MR. NOBLE: Thank you. As the Technical
18 Committee Chair for the Installation Committee, I
19 am speaking in objection to the motion, in support
20 of the committee action, and I need to just add a
21 little to that.

22 Just as a matter of history, for the last
23 several cycles anyways, the committee has struggled
24 with this particular issue, and I think for the

1 first time we were able to generate enough
2 continuity in the room, enough cooperation that we
3 were able to move forward with something to put in
4 the standard. You will note that there were
5 25 votes cast for this motion. 24 were in support
6 and only 1 opposed. Thank you.

7 MODERATOR NEWMAN: Thank you. Microphone
8 Number 2.

9 MR. KIRN: My name is Mike Kirn. I represent
10 Code Consultants, Inc., and Fire Protection System
11 Corrosion Management. I speak in opposition to the
12 motion.

13 I have a few more brief points to add to
14 Joe's. The proposed change represents just a small
15 step for internal corrosion management; and, again,
16 today, the fire sprinkler industry is endeavoring
17 to become more proactive about limiting the
18 damaging effects of corrosion in water-based fire
19 protection systems. One such proactive measure is
20 venting trapped air from wet pipe systems. The
21 added appendix material offers guidance as to how
22 venting may be accomplished.

23 The proposal, again, overwhelmingly
24 supported by the committee, 24 to 1, is intended to

1 offer guidance on how to vent systems and reduce
2 the damage caused by internal piping corrosion.

3 Speaking to Mr. Isman's concern about
4 overpressurization, we discussed it in a previous
5 motion here, that all new systems will have a
6 pressure relief. Thank you.

7 MODERATOR NEWMAN: Thank you. Microphone
8 Number 2.

9 MR. RAY: Richard Ray, Cybor Fire Protection,
10 professional fire protection engineer and
11 contractor in Chicago. I would speak against the
12 motion.

13 Automatic air vents are a good thing.
14 Here's my reasoning: Ever since NFPA 13 allowed
15 the inspector's test connection to be moved
16 anywhere downstream of the water flow switch and no
17 longer always at the end of the system, from an
18 installation standpoint, it's very difficult then
19 to get rid of the trapped air in a sprinkler system
20 when you put in service, and this column of air
21 tends to move around in the piping system and
22 prevent false alarms.

23 MODERATOR NEWMAN: Thank you. Microphone 5.

24 MR. BILBO: Cecil Bilbo, Academy of Fire

1 Sprinkler Technology and representing National Fire
2 Sprinkler Association. The sprinkler associations
3 have gotten very proactive --

4 MODERATOR NEWMAN: Are you for or against?

5 MR. BILBO: I speak in favor of it.

6 MODERATOR NEWMAN: Thank you.

7 MR. BILBO: We've gotten very proactive, and I
8 just -- I mean, the problem that I'm having is
9 where we're headed with this whole thing.

10 I spoke earlier in hopes of not having to
11 have pressure relief valves on every sprinkler
12 system everywhere. Now you're wanting to put air
13 vents in every sprinkler system everywhere. This
14 air vent isn't going to produce the result of
15 getting rid of all the air which isn't even
16 desirable. It's just another added expense. We're
17 work towards minimizing corrosion. We don't see
18 this as a solution. Thank you.

19 MODERATOR NEWMAN: Thank you. Microphone
20 Number 2.

21 MR. CABRAL: Mike Cabral. I am representing
22 myself on this issue. I just wanted --

23 MODERATOR NEWMAN: Are you speaking for or
24 against?

1 MR. CABRAL: I'm speaking against this motion.

2 MODERATOR NEWMAN: Thank you.

3 MR. CABRAL: One of the things about air
4 release from a system, I think the real intent is
5 to reduce the amount of air water interface
6 primarily in the cross mains. There's really no
7 effective method to fully reduce the -- relieve the
8 air from the branch lines, and that air water
9 interface on the cross main is really the
10 problematic point. I think the use of an air vent
11 helps eliminate that air water interface as a very
12 effective method. Thank you.

13 MODERATOR NEWMAN: Thank you. Microphone 4.

14 MR. WEBB: Bill Webb, fire protection engineer.
15 I call the question.

16 A VOICE: Second.

17 MODERATOR NEWMAN: We have a motion to call the
18 question. That is nondebatable. We will proceed
19 to an immediate vote. Those in favor of the
20 motion, please raise your hands. Those opposed.

21 The motion passes.

22 We will now proceed to a vote on Motion
23 Sequence Number 13-10 which is a motion to reject
24 Comment 13-47. All those in favor, please raise

1 your hands. All those opposed.

2 The motion fails.

3 We will now proceed to Motion Sequence
4 13-11. Microphone Number 5.

5 MR. ISMAN: Thank you, Mr. Chair. Ken Isman
6 with the National Fire Sprinkler Association. We
7 move to reject the deletion of Figures A.22.4.4.5.1
8 and Table A.22.4.4.5.1.

9 MODERATOR NEWMAN: Thank you. Mr. Isman is the
10 authorized maker of the motion. Do I have a
11 second?

12 A VOICE: Second.

13 MODERATOR NEWMAN: Any comments, Mr. Budnick?

14 MR. BUDNICK: This is not a correlation issue.
15 So again, once again, for the last time, I will ask
16 Joe to come up and speak to it.

17 MODERATOR NEWMAN: Microphone Number 4.

18 MR. NOBLE: Yes, sir. Thank you. As the Chair
19 of the Technical Committee, I am compelled to
20 object to this. However, you should know that this
21 figure and table probably are desirable if you want
22 to actually use the formula being considered here.
23 Thank you.

24 MODERATOR NEWMAN: Microphone Number 5.

1 MR. ISMAN: Ken Isman, National Fire Sprinkler
2 Association. Thank you. The committee requires
3 friction loss calculations to be done for large
4 anti-freeze systems in accordance with the
5 Darcy-Weisbach calculation technique, but you can't
6 do that calculation technique without the Moody
7 diagram and without some knowledge of the roughness
8 of the pipe that you're using.

9 So we think this deletion got caught up in
10 the deletion of the whole rest of the annex note.
11 And we're okay with the whole rest of the annex
12 note going away, but we really need the table and
13 the figure back. Thanks.

14 MODERATOR NEWMAN: Thank you. Seeing no
15 further comment, we'll proceed to a vote. We're
16 voting on Motion Sequence 13-11 which is a motion
17 to reject an identifiable part of Comment 13-302,
18 and I will let you read the rest. All those in
19 favor, please raise your hands. All those opposed.

20 The motion passes.

21 Moving on, is there any further discussion
22 on NFPA 13? Seeing none, we'll now move to
23 NFPA 13D. Mr. Budnick?

24 MR. BUDNICK: Thank you, Mr. Chairman. We'll

1 now move on to Part 2, Part 2 of the TCC report.
2 The revision of NFPA 13D, Installation of
3 Residential Sprinkler Systems, is now presented for
4 adoption. The Technical Committee's report can be
5 found in the Report on Proposals and the Report on
6 Comments for the 2009 Annual Meeting Revision Cycle
7 and proposes a partial revision of NFPA 13D,
8 Standard for the Installation of Sprinkler Systems
9 in One- and Two-Family Dwellings and Manufactured
10 Homes.

11 The presiding officer will now proceed
12 with the certified amending motions.

13 MODERATOR NEWMAN: Thank you, Mr. Budnick. I
14 would like to announce that the order of the
15 certified amending motions for NFPA 13D will be
16 changed with the concurrence of the maker of the
17 motion. Certified Amending Motion Number 13D-2
18 will be taken before Motion Number 13D-1. So we
19 proceed to Motion Sequence 13D-2. Microphone
20 Number 5.

21 MR. KLEIN: Marshall Klein, fire protection
22 engineer from Eldersburg, Maryland. Mr. Chairman,
23 I would like to make a motion to reject code
24 Comment 13D-18.

1 A VOICE: Second.

2 MODERATOR NEWMAN: Thank you. Mr. Klein is the
3 authorized maker of the motion. Do we have a
4 second? I think I heard one there.

5 A VOICE: Second.

6 MODERATOR NEWMAN: Thank you. Please proceed.

7 MR. KLEIN: Thank you, Mr. Chairman. Ladies
8 and gentlemen, in order to understand this, instead
9 of looking at the comment in the ROC, I think
10 you're better off looking at the original proposal
11 in the ROP that's on Page 13D-9 which is actually
12 Proposal 13D-15(a), and the reason I say that is
13 when you go to that page, 13D-9, you will actually
14 see the words that have been deleted under the
15 revised Paragraph 5.2.1.3 and 5.2.5.3 which are the
16 words, "passive purge systems not equipped with a
17 fire department connection" in those two sections.

18 And what is going on here is that by this
19 code comment that removes those wordings, we want
20 that wording back in to have those sessions also
21 apply to the passive purge systems not equipped
22 with fire department connections, to have a working
23 pressure not less than 130 PSI instead of what the
24 default would be of a working pressure not less

1 than 175 PSI.

2 We feel going up to 175 PSI, which would
3 be a new requirement, is excessive and unnecessary
4 because a passive purge system under the plumbing
5 codes -- remember, this is 13D -- but what is going
6 to end up governing is your National Plumbing Codes
7 in the different jurisdictions that the passive
8 purge system, because it will have a plumbing
9 fixture on it based on the definition, it is part
10 of the water distribution system. It is a plumbing
11 water distribution system and, therefore, is
12 governed by the plumbing codes which therefore
13 limits the working pressure to the plumbing
14 distribution system to no more than 80 PSI.

15 Therefore, there's no real technical
16 justification to require the design of a passive
17 purge residential sprinkler system to be increased
18 from the existing requirement of a maximum 130 PSI
19 to the new requirement of 175 since the plumbing
20 code, which is going to be applicable to the design
21 of all these systems because that's the way the
22 plumbing codes regulate these systems, would limit
23 the maximum working pressure to 80 PSI.

24 So the upshot here is we would like your

1 support on this because none of these systems is
2 ever going to say anything more than 80 PSI by the
3 plumbing code. You already have the factor of
4 safety of the piping and all being designed,
5 meeting the working pressure of 130, and 130 to 175
6 is just really too excessive to permit. So please
7 support our motion.

8 MODERATOR NEWMAN: Thank you. Any comment,
9 Mr. Budnick?

10 MR. BUDNICK: As this is not a correlation
11 issue, I would ask that the Technical Committee
12 Chair speak to this matter. Maurice Pilette.

13 MODERATOR NEWMAN: Microphone Number 4.

14 MR. PILETTE: Maurice Pilette, Chair of the
15 Residential Committee, 13D. The Chair takes no
16 action and supports the action of the committee.

17 MODERATOR NEWMAN: Thank you. Microphone
18 Number 5.

19 MR. ISMAN: Thank you, Mr. Chair. Ken Isman
20 with the National Fire Sprinkler Association.

21 I rise in support of the motion on the
22 floor which might surprise you given that it's my
23 comment that is actually being sent back by the
24 motion. Sorry about that, but that's where we

1 stand right now.

2 As you can well imagine, the National Fire
3 Sprinkler Association as an association has been
4 very divided on this issue. I served on the task
5 group that originally drafted the language that's
6 in the ROP that was adopted by the committee.
7 During deliberations after the publication of the
8 ROP, we had an Engineering and Standards Committee
9 that was a little concerned about what was drafted
10 at the ROP stage and asked me to submit the
11 comment, and the vote on that was very close at our
12 association committee meeting, but they asked me to
13 submit this comment that we're now discussing, and
14 I went ahead and I did submit it.

15 Since then, our Board of Directors has
16 asked our Engineering and Standards Committee to
17 relook at their position; and, at its most recent
18 meeting, our Engineering and Standards Committee
19 voted to reverse its position, in other words, they
20 are sorry they ever submitted the comment.

21 So I apologize for speaking on both sides
22 of this issue in the last six months or so, but
23 this is the current position of the National Fire
24 Sprinkler Association, that we're in favor of the

1 use of this pipe that's rated for 130 PSI at
2 120 degrees Fahrenheit in passive purge systems.

3 The pipe can already be used in
4 multi-purpose systems; and, therefore, plumbers
5 that are already able to use this pipe in
6 installing multi-purpose sprinkler systems are
7 putting sprinkler contractors at a disadvantage.
8 Sprinkler contractors are looking for the ability
9 to compete on an equal playing field with the
10 plumbers that are installing these multi-purpose
11 systems already. Our contractors are also looking
12 for alternatives to the piping materials that are
13 currently in use for single-family dwelling
14 systems.

15 The question really shouldn't be about
16 whether we're lowering the rated pressure of pipe
17 from 175 PSI to 130 PSI. Instead, the question
18 that we need to be asking is, is the pipe rated for
19 135 PSI sufficient for a 13D system? And we feel
20 that the answer to that question is yes, and we
21 urge you to vote in favor of this motion.

22 MODERATOR NEWMAN: Microphone Number 2.

23 MR. GOLINVEAUX: Thank you. Thank you,
24 Mr. Chair. My name is James Golinveaux. I

1 represent Tyco Fire Suppression & Building
2 Products. I am speaking against the motion.

3 The simplification of this proposal is to
4 reduce the requirement currently required in
5 NFPA 13D of the pressure rating for the stand-alone
6 passive purge sprinkler system, residential
7 sprinkler system that requires currently 175 PSI to
8 reduce that down to 130 PSI and, in addition, not
9 mentioned so far, the thermal temperature rating of
10 the piping at that required rate of pressure from
11 150 degrees down to 120 degrees Fahrenheit.

12 The 175 versus 130 PSI, being only a
13 45 PSI difference, changes the quality standard for
14 testing. The quality standard is that we test at a
15 five times multiple of the rated working pressure.
16 So that results in a 225 PSI reduction of the
17 quality testing of our piping.

18 The temperature testing that we have done
19 over -- in the industry for unventilated attics
20 have shown that peak temperatures in excess of
21 120 degrees have occurred, and this would require
22 thermal barriers on piping that's rated at
23 120 degrees Fahrenheit to separate those peak
24 temperatures from this thermal plastic piping.

1 The current plastic pipe that's rated at
2 175 degrees -- excuse me, at 175 PSI and
3 150 degrees, that 150 is above those peak
4 temperatures that we measured.

5 The pressure temperature combination of
6 130 PSI at 120 degrees Fahrenheit is allowed by
7 NFPA 13D for multi-purpose piping. I sat on the
8 original task group back in the early 1990s
9 allowing this reduction from 175 to 130 PSI, and it
10 was justified since if any issue surfaced with this
11 reduction of the temperature in the pressure rating
12 it would immediately be noticeable because the
13 entire plumbing system of a multi-purpose would be
14 disabled. So you would have immediate action to
15 cause to fix this system to bring your plumbing
16 system back into operation.

17 This proposal of passive purge is that
18 only one plumbing fixture, a toilet fixture, be
19 installed on this system, not the entire domestic
20 supply. Experts have explained to us in PEX piping
21 that it can meet the 175 PSI, 150 degree rating.
22 So they have come to the technical committees and
23 said, yes, this piping method can meet the current
24 standard. But if they do, the pipe won't be as

1 flexible and it will be more expensive.

2 So the proposal from the proponents is,
3 well, if they can't do that, it would be more
4 expensive and it won't be as flexible, well, let's
5 just reduce the standard. I don't think that's the
6 technical merit to do so.

7 Tyco has been sponsoring the continuing
8 cost analysis of the current approved CPVC plastic
9 systems against the passive purge PEX systems. Our
10 information shows a significant material increase
11 for the current PEX systems that are on the market
12 as compared to the CPVC. We do not argue that the
13 labor cost is less for the PEX systems because of
14 the flexibility of the piping and the elimination
15 of fittings for the more rigid 175 PSI piping, but
16 we have not seen a significant cost savings to the
17 end user by allowing this reduction in material
18 quality so that there's a significant benefit to
19 make this change to an NFPA standard to reduce the
20 overall performance.

21 We're very concerned to reduce the
22 pressure temperature requirements for stand-alone
23 systems in 13D occupancies, stand-alone passive
24 purge being a type of stand-alone system as

1 defined. We're very concerned about this because
2 also single-family homes don't get the same
3 maintenance standard as a commercial system. They
4 are not required to follow NFPA 25 where you get
5 annual inspections.

6 MODERATOR NEWMAN: One minute.

7 MR. GOLINVEAUX: So we're very concerned that
8 these systems will be installed and not have the
9 rigorous maintenance schedules that we have in our
10 commercial systems.

11 I would just like to conclude, running out
12 of time here, if the proposal would reduce the
13 installed price of residential sprinklers, I would
14 be a strong proponent because it would increase the
15 use of residential sprinklers, and that's always
16 our charter. I don't see the evidence being
17 submitted so far. With 25 years of history of the
18 standards that we had, the 175 PSI is not a new
19 requirement. It's been the requirement ever since
20 sprinklers were put into NFPA 13D from its first
21 issuance.

22 The Technical Committee ballot -- the
23 result on the log shows the great favor for
24 supporting the position of the 175 PSI, and I just

1 remind you one more time. I thank you for your
2 time, and I speak against the motion.

3 MODERATOR NEWMAN: Thank you. I'm going to
4 recognize Microphone Number 3, please.

5 MR. CABRAL: Thank you, Mr. Chairman. I would
6 like to speak in favor of this motion to reject
7 Comment 13D-18. My name is Mike Cabral. I
8 represent REHAU, Incorporated.

9 The original proposal that was generated
10 by a task group which I served on, 13D, resulted in
11 CP-11, developing the original proposal. There was
12 a great deal of discussion during the ROP meeting
13 and concerns were addressed regarding the issues of
14 130 PSI and 120 degree pipe and were debated
15 specifically and extensively.

16 Passive purge flow-through systems
17 utilizing PEX A130, 120 degree F pipe and fittings
18 have been used widely and successfully across the
19 nation with no failures reported. AHJs have
20 accepted this approach as a method to meet the
21 interpretation of the definition of what a
22 multi-purpose system is as defined by 3.3.9.3 of
23 the 2007 edition of 13D.

24 And if I may, I would like to just quickly

1 read that definition. It's very vague. "A
2 multi-purpose piping system, a piping system
3 intended to serve both domestic and fire protection
4 needs." I would like to point out that there was
5 no mention of any fixtures in that definition, and
6 in the definition, there's no type of fixtures,
7 location of fixtures at all. Many authorities that
8 have jurisdiction have accepted just a combination
9 of a combined water supply service to meet the
10 intent of that section of the standard.

11 Redefining the term passive purge as a
12 type of stand-alone system was a very curious
13 request, and I really do not fully understand why
14 it was -- why it was brought up, but I didn't
15 object to it because I wanted to just kind of
16 cooperate. My main objection was to not lose the
17 opportunity to have PEX A pipe to be used in these
18 applications.

19 I would like to also point out that the
20 intent of passive purge has grown in its use across
21 the country as a method for fire sprinkler
22 contractors to install PEX piping in multi-purpose
23 or in single-family dwellings. The purpose for
24 this is, where jurisdictions allow them to do that,

1 the fire sprinkler contractor can freely install
2 his fire sprinkler system and then therefore leave
3 an outlet just for the plumber to make a connection
4 to the toilet. So we end up with a system that is
5 installed by a qualified fire sprinkler installer
6 and the plumbing system which is connected by a
7 qualified and licensed plumber.

8 Most -- one of the most difficult
9 conditions we have to face in this particular
10 market with multi-purpose is the jurisdictional
11 issues that we are faced with on a day-to-day basis
12 between whose work is whose work, between the
13 plumbers and the sprinkler contractors.

14 PEX pipe has been -- has a burst pressure
15 of 750 PSI at 73 degrees F. In addition, PEX pipe
16 has the ability to absorb pressure developed by a
17 water hammer. That's a test performed by
18 Underwriters Laboratories that registers the
19 increase and pressure against a rigid material,
20 steel pipe versus a PEX material. They flow water
21 at 32 feet per second and they then close --
22 abruptly close the ball valve creating a hammer.
23 Under those extreme conditions, under that
24 velocity, there's a 16 percent reduction in the

1 increase in pressure in the PEX pipe versus the
2 steel pipe.

3 MODERATOR NEWMAN: One minute, please.

4 MR. CABRAL: The resulting increase in the
5 thermal expansion would be a much slower process.
6 Because of the flexibility of the PEX pipe, we
7 really feel that the additional build-up of
8 pressure in the system to the thermal expansion is
9 really a minor issue. Thank you.

10 MODERATOR NEWMAN: Thank you. I will recognize
11 Microphone Number 6, please.

12 MR. DURST: Mike Durst. I am with FBC Building
13 Solutions, and I speak opposed to this motion. And
14 the reason, I was a fire inspector for 20 years and
15 state fire marshall for eight years after that, and
16 one thing that I didn't really care for is when
17 people came in and wanted to lower standards.

18 If we really think about our codes, nobody
19 ever comes in and says, I would like to build a
20 better building or I would like to build a better
21 sprinkler system. They always want the minimum
22 standards, and that's how everything we have is
23 designed at minimum standards. Now we want to
24 lower that standard even lower. I have a problem

1 with that.

2 The second thought is when I first seen
3 CPVC in '84 and came out as a fire inspector, the
4 first thing -- we had a little run-in with the
5 polybutylene. First thing, of course I said, Does
6 that stuff burn? Obviously they showed us the
7 record on there and it takes 60 percent oxygen,
8 60 for it to burn. When I look at the PEX pipe in
9 the same instance, it burns at 20 or 21 percent
10 which is the same as the oxygen in the air.

11 So we're putting out a product here that I
12 just don't have a whole lot of faith in. The
13 passive purge system may work, but then, again, if
14 you start putting in pressure-reducing valves,
15 you're going to have all kinds of problems because
16 of the maintenance with that kind of an
17 installation.

18 MODERATOR NEWMAN: Thank you. Microphone
19 Number 4.

20 MR. WEBB: Bill Webb, fire protection engineer.
21 In my over 45 years of experience in the industry,
22 I had been trained that fire protection was
23 supposed to be something special, higher standards.
24 If this issue -- I was on the sprinkler committee,

1 as a matter of fact, 13D, when the multi-purpose
2 systems was introduced. At the time I felt it was
3 the camel's nose in the tent which certainly seems
4 to be the case. And if these are plumbing systems,
5 then why don't we just call them plumbing systems.
6 Let them be identified in the code, in the building
7 code as plumbing systems, and NFPA get out of this
8 business of writing plumbing standards. Thank you.

9 MODERATOR NEWMAN: Thank you. Microphone
10 Number 3, please.

11 MR. RAY: Richard Ray, Cybor Fire Protection,
12 sprinkler contractor in the Chicago metropolitan
13 area and licensed fire protection engineer in
14 Illinois. I would like to speak to some of the
15 points that have been made.

16 I keep hearing about this lowering of the
17 standard. It was lowered when they allowed
18 multi-purpose systems. The standard has been
19 lowered. And the problem that you're going to see,
20 in Illinois, in order to install fire sprinkler
21 systems, you have to have a license; but if it's a
22 multi-purpose system, you don't need a license. So
23 what you may get is unqualified people installing
24 fire sprinkler systems. There's a reason they

1 require licenses.

2 So the standard's been lowered. I'm
3 sorry. That's my opinion.

4 Number two, Mr. Golinveaux's comment about
5 the elevated temperatures in attics; all we want
6 here is an option to use another product. That's
7 all it is. We're not saying all homes got to use
8 PEX. We want an option. That's all. So if there
9 is a concern about installing PEX in an attic in
10 Arizona where it gets 120 degrees, I would think
11 the contractor's choice would be not to use PEX in
12 that situation.

13 In regards to the product burning, I don't
14 remember which gentleman brought that up, be aware
15 that PEX just received its UL 1821 listing which
16 means it is now listed for installation under
17 smooth ceilings exposed. Exposed. So I don't run
18 UL tests, but I'm sure they're pretty tough.

19 Lastly, again, I've heard about people
20 don't know how much it affects the cost. In the
21 Chicago metropolitan area, we're very lucky. We
22 have 60, 60, 6-0, communities where if you build a
23 new single-family home, you will sprinkle it. I
24 know about the costs of these systems. We've been

1 installing them since the early '90s. And there is
2 a significant labor savings in using this product,
3 and the biggest complaint or perhaps the biggest
4 obstacle to installing sprinklers in single-family
5 homes, as were seen with the fighting of the RIC
6 adoption across the country, is cost. It reduces
7 the cost because it reduces my labor cost as a
8 contractor and it also will reduce the cost in the
9 marketplace by providing competition in the piping
10 and fitting industry. Thank you.

11 MODERATOR NEWMAN: For the record, would you
12 please confirm that you're either for or against
13 the motion?

14 MR. RAY: I'm sorry. I'm speaking in favor of
15 it.

16 MODERATOR NEWMAN: Thank you. Microphone 6,
17 please.

18 MR. OLAH: Good evening. My name is Andy Olah.
19 I'm Technical Director of TempRite, a division of
20 Lubrizol. We're makers of materials of CPVC --

21 MODERATOR NEWMAN: Are you for or against?

22 MR. OLAH: I am opposed to the motion.

23 MODERATOR NEWMAN: Thank you.

24 MR. OLAH: We're producers of materials for

1 CPVC and also we are a PEX producer. We produce
2 both materials.

3 Personally, I have been a member of North
4 American Standards Development for 20 years,
5 International Standards Development for over
6 15 years in both plumbing and fire protection. I
7 have been personally involved with the BlazeMaster
8 product line for over 20 years.

9 In addition, during our investigation of
10 BlazeMaster, we also investigated the performance
11 of PEX, not only performance requirements such as
12 pressure, but also full-scale fire performance
13 requirements such as utilized in fire protection.
14 Although our PEX product is one of the best
15 performing in the plumbing industry, we would not
16 consider it as a suitable product for fire
17 sprinkler applications. Current PEX products
18 cannot meet the performance requirements
19 established for fire sprinkler stand-alone systems.

20 These industry requirements for fire
21 protection have proven their soundness and
22 suitability over time, and that is why I am against
23 this motion. It's the responsibility of us
24 material producers, such as Lubrizol, and technical

1 directors, such as myself, to develop materials
2 that meet the performance requirements that have
3 been established. It's not our professional duty
4 to dilute or compromise those requirements. In
5 fact, we have programs currently in place
6 investigating enhancing the performance of our PEX
7 products that will, in fact, meet the fire
8 sprinkler standard requirements of 175 PSI.

9 Therefore, in all seriousness, and I know
10 it's late in the day, and with due respect, it's a
11 very serious consideration that's before us today.
12 I ask the committee not to dilute performance
13 requirements that have been proven to be sound and
14 functional just to meet the substandard performance
15 of a material; but, rather, hold to those
16 requirements and encourage the development of new
17 materials to meet those requirements.

18 MODERATOR NEWMAN: Thank you. Microphone
19 Number 5, please.

20 MR. BALLANCO: Julius Ballanco,
21 J. B. Engineering. I am in support of this motion.

22 The unfortunate thing is we have a
23 disconnect between the residential sprinkler
24 committee and the plumbing industry. What you have

1 heard already is that the plumbing codes limit the
2 pressure to plumbing fixtures and to plumbing
3 systems to 80 PSI. Actually, we go a lot further
4 than that. We limit the pressure to 80 PSI and
5 also require to address the situation when there is
6 a backflow preventer check valve or
7 pressure-reducing valve that prevents the pressure
8 from being dissipated into main, we require
9 expansion control because we have hot water
10 systems. And we design those hot water systems.
11 We base those numbers on anywhere from 140 degrees
12 to 160 degrees. So we design expansion
13 compensation for that such that the plumbing system
14 never exceeds 80 PSI. And that is a fact.

15 So here we're looking at a system that's
16 tied to plumbing that can never exceed 80 PSI, and
17 we're asking the pipe to be 175 PSI. Now, quite
18 frankly, that doesn't make too much sense to me.

19 Currently, the code allows a multi-purpose
20 piping system to be rated for the 130 PSI at
21 120 degrees Fahrenheit whether you have one fixture
22 or 12 fixtures connected to it in the plumbing
23 system. Now we're saying if you only connect one,
24 we want the pipe to be rated higher. So we're not

1 lowering the standard. We're actually increasing
2 the standard here.

3 The other thing that has not been brought
4 up is that all plumbing pipe must meet the plumbing
5 material requirements. Every potable water piping
6 material must meet a rating of 180 degrees at
7 100 PSI. So now we have this material that's rated
8 for 180 degrees at 100 PSI, yet the system is
9 limited to 180 PSI. So the concern for 150 degrees
10 in the ceiling or in the attic is addressed by the
11 plumbing code requirements because the material has
12 to meet that. In addition, the material has to
13 meet NSF 61.

14 So I would ask you to look at this from
15 the perspective of common sense. I have got a home
16 and I have got pipe in the ceiling, and let's call
17 that material PEX, and it's serving the plumbing
18 system, all 12 plumbing fixtures in the home, and
19 it's serving the sprinkler systems. That's
20 permitted. That will continue to be permitted.
21 And it's PEX. Now I'm going to unconnect 11 of
22 those plumbing fixtures and only have one connected
23 and, all of a sudden, I can't put the PEX in. Now
24 does that make sense to you? Because, to me, it

1 doesn't.

2 I see no reason to change the material
3 just because I cut out the number of plumbing
4 fixtures connected to my sprinkler system. So I'd
5 encourage you to approve this motion. Thank you.

6 MODERATOR NEWMAN: Thank you. Microphone 4,
7 please.

8 MR. HIRSCHLER: Marcelo Hirschler, GBH
9 International. I don't understand anything about
10 pipe pressure, but I understand something about
11 fire testing. I was one of the original developers
12 of UL 1887 which is the test -- fire test for
13 sprinkler pipe, and I know that CPVC is a material
14 that passes and the polyethylene is a material that
15 does not pass. PEX is polyethylene.

16 I run heat release tests. When you run
17 heat release tests, CPVC gives you a fire
18 performance of about 20 or 30 kilowatts per square
19 meter while polyethylene gives you about
20 1000 kilowatts per square meter. We have a massive
21 difference of fire performance between CPVC and
22 polyethylene.

23 I urge you not to allow and to oppose the
24 motion. Thank you.

1 MODERATOR NEWMAN: Microphone Number 3, please.

2 MR. BITTENBENDER: My name is John Bittenbender
3 with REHAU, Incorporated, and I'm speaking in favor
4 of the motion.

5 One thing we have to remember here is that
6 we keep coming back to PEX pipe, but PEX pipe has
7 been meeting the UL requirements, UL 1821, the same
8 requirements that CPVC has met for the past ten
9 years. There's been two manufacturers with
10 UL-listed products that have been installed in 13D
11 fire sprinkler systems very successfully for the
12 past ten years without any issues. So it's a
13 proven product.

14 So what we're talking about here today as
15 far as rejecting this comment is just to decide on
16 how many plumbing fixtures need to be connected to
17 this PEX system or this multi-purpose system. So
18 the debate on PEX shouldn't be even discussed here
19 because it's a proven product and it meets all of
20 the requirements from UL and the NFPA 13D standard,
21 and it's just a matter of accepting this proposal
22 to revert back to the proposal state where
23 basically a passive purge system was defined as a
24 plumbing fire sprinkler system where 130 PSI

1 application would be used.

2 MODERATOR NEWMAN: Thank you. Microphone
3 Number 6, please.

4 MR. OLAH: Yes. Andy Olah, Lubrizol, still
5 opposed to the motion.

6 Again, I feel my distinguished colleague
7 previously at Microphone 5 puts this in a very
8 clear matter in which he defines a system having
9 something like 17 or 18 fixtures as having a low
10 pressure rating. Well, of course, that's a
11 plumbing system. And then you take all those
12 fixtures off except the one and keep the fire
13 protection fixtures in place. Well, you have then
14 taken the plumbing system and made it a fire
15 protection system. And that's where I call for a
16 very sharp demarkation between those two systems
17 that, as it goes to a fire protection system, by
18 all means, performance standards that have been in
19 place for decades and have shown the truth of time
20 should be maintained and held in place, and that's
21 simply the question being called today.

22 MODERATOR NEWMAN: Thank you. Microphone
23 Number 4.

24 MR. BLACK: Thank you, Mr. Presiding officer.

1 Art Black, Carmel Fire Protection Associates. I
2 call the question.

3 A VOICE: Second.

4 MODERATOR NEWMAN: We have a motion to call the
5 question. We will now proceed to an immediate
6 vote. All those in favor of the motion, please
7 raise your hands. All those opposed.

8 The motion passes.

9 We will now proceed to a vote on Motion
10 Sequence 13D-2 which is a motion to reject
11 Comment 13D-18. All those in favor, please raise
12 your hands. All those opposed. I'm going to call
13 for a standing count on this one. All those in
14 favor please rise. Thank you, please be seated.
15 All those opposed, please rise. You may be seated.
16 Thank you.

17 The motion passes, 56 to 44 with some
18 abstentions. Thank you.

19 As previously announced, we will now
20 proceed to Motion Sequence 13D-1. I just want to
21 point out that this is a group amending motion.
22 There were actually two NITMAMs made, and they will
23 be basically placed on the floor for debate and
24 vote as a single up or down motion.

1 Microphone Number 1, please.

2 MR. BITTENBENDER: My name is
3 Jonathan Bittenbender, I represent
4 REHAU, Incorporated. I move to accept Proposal
5 13D-27 and 13D-30.

6 A VOICE: Second.

7 MODERATOR NEWMAN: Thank you. Mr. Bittenbender
8 is the authorized maker, and I did hear a second.
9 Please proceed, Mr. Bittenbender.

10 MR. BITTENBENDER: Basically the objective of
11 this motion to accept these proposals is to allow
12 nonmetallic piping systems not equipped with the
13 fire department connection rated at 130 PSI to be
14 equipped with a UL-listed pressure relief valve set
15 at a maximum of 130 PSI. This 130 PSI and
16 120 degree F rating has already been established
17 and used in the NFPA 13D standard as already
18 discussed for nearly ten years now.

19 So basically this motion to accept the
20 proposal is to provide another means of controlling
21 the conditions within the pipe which are even more
22 reliable than the existing prescribed methods.

23 Currently, the NFPA 13D standard
24 establishes a means to use nonmetallic piping

1 systems rated at 130 PSI when connected to a
2 domestic plumbing fixture; and the intent of this
3 plumbing fixture is to relieve any excess pressure
4 in the system due to thermal expansion, for
5 example. However, pressure relief from thermal
6 expansion can also be achieved by a UL-listed
7 pressure relief valve.

8 There already exists UL-listed pressure
9 relief valves that can be set at 130 PSI, and these
10 devices can provide the necessary pressure relief
11 in place of a domestic plumbing fixture.

12 Cross-linked polyethylene pipe has been
13 recognized and used within the NFPA 13D standard
14 for ten years at this rating of 130 PSI and 120 F,
15 and basically this rating is a long-term
16 temperature pressure rating based on a 2-to-1
17 safety factor; and also, in the UL 1821, it's based
18 on the short-term temperature pressure situation of
19 5-to-1 safety factor.

20 Also in addition to this, Hughes
21 Associates, which is a nationally recognized fire
22 protection engineering firm, has performed a heat
23 transfer study based on an original study developed
24 by a task group of the NFPA 13 committee when

1 nonmetallic pipe was first being considered. REHAU
2 asked Hughes to expand on this study with
3 consideration for a temperature rating of
4 120 degrees F on the PEX pipe.

5 The result of this analysis showed that
6 even under extreme conditions of 110 degrees F in
7 the room and 165 degrees F in an attic, it showed
8 that the pipe is exposed to a maximum of
9 111 degrees with a conservative covering of
10 3 inches of insulation.

11 Therefore, PEX is a demonstrated product
12 with proof in the real world experience that can
13 handle these types of temperature pressure
14 conditions defined in NFPA 13D standard for
15 residential fire sprinkler systems.

16 The intent of this change to the standard
17 is to allow for another means of maintaining the
18 pressure in the sprinkler system. Making this
19 change to the NFPA 13D standard will allow the
20 licensed fire sprinkler contractor another option
21 in installing 130 PSI nonmetallic piping systems
22 for residential sprinkler applications without
23 solely relying on the domestic plumbing demand.

24 The fire sprinkler contractor is already

1 familiar with the pressure relief valves and these
2 devices are commonly installed on NFPA 13R and 13
3 systems. In fact, the pressure relief valve, as we
4 know from before, is already a requirement of
5 NFPA 13 for gridded systems.

6 The other issue is that previously the
7 case has been made that locating the discharge of a
8 pressure relief valve can be problematic. However,
9 every residential home has a hot water heater with
10 a pressure relief valve already installed. The
11 discharge of this valve would be an appropriate
12 location for the discharge of the fire protection
13 relief valve. Additional guidance can be provided
14 to the fire sprinkler contractor on where to
15 discharge this relief valve as per the
16 International Residential Code in
17 Section P2803.6.1. Therefore, locating the
18 discharge pipe for the pressure relief valve on a
19 fire sprinkler system would not be a problem for
20 the fire sprinkler contractor.

21 And it also should be noted that there are
22 numerous manufacturers --

23 MODERATOR NEWMAN: One minute.

24 MR. BITTENBENDER: -- of prefabricated riser

1 assemblies and test drain assemblies for NFPA 13D
2 that include a pressure relief valve. So we know
3 it's already being used.

4 In summary, allowing the use of a pressure
5 relief valve in place of a domestic plumbing
6 fixture will allow the fire sprinkler contractor to
7 install a completely listed sprinkler system
8 compliant with the standard and will provide
9 further options and materials and installation
10 methods for NFPA 13D applications for the sprinkler
11 contractor.

12 MODERATOR NEWMAN: Thank you, Mr. Bittenbender.
13 I just want to reiterate that this certified
14 amending motion will result in accepting Proposal
15 13D-27 and 13D-30. Any comments, Mr. Budnick?

16 MR. BUDNICK: Thank you, Mr. Chairman. I would
17 ask Maurice Pilette to respond to this.

18 MODERATOR NEWMAN: Microphone 4, please.

19 MR. PILETTE: Maurice Pilette, chair of the
20 Residential Committee. The Chair stands behind the
21 action of the committee and note for information,
22 the committee rejected Proposal 27 21 to 2 and it
23 rejected Proposal 13D-30 23 versus 0. So there was
24 ample time. There was a pre-ROP on this issue.

1 The committee met on the pre-ROP. Had an ROP. Had
2 a task group. Had the ROC. So the committee has
3 spoken on this issue.

4 MODERATOR NEWMAN: Thank you. Microphone
5 Number 2, please.

6 MR. GOLINVEAUX: Thank you. My name is
7 James Golinveaux. I represent Tyco Fire
8 Suppression & Building Products. I will not repeat
9 my last speech on the PEX 130 -- I'm speaking
10 against the motion.

11 I won't repeat what I had said before, but
12 I want to clarify the difference of the previous
13 motion and what we're talking about now. The
14 previous motion was a passive purge system that had
15 a toilet fixture, a plumbing fixture installed on
16 the end of a stand-alone system. This proposal is
17 just for the generic piping and fitting standard
18 for NFPA 13D. So this would apply to all systems.
19 This would be the stand-alone system that may or
20 may not be attached to the domestic
21 pressure-reducing valve.

22 So the arguments of having a plumbing
23 fixture are not applicable here in this debate for
24 this issue. So there's no guarantee of any

1 pressure reduction or plumbing fixture pressure
2 limitations because it can be a separate system.
3 So this is completely dependent on this pressure
4 relief valve to provide this lower grade of
5 pressure, the 130 PSI, on a system again that
6 doesn't have the robust maintenance standard
7 required and very difficult to enforce.

8 So I am very concerned that this broadens
9 it to all system types. And we heard a lot of
10 argument and I'm afraid this got labeled into a PEX
11 versus CPVC. That's not the proposal. The
12 proposal is to change all piping materials to
13 130 degrees at 120 degree F -- 130 PSI at 120 F.
14 It doesn't have to be PEX. It doesn't have to be
15 CPVC. It could be fiberglass. It could be any
16 material that would meet that pressure temperature
17 classification.

18 So this is a broad application to all
19 systems in 13D, not the passive purge. Thank you.

20 MODERATOR NEWMAN: Thank you. Number 3,
21 please.

22 MR. RAY: Richard Ray, Cybor Fire Protection,
23 professional fire protection engineer in the
24 Chicago area. I am speaking in favor of the

1 motion.

2 I just heard somebody saying we're going
3 to rely on a relief valve. A couple hours ago, we
4 just relied on relief valves in NFPA 13, commercial
5 systems, for tree systems and loops when previously
6 it was just on grids. So it's kind of like we want
7 them sometimes but sometimes we don't.

8 So if it's a UL-listed relief valve, I
9 don't know why the argument would be it's okay on a
10 commercial system, but not on a single-family home.
11 That's my first point.

12 Number two, yes, this is a different type
13 of system. This is a system where we're going to
14 rely on a UL-listed relief valve to relieve any
15 excess pressure that may build up. Again, if this
16 is going to be a home in Texas or Phoenix, maybe
17 you don't use that. Maybe you don't run the pipe
18 in the attic. It's a choice for the contractor.
19 Choices, lower prices, provides competition,
20 provides alternatives, not just it's the only game
21 in town and you got to use it. It provides
22 competition and it reduces costs. And I will
23 repeat myself, the biggest opposition we are facing
24 across this country with the adoption of 13D is

1 cost.

2 We just accepted a passive purge system
3 where we're going to rely on a toilet to relieve
4 the pressure. I think about vacation homes that
5 people don't go all the time maybe. So the
6 alternative, a UL-listed pressure relief valve.
7 Thank you.

8 MODERATOR NEWMAN: Thank you. Microphone
9 Number 4, please.

10 MR. WEBB: I am Bill Webb, fire protection
11 engineer, and I'm speaking opposed to the motion.

12 I mentioned -- even though I have come
13 back recently from Dubai, I did not bring the
14 camel, but it appears somebody else did. I
15 mentioned the camel's nose, bringing its nose in
16 the tent. Well, for sure, it has arrived now. I
17 am opposed to this motion of lowering the standard
18 for all systems.

19 MODERATOR NEWMAN: Thank you. Microphone
20 Number 1, please.

21 MR. CABRAL: Thank you, Mr. Chairman. I would
22 like to say that we're in essence not reducing the
23 standard. The standard has already been
24 established.

1 MODERATOR NEWMAN: Are you speaking for or
2 against the motion?

3 MR. CABRAL: I am speaking for the motion.

4 MODERATOR NEWMAN: I'm sorry. Could you please
5 state your name again and affiliation?

6 MR. CABRAL: Mike Cabral, REHAU, Incorporated.
7 The standard has already been established within
8 NFPA 13D at 130 PSI and 120 degrees F. That's an
9 existing standard. It has been -- we have been
10 relegated into the multi-purpose segment of the
11 market primarily because of that lower pressure
12 utilizing a plumbing fixture as a method to relieve
13 any extra pressure that would be built up due to
14 thermal expansion.

15 With the previous motion that was just
16 passed, among the items that no longer would not
17 require to have a UL listing, they added the
18 inclusion of a pressure-reducing valve to that
19 section. So we really already have established
20 this standard. It's been in the standard for a
21 number of years.

22 What we're really doing is just again
23 changing the method in which we control the
24 conditions that are in the pipe, in the standard.

1 If it's acceptable for a multi-purpose system with
2 a toilet working as a relief valve, wouldn't a
3 UL-listed pressure relief valve also be an
4 acceptable method of regulating the pressure?

5 I would also like to point out Section 1.4
6 of NFPA 13D which refers to the equivalency:
7 Nothing in this standard is intended to restrict
8 new technologies or alternative arrangements
9 provided the level of safety prescribed by the
10 standard is not reduced.

11 I submit to this body that we're not
12 reducing the level of the standard. We're
13 maintaining a standard that has been established
14 for over a ten-year period, but merely providing an
15 additional method to monitor the conditions and
16 relieve any excess pressure build-up due to thermal
17 expansion. Thank you.

18 MODERATOR NEWMAN: Thank you. Microphone 6,
19 please.

20 MR. OLAH: Andy Olah, Lubrizol. I am against
21 the motion.

22 I'm not going to repeat everything I have
23 read before, but I do want to warn against the
24 evolution of this, and as I am seeing it, I do

1 wanted to go on record against it. Ten years ago,
2 we went to 130 PSI multi-purpose system combined
3 with plumbing. Ten minutes ago, we went to a
4 passive purge system with one fixture at 130 PSI.
5 Right now, you're going to change something the
6 industry has held as an icon for decades, and
7 that's the 175 PSI stand-alone system.

8 I can only take a few minutes to warn
9 against the slippery slope you are sliding into and
10 what type of information or indication this may
11 reflect to others out there wondering is there a
12 method of compromising fire protection systems.

13 Looking at the evolution as I defined it,
14 please keep in mind as you vote what slippery slope
15 we are dropping ourselves into.

16 MODERATOR NEWMAN: Thank you. Seeing no
17 further comment, we will proceed to a vote. The
18 vote is on Motion 13D-1, and that's to accept
19 Proposal 13D-27 and 13D-30. All in favor, please
20 raise your hands. All opposed.

21 The motion fails.

22 We will now proceed to Motion Sequence
23 13D-3. Please note that Motion 13D-3 and 13D-4 are
24 related motions. Once any of the motions are made

1 and seconded, the others will no longer be in order
2 and the single motion on the floor will serve as
3 the representative motion for purposes of debate
4 and vote on the proposed action. All persons
5 wishing to participate in debate on the proposed
6 action should therefore do so during the
7 presentation of the representative motion.

8 Do we see --

9 A VOICE: Point of order.

10 MODERATOR NEWMAN: Point of order at
11 Microphone 5.

12 MR. ISMAN: Ken Isman with the National Fire
13 Sprinkler Association. I don't think we need to
14 move forward with 13D-3 or 13D-4 since 13D-2
15 passed.

16 MODERATOR NEWMAN: Okay. Thank you. Thanks,
17 Mr. Isman. Okay. We will then move on to Motion
18 Sequence 13D-5. Microphone 5, please.

19 MR. ISMAN: Thank you, Mr. Chairman. Ken Isman
20 with the National Fire Sprinkler Association. I
21 want to thank everyone for all their patience today
22 with all the motions we've made. You have been a
23 wonderful group to work with.

24 For my last motion of the day, I would

1 like to move that we accept Comment 13D-27 which
2 appears on Page 13D-14 of the ROC.

3 MODERATOR NEWMAN: Mr. Isman is the authorized
4 maker of the motion. Do I hear a second?

5 A VOICE: Second.

6 MODERATOR NEWMAN: Please proceed.

7 MR. ISMAN: Thank you. This comment will add a
8 local water flow alarm to a NFPA 13D sprinkler
9 system. That's it. Just a local alarm. We're not
10 talking about central station monitoring here.
11 We're not talking about sending the signal to some
12 constantly attended location. We're not talking
13 about supervised alarm systems here. We're just
14 talking about a flow switch and a bell which will
15 accomplish a great deal at a very minimal cost.

16 We believe that people need to know when
17 water is flowing in a sprinkler system. We know
18 from experience that people do not want sprinkler
19 systems in their homes without water flow alarms.
20 People are concerned about the water damage, and
21 the water damage issue is so important to them that
22 we can't even go into communities and pass
23 legislation for sprinklers mandatory in one- or
24 two-family dwellings until we deal with that issue

1 of what's going to happen with water damage. How
2 is it going -- how are we going to minimize the
3 water damage issue?

4 So we need the water flow alarms on these
5 systems. We know that an overwhelming majority of
6 communities that adopt requirements for sprinklers
7 in one- and two-family homes require water flow
8 alarms. These communities go above and beyond
9 NFPA 13D so often that the standard is out of touch
10 with the overwhelming majority of its users.

11 The issue is actually accepted by the
12 committee at the ROC meeting, but it failed
13 committee ballot by one vote; and, therefore, with
14 a majority of the Technical Committee agreeing with
15 us, we bring the motion to you and ask that you
16 vote in favor of the requirement for water flow
17 alarms.

18 MODERATOR NEWMAN: Thank you, Mr. Isman. Any
19 comments, Mr. Budnick?

20 MR. BUDNICK: Again, as this is not a
21 correlation issue, I would ask Maurice to speak to
22 this.

23 MODERATOR NEWMAN: Microphone 4.

24 MR. PILETTE: Maurice Pilette, Chair of the

1 Residential Committee. The committee has debated
2 or addressed or talked about this issue for ten
3 cycles, 35 years. This standard is going into its
4 35th year. It has an extraordinary track record of
5 using a particular philosophy of being low-cost,
6 and it has kept it at premises for, in effect, ten
7 cycles.

8 So as the chair of the committee, I stand
9 by the committee action of keeping to that
10 philosophy, and that's all there is to say.

11 MODERATOR NEWMAN: Thank you. Microphone
12 Number 4, please.

13 MR. SHAPIRO: Jeff Shapiro. On this issue, I
14 am speaking on behalf of the IRC Fire Sprinkler
15 Coalition. I serve as Executive Director of that
16 organization; and, in that role, I am involved in
17 advocating the adoption of the International
18 Residential Code Fire Sprinkler Requirements all
19 across the United States.

20 Currently, we have regulatory --

21 MODERATOR NEWMAN: Excuse me. Are you for or
22 against?

23 MR. SHAPIRO: I'm speaking against the motion.
24 I apologize.

1 MODERATOR NEWMAN: Thank you.

2 MR. SHAPIRO: Currently, we have either
3 regulatory or legislative activity dealing with
4 adoption of the IRC at the state level in 25 of the
5 50 states. I'm very sorry to report that in Texas
6 last week, the state legislature took it upon
7 themselves to pass a law that does not allow any
8 city in Texas the authority to adopt a requirement
9 for fire sprinklers in new homes.

10 The number one issue cited over and over
11 again in the press and by the legislature was cost.
12 It's not just the cost of a flow switch. It's not
13 just the cost of a bell. It's the cost of
14 installing that equipment. It's the cost of a
15 circuit breaker. It's the cost of the electrician
16 running the wiring. It's the cost of a transformer
17 to run that bell. By the time you're done putting
18 in what looks like something which might cost under
19 \$100, you're probably adding several hundred
20 dollars to the cost of a system.

21 But the bottom line with respect to my
22 personal opinion and the position of our
23 organization with regard to advocating residential
24 sprinklers gets back to the fundamental philosophy

1 of NFPA 13D. While it provides for property
2 protection, it is primarily a life safety standard.
3 And I tell you and I ask you, how is it that you
4 gain any life safety by putting a bell on a system
5 to notify water flow when you already have smoke
6 alarms and the bell can go outside anyway? It is
7 not a life safety device; and, for that reason
8 alone, it does not belong in NFPA 13D.

9 The final thing which I will mention which
10 is somewhat political but, nevertheless, you need
11 to know, the International Code Council adopted a
12 section in the plumbing provisions, P2904, which
13 currently parallels NFPA 13D. If you do not -- or
14 if you were to pass this motion and require a water
15 flow alarm under NFPA 13D, you will drive people to
16 use P2904 which doesn't require water flow alarm.
17 So as a matter of practicality, what you're doing
18 is you are being divisive between these documents
19 which were designed to be compatible and
20 consistent.

21 So there's lots of reasons that I would
22 ask you to reject this motion, but it is very much
23 contrary to our mission of getting fire sprinklers
24 in new homes and doing so in a cost-effective

1 manner.

2 MODERATOR NEWMAN: Thank you. Microphone
3 Number 3, please.

4 MR. ROYSE: I'm David Royse with Potter
5 Electric Signal Company. I'm speaking in favor of
6 the motion on the floor.

7 When this matter was discussed by the
8 committee last fall, they voted in favor of
9 requiring local water flow alarms. But when the
10 ballots were collected, the proposal was rejected.
11 At the ROP meeting prior to that meeting, the vote
12 was 15 in favor versus 8 negative. So it failed
13 because it didn't reach the two-thirds majority by
14 a single vote. Well, obviously, the committee has
15 struggled with this issue over the years.

16 A survey by contractors that actively
17 pursue 13D work revealed that water flow alarms are
18 installed in over 90 percent of all 13D systems
19 whether or not they're required. It's simply good
20 fire protection to add this feature.

21 Regarding cost? Well, the cost to install
22 a water flow alarm is minimal already, but keep in
23 mind that we're talking about a substantial
24 increase in the number of systems installed in

1 residential homes. As those numbers increase, like
2 many things, the prices will fall. There will be
3 more competition. Technology will change, and
4 we'll see adjustments. And we've already seen
5 movement on this. We've already discussed
6 different approaches today. As more systems are
7 installed, this will accelerate.

8 The bottom line is why publish a document
9 that doesn't reflect what's already being done in
10 the industry today? I urge you to support the
11 motion to require local water flow alarms in order
12 to keep the document relevant.

13 MODERATOR NEWMAN: Thank you. Microphone
14 Number 4, please.

15 MR. LEYTON: My name is Steve Leyton,
16 Protection Design and Consulting, speaking on my
17 own behalf, but I want it known that I'm an
18 alternate member of the Residential Sprinkler
19 Technical Committee and was in the room during the
20 discussions of this issue.

21 MODERATOR NEWMAN: Excuse me, for or against?

22 MR. LEYTON: I speak against the motion. Thank
23 you.

24 To the issue of cost, if we were to try

1 and objectively establish what is low or moderate
2 cost, I think the discussion could go on endlessly
3 without resolution. But if we look at it
4 comparatively and we say that the cost of a flow
5 switch and bell installed -- and I have done this
6 comparison at street pricing in Southern
7 California -- that with an hour or two of labor
8 from the combined forces of the sprinkler and the
9 electrical crews and the street prices of the flow
10 switch, the backing box and the bell, the installed
11 price is 320 to \$350, direct cost before it's
12 marked up by the home builder, other layers between
13 the buyer and the installation.

14 If we accept NFPA Research Foundation's
15 estimate of \$1.61 per sprinkler square foot of a
16 2,000 square foot sprinkler premises, that
17 represents more than 10 percent of the cost.
18 10 percent is not an insignificant number. It's a
19 measurable cost impact.

20 And I hark back to Mr. Shapiro's words
21 about concerns nationwide in the home building
22 community about cost and all of us having
23 experience for the last 20 years the objections of
24 that community based on solely on cost.

1 Additionally, in the making of the motion,
2 Mr. Isman notes that there are concerns in the
3 public community regarding water damage. A water
4 flow switch and the attendant alarm are not
5 intended to be a warning device. If we are
6 concerned about warning homeowners of water damage,
7 then there would be a leak detector on every
8 washing machine and every laundry set that's built
9 into new homes. But so far the plumbing code
10 hasn't required that.

11 I don't believe it's the function a
12 UL-listed water flow alarm to notify homeowners or
13 their neighbors or any other party of potential
14 water damage in the domicile.

15 I would add lastly that this is a local
16 issue and many jurisdictional authorities have
17 stringent requirements for water flow alarms with
18 closed door audibility testing between bedrooms and
19 the location of the signaling device or devices.
20 Some jurisdictions go so far as to require interior
21 notification in the same way that a NFPA 72
22 commercial system would be designed.

23 But there are jurisdictional authorities
24 in this country, and I have spoken with several of

1 them, at least one of which I know for a fact is
2 represented in this room, that do not allow audible
3 alarms under any circumstances unless they are
4 monitored because of water supplies that may surge
5 and cause false alarms or other instigations of
6 false alarms that roll fire trucks at great public
7 expense.

8 So we have to allow I think local
9 jurisdictions ultimately to make this decision for
10 and against. I concur with the comments about the
11 history of the standard absent the alarm being a
12 successful one, and its track records speaks for
13 itself, and I encourage that we vote against the
14 amending motion.

15 MODERATOR NEWMAN: Thank you. Microphone
16 Number 5, please.

17 MR. DURST: Mike Durst, FBC Building Solutions.
18 I'd just like to ask one question of this group
19 here. Would anybody in here install a fire
20 sprinkler system without an alarm in your own home?
21 I don't think you would. We're in the business.
22 We know what we're doing.

23 MODERATOR NEWMAN: For the record, are you
24 speaking for or against?

1 MR. DURST: I am speaking for it.

2 MODERATOR NEWMAN: Thank you. Number 6,
3 please.

4 MR. HIRSCHLER: Marcelo Hirschler, GBH
5 International. I call the question.

6 MODERATOR NEWMAN: We have a motion to call the
7 question. We'll proceed to a vote on the motion.
8 All those in favor of calling the question, please
9 raise your hand. All those opposed.

10 The motion passes.

11 We will now proceed to a vote on Motion
12 Sequence 13D-5 which is a motion to accept
13 Comment 13D-27. All those in favor, please raise
14 your hands. All those opposed.

15 I'm going to do one more standing count.
16 Thank you. That one is a little close. All those
17 in favor, please rise. Please be seated. All
18 those opposed, please rise. Please be seated.
19 Thank you.

20 The motion fails, 56 to 45. Motion fails
21 56 to 45 with some abstentions.

22 Is there any further discussion on 13D?
23 Seeing none, I would like to thank Ed Budnick and
24 the rest of his committees for all the work that

1 was done on 13 and 13D. Thank you very much.

2 This officially concludes this portion of
3 the 2009 Annual Association Technical Meeting.
4 This Association Technical Meeting will reconvene
5 here tomorrow, Thursday, June 11, at 8 a.m.

6 I want to thank you for your
7 participation, interest and support, and I now
8 declare this portion of the meeting officially
9 closed. Thank you, and good evening.

10 (Off the record at 7:03 p.m.)
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1 STATE OF ILLINOIS)
2) SS:
3 COUNTY OF C O O K)
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5 ANNA M. MORALES, being first duly sworn,
6 On oath says that she is a court reporter doing
7 business in the State of Illinois; and that she
8 reported in shorthand the proceedings of said
9 meeting, and that the foregoing is a true and
10 correct transcript of her shorthand notes so taken
11 as aforesaid, and contains the proceedings given at
12 said meeting.

13 

14 _____
15 Certified Shorthand Reporter
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