

1 Batterymarch Park, Quincy, MA 02169-7471 USA
Phone: +1 (617) 770-3000 Fax: +1 (617) 770-0700 www.nfpa.org

MEMORANDUM

TO: NFPA Technical Committee on Sprinkler System Installation Criteria

FROM: Jeanne Moreau

DATE: July 15, 2010

SUBJ: NFPA 13 Proposed TIA No. 1000 **FINAL TC BALLOT RESULTS**

According to 5.4 in the NFPA Regs, the final results show this TIA **HAS NOT** achieved the $\frac{3}{4}$ majority vote needed on Question 1 (**Technical Merit**) and **HAS** on Question 2 (**Emergency Nature**).

30 Eligible to Vote

7 Not Returned (P. Brock, A. Marburger, R. McPhee, D. Mowrer, J. Patel, L. Slocum, C. Studer)

Technical Merit:

1 Abstentions (W. Smith)

12 Agree (G. Laverick w/comment)

10 Disagree (C. Bilbo, D. Dornbos, R. Duke, L. Keeping, K. Linder, T. Miller, P. Schwab, L. Swantek, L. Underwood, T. Victor)

Emergency Nature:

1 Abstentions (W. Smith)

19 Agree

3 Disagree (D. Dornbos, T. Miller, L. Underwood)

There are two criteria necessary to pass ballot [(1) affirmative $\frac{3}{4}$ vote and (2) simple majority].

(1) The number of affirmative votes needed for the report to be published is **17**.

(30 eligible to vote - 7 not returned - 1 abstentions = $22 \times 0.75 = 16.5$)

(2) In all cases, an affirmative vote of at least a simple majority of the total membership eligible to vote is required. This is the calculation for simple majority:

$[30 \text{ eligible} \div 2 = 15 + 1 = \mathbf{(16)}]$

Final ballot comments are attached for your review. Ballots received from alternate members are not included, unless the ballot from the principal member was not received.

Attachments: Ballots

Moreau-Correia, Jeanne

From: C Bilbo - Fire Sprinkler Academy [cecil@sprinkleracademy.com]
Sent: Wednesday, July 14, 2010 6:06 PM
To: Moreau-Correia, Jeanne
Subject: RE: NFPA 13 Proposed TIA 1000 - Due Friday, July 9, 2010

Hi Jeanne,

I would vote affirmative on this being emergency in nature.

Thanks for the follow up,

Cecil

From: Moreau-Correia, Jeanne [mailto:jmoreau@NFPA.org]
Sent: Wednesday, July 14, 2010 1:42 PM
To: C Bilbo - Fire Sprinkler Academy
Subject: RE: NFPA 13 Proposed TIA 1000 - Due Friday, July 9, 2010
Importance: High

Cecil,

Please advise on your vote for Emergency Nature.

Thank you,
Jeanne

From: C Bilbo - Fire Sprinkler Academy [mailto:cecil@sprinkleracademy.com]
Sent: Monday, July 12, 2010 12:23 PM
To: Moreau-Correia, Jeanne
Subject: RE: NFPA 13 Proposed TIA 1000 - Due Friday, July 9, 2010

If it is not too late, I would like my vote to be in the negative on this issue.

Comment would be: "I believe the testing is not complete enough for such a drastic measure."

Cecil Bilbo

From: Moreau-Correia, Jeanne [mailto:jmoreau@NFPA.org]
Sent: Friday, July 02, 2010 11:37 AM
To: Walker, Nancy; Coughlin, Ann; Moreau-Correia, Jeanne
Subject: NFPA 13 Proposed TIA 1000 - Due Friday, July 9, 2010

To: The Technical Committee on Sprinkler System Installation Criteria

Dear Committee Members:

Attached is the **NFPA 13 TIA 1000** ballot materials. The due date for return of the ballots is **Friday, July 9, 2010**. Please fax your ballots to 617-984-7110 or email to jmoreaucorreia@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA to add section 7.6.1.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

The need to curtail use of ALL antifreeze solutions within dwelling unit portions of sprinkler systems is not supported by the limited testing described in reports accompanying the TIA. The Executive Summary included in the support documents states that large-scale ignition of the antifreeze solutions did not occur in any tests using a 50% solution. Consequently, I believe measures proposed in TIA 998 are a sufficient and more appropriate response to safety concerns and knowledge gaps recently acknowledged.

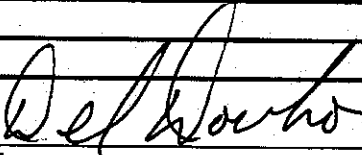
Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

See Explanation of Vote



Signature

Del Dornbos
Name (Please Print)

July 8, 2010
Date

Please return the ballot on or before **Friday, July 9, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreaucorreia@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA to add section 7.6.1.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

PROHIBITING ALL USE OF ANTIFREEZE IS
IMPRACTICAL.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

AGREE _____ **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Robert E Duke

Signature

ROBERT E. DUKE

Name (Please Print)

7/9/10

Date

Please return the ballot on or before **Friday, July 9, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreaucorreia@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the TECHNICAL MERITS of the Proposed TIA to add section 7.6.1.

_____ AGREE DISAGREE* _____ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

SEE ATTACHED SHEET

Question 2: I agree that the subject is of an EMERGENCY NATURE.

AGREE _____ DISAGREE* _____ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

SEE ATTACHED SHEET

L. Keeping
Signature

LARRY KEEPING
Name (Please Print)

7 July 2010
Date

Please return the ballot on or before **Friday, July 9, 2010.**

PLEASE RETURN TO:
Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreaucorreia@nfpa.org

NFPA 13
Ballot for TC on Sprinkler System Installation Criteria

Proposed Tentative Interim Amendment Log No. 1000

Regarding this issue, I Disagree with the Technical Merits of the proposed TIA 1000.

Comment on Disagreement:

Based on my reading of the information package that came as part of the Ballot materials, it appears that 50% / 50% antifreeze solutions perform almost as well as water does, so I believe that this mixture will give us a viable mechanism to sprinkler dwelling units in freezing environments without undue risk. Therefore the control of the A/F solution proposed by the corresponding TIA 998 seems a more reasonable approach. A total prohibition of antifreeze within dwelling units should not be necessary.

I would also note that in the testing there were instances (ie. tests no. 1, 3 & 5) when higher concentrations of A/F were able to control the fire roughly the same as water, so A/F solution isn't necessarily the only culprit in the fire scenarios. It is a well known fact that just throwing water on a kitchen oil fire can cause a flash fire, so all of the variables (ie. pressures, k-factors, drop sizes, distances, etc.) that are involved need to be studied, so that we can better understand the mechanisms, before a complete prohibition should be considered. At this point it is not even clear if this is a kitchen / cooking oil problem or if it is also applicable to Class A type fires.

Further, I do not support the proposal to ban A/F from dwelling units, because there are scenarios where water based wet systems aren't practical due to the freezing concerns and dry systems aren't practical due to the 15 second water delivery time criteria, so the only available option would be to use an A/F type system.

Regarding this issue, I Agree that this issue is of an Emergency Nature.

Comment on Agreement:

The reported fire incidents and the recent UL testing certainly points to a dire potential hazard with A/F systems with higher concentrations, and we cannot in good conscience maintain the status quo. However, as noted above, I support the proposed TIA 998, in lieu of imposing a complete ban on A/F solutions within dwelling units.



Larry Keeping, P.Eng

Vipond Fire Protection

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA to add section 7.6.1. ✓

AGREE **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

We prefer TIA 1000 over TIA 998.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**. ✓

AGREE **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

George E. Laverick
Signature

George E. Laverick
Name (Please Print)
July 3, 2010
Date

Please return the ballot on or before **Friday, July 9, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA

1 Batterymarch Park

Quincy, MA 02169 FAX: (617) 984-7110 E-mail: jmoreaucorreia@nfpa.org

Moreau-Correia, Jeanne

From: Kenneth_Linder@swissre.com
Sent: Tuesday, July 13, 2010 4:29 PM
To: Moreau-Correia, Jeanne
Cc: Lake, Jim
Subject: Re: Circulation of Votes - NFPA 13 TIA 1000 - Wednesday, July 14, 2010

Jeanne,

I thought I sent in my ballot, but now realize that I voted on TIA 998 and not this one.

Please record me as voting as follows:

Question 1, Technical merit. I disagree. I am not convinced that there is a need to ban all antifreeze and prefer the action that would be taken in log 998.

Question 2, Emergency Nature -- I agree.

Let me know if you need anything else.

Regards,
Ken

Kenneth Linder | Vice President | Property & Specialty
Swiss Re/Industrial Risk Insurers | 2 Waterside Crossing, Suite 200, Windsor, CT 06095, USA
Direct: +1 860 902 7237 Mobile: +1 860 573 7722 E-mail: Kenneth.Linder@swissre.com

<http://www.swissre.com>

From: "Moreau-Correia, Jeanne" <jmoreau@NFPA.org>
To: "Walker, Nancy" <nwalker@NFPA.org>, "Fuller, Linda" <lfuller@NFPA.org>, "Moreau-Correia, Jeanne" <jmoreau@NFPA.org>
Date: 07/12/2010 04:26 PM
Subject: Circulation of Votes - NFPA 13 TIA 1000 - Wednesday, July 14, 2010

TO: The Technical Committee on Sprinkler System Installation Criteria

Dear Committee Members:

Attached is the Circulation of Votes for the NFPA 13 TIA 1000 Ballot. If you wish to change your vote, changes are due back at NFPA by **Wednesday, July 14, 2010**. If you haven't yet returned a ballot, you may return your vote during the circulation period.

Please return your ballot by fax to **617-984-7110** or e-mail jmoreaucorreia@nfpa.org

Please remember that the return of ballots and attendance at Committee Meetings are required in accordance with the Regulations Governing Committee Projects.

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA to add section 7.6.1.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

See the action on TIA Log 998 and the comments
attached to that log.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

As noted in the NFPA Research Foundation Report, additional
work is needed to complete action. See also the
action on TIA Log 998.

Thomas A Miller
Signature

Thomas A. Miller, PE
Name (Please Print)

July 9, 2010
Date

Please return the ballot on or before **Friday, July 9, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreaucorreia@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA to add section 7.6.1.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN*** ✓

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

DATA INDICATES ISSUES WITH 70/30 MIX USING SMALL
ORIFICES AND HIGH PRESSURES. BANNING ALL ANTIFREEZE BASED
ON A NARROW RANGE OF TEST PARAMETERS IS AN OVER REACTION.
I FEEL TIA # 997 IS MORE APPROPRIATE.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** _____ **DISAGREE*** _____ **ABSTAIN*** ✓

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Signature

Peter T. Schwab
Name (Please Print)

7/6/10
Date

Please return the ballot on or before **Friday, July 9, 2010.**

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreaucorreia@nfpa.org

017.

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA to add section 7.6.1.

_____ **AGREE** _____ **DISAGREE*** **X** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:


*An explanation must accompany a disagreement or abstaining position.
Further research is being conducted to investigate antifreeze solutions in home fire
sprinkler systems. Because research on this topic is ongoing, the Standards Council
should decide on the TIA based on the most recent research available at that time.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** _____ **DISAGREE*** **X** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.
Further research is being conducted to investigate antifreeze solutions in home fire
sprinkler systems. Because research on this topic is ongoing, the Standards Council
should decide on the TIA based on the most recent research available at that time.


Signature

FOR MIKE KIRN

WILL SMITH
Name (Please Print)

7-9-2010
Date

Please return the ballot on or before **Friday, July 9, 2010**.

PLEASE RETURN TO:
Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreaucorrea@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA to add section 7.6.1.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

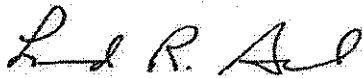
The data presented thus far (UL Report of May 26, 2010) indicates safe operating conditions exist at 50% antifreeze concentrations. Accordingly, setting a temporary concentration limit at 50% (Ref. TIA998) appears to be the most prudent short term action. Implementing a complete ban seems excessive and potentially burdensome for building owners and contractors for the remediation of existing systems that may pose no immediate hazard. A complete ban may render some dwellings unprotected, during the process of bracketing and validating the actual risk.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

 X **AGREE** _____ **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.



Signature

Leonard R. Swantek

Name (Please Print)

July 8, 2010

Date

Please return the ballot on or before **Friday, July 9, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreaucorreia@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA to add section 7.6.1.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

✓

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

NEEDS TO INCLUDE "WHEN RESIDENTIAL SPRINKLERS ARE USED."
NO TESTING HAS BEEN DONE WITH OTHER SPRINKLERS

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

✓

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

THIS IS REACTING TOO QUICKLY WITH INCOMPLETE TEST DATA.

Lynne K Underwood
Signature

Lynne K Underwood
Name (Please Print)

7/2/10
Date

Please return the ballot on or before **Friday, July 9, 2010.**

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreaucorreia@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1000
Add Section 7.6.1 Proposed 2010 Editions of NFPA 13,
Standard for the Installation of Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA to add section 7.6.1.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

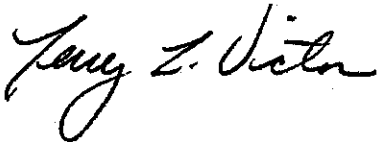
*An explanation must accompany a disagreement or abstaining position. The preliminary test results at Underwriters laboratories indicate that a 50/50 % mixture of water and glycerin or water and propylene glycol does not present any more of a danger of a large scale ignition than 100% water. There is a need in some residential occupancies, specifically those with sprinkler systems installed in accordance with NFPA 13, to use antifreeze in a 50/50 % premixed solution to provide adequate freeze protection.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

AGREE _____ **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.



Signature

Terry L Victor

Name (Please Print)

July 6, 2010

Date

Please return the ballot on or before **Friday, July 9, 2010**.

PLEASE RETURN TO:

Jeanne Moreau

NFPA

1 Batterymarch Park

Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreaucorreia@nfpa.org