MEMORANDUM

To: NFPA Correlating Committee on Automatic Sprinkler Systems

From: Elena Carroll, Administrator, Technical Projects

Date: June 25, 2012

Subject: NFPA 13D Proposed Tentative Interim Amendment (TIA) No. 1060

The Technical Committee on Residential Sprinkler Systems has been balloted on proposed TIA 1060, submitted by Dana Haagensen and endorsed by Maurice Pilette. A copy of the proposed TIA and the final results of the TC balloting are attached.

This proposed TIA is now being submitted to you for letter ballot. In addition to being balloted on the correlating issues of the proposed TIA, the Committee is also being balloted on whether or not this matter is of an emergency nature. Disagreeing votes are limited to subjects within the purview of the TCC. Opposition on a strictly technical basis is not sufficient grounds for substantiating a disagreement vote. If you do have correlation issues please identify and describe your concerns. Please see Section 5 (copy enclosed) regarding the processing of TIAs from the NFPA Regulations Governing Committee Projects.

Please complete and return the attached letter ballot to Elena Carroll either via email to ecarroll@nfpa.org or via fax to 617-984-7110. Ballots are due on June 29, 2012.

This proposed TIA 1060 has been published for public comment in the June 1, 2012 issue of NFPA News with a Public Comment Closing Date of July 2, 2012. Any public comments received will be circulated to the committee. The Standards Council will consider the issuance of this TIA at their August 7 – 9, 2012 meeting.

Note: Please remember that the return of ballots and attendance at committee meetings are required in accordance with the NFPA Regulations Governing Committee Projects.

Attachments
Section 5 Tentative Interim Amendments.

5.1 Preliminary Determination of Compliance. A Tentative Interim Amendment (TIA) to any Document may be processed if the Council Secretary determines, after a preliminary review, and consultation with the appropriate Chair, that the Amendment appears to be of an emergency nature requiring prompt action and has the endorsement of at least two Members of the involved TC or TCC. If processed, the question of emergency nature shall be considered by the TC and TCC. The text of a proposed Tentative Interim Amendment may be processed as submitted or may be changed, but only with the approval of the submitter.

5.2 Evaluation of Emergency Nature. Determination of an emergency nature shall include but not be limited to one or more of the following factors:

(a) The document contains an error or an omission that was overlooked during a regular revision process.

(b) The document contains a conflict within the document or with another NFPA document.

(c) The proposed TIA intends to correct a previously unknown existing hazard.

(d) The proposed TIA intends to offer to the public a benefit that would lessen a recognized (known) hazard or ameliorate a continuing dangerous condition or situation.

(e) The proposed TIA intends to accomplish a recognition of an advance in the art of safeguarding property or life where an alternative method is not in current use or is unavailable to the public.

(f) The proposed TIA intends to correct a circumstance in which the revised document has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process, or was without adequate technical (safety) justification for the action.

5.3 Publication of Proposed Tentative Interim Amendment. A proposed Tentative Interim Amendment that meets the provisions of 5.1 shall be published by the Association in appropriate media with a notice that the proposed Tentative Interim Amendment has been forwarded to the responsible TC and TCC for processing and that anyone interested may comment on the proposed Tentative Interim Amendment within the time period established and published.

5.4 Technical Committee and Technical Correlating Committee Action.

(a) The proposed Tentative Interim Amendment shall be submitted for ballot and comment of the TC in accordance with 3.3.4. The TC shall be separately balloted on both the technical merits of the amendment and whether the amendment involves an issue of an emergency nature. Such balloting shall be completed concurrently with the public review period. Any public comments inconsistent with the vote of any TC Member shall be circulated to the TC to allow votes to be changed. A recommendation for approval shall be established if three-fourths of the voting Members calculated in accordance with 3.3.4.5 have voted in favor of the Tentative Interim Amendment.

(b) The proposed Tentative Interim Amendment shall be submitted for ballot and comment of the TCC, if any, which shall make a recommendation to the Council with respect to the disposition of the Tentative Interim Amendment. The TCC shall be separately balloted on both the merits of the amendment (as it relates to the TCC authority and responsibilities in accordance with 3.4.2 and 3.4.3) and whether the amendment involves an issue of an emergency nature. Any public comments inconsistent with the vote of any TC or TCC Member shall be circulated to the 28 TCC to allow votes to be changed. A recommendation for approval shall be established if three-fourths of the voting Members calculated in accordance with 3.3.4.5 have voted in favor of the Tentative Interim Amendment.

(c) All public comments, ballots, and comments on ballot on the proposed Tentative Interim Amendment shall be summarized in a staff report and forwarded to the Council for action in accordance with 5.5.

5.5 Action of the Council. The Council shall review the material submitted in accordance with 5.4(c), together with the record on any Appeals (see 1.6, 1.6.1), and shall take one of the following actions:

(a) Issue the proposed Tentative Interim Amendment

(b) Issue the proposed Tentative Interim Amendment as amended by the Council

(c) Where acted on concurrently with the issuance of a new edition of the Document to which it relates, issue the Tentative Interim Amendment as part of the new edition;

(d) Reject the proposed Tentative Interim Amendment

(e) Return the proposed Tentative Interim Amendment to the TC with appropriate instruction

(f) Direct a different action

5.6 Effective Date of Amendment. Tentative Interim Amendments shall become effective 20 days after Council issuance unless the President determines, within his or her discretion, that the effective date shall be delayed pending the consideration of a Petition to the Board of Directors (see 1.7). The President may also, within his or her discretion, refer the matter of a delay in the effective date of the TIA to the Executive Committee of the Board of Directors or to the Board of Directors.

5.7 Publication of Amendment. The Association shall publish in one of its publications sent or accessible to all Members notice of the issuance of each Tentative Interim Amendment and may, as appropriate, issue a news release to applicable and interested technical journals. The notice and any news release shall indicate the tentative character of the Tentative Interim Amendment. In any subsequent distribution of the Document to which the Tentative Interim Amendment applies, the text of the Tentative Interim Amendment shall be included in a manner judged most feasible to accomplish the desired objectives.

5.8 Applicability. Tentative Interim Amendments shall apply to the document existing at the time of issuance. Tentative Interim Amendments issued after the proposal closing date shall also apply, where the text of the existing document remains unchanged, to the next edition of the Document. Tentative Interim Amendments issued concurrently with the issuance of a new edition shall apply to both the existing and new edition.

5.9 Subsequent Processing. TC responsible for the Document or part of the Document affected shall process the subject matter of any Tentative Interim Amendment as a proposal for the next edition of the Document (see 3.3).

5.10 Exception. When the Council authorizes other procedures for the processing and/or issuance of Tentative Interim Amendments, the provisions of this Section shall not apply.
1. Revise the title of 4.1.4 to read:

**4.1.4 Maintenance and Modifications of Existing Antifreeze Systems.**

2. In 5.2.7, insert the phrase, “on modifications to existing”, before “antifreeze systems”.

3. Revise Section 8.3 to read:

**8.3 System Types.** Systems shall be permitted to be wet pipe (not including antifreeze), dry pipe, or preaction. Antifreeze systems shall not be permitted for new installations.

4. Revise 8.3.1 to read:

**8.3.1 Wet Pipe Systems.** A wet pipe system, not including antifreeze, shall be permitted to be used where all piping is installed in areas maintained above 40°F (4°C), including areas properly insulated to maintain 40°F (4°C).

5. Delete 8.3.2(2) and renumber the subsequent paragraphs accordingly.

6. Move all of 8.3.3 to a new 4.1.4.2, renumber all references throughout the standard accordingly, including Annex sections, and revise the title of the subsection to read:

**4.1.4.2 Acceptable Arrangements for the Maintenance and Modifications of Existing Antifreeze Systems.**

Submitter’s Substantiation:

1. Based on Fire Protection Research Foundation sponsored testing and research, it has been conclusively demonstrated that certain combinations of antifreeze type, antifreeze concentrations, sprinkler discharge pattern, sprinkler operating pressure, and nature of the fire development, can lead to situations where the discharge of antifreeze solutions in fire sprinkler systems exacerbates a fire. The latest research and testing demonstrates that the concentrations of antifreeze previously acceptable by consensus standards are not actually universally safe [see the February 2012 Fire Protection Research Foundation report - Antifreeze Solutions Supplied Through Spray Sprinklers: Interim Report].

2. Seeing that new installations allow for the installation of piping in heated areas when simply coordinated with residential building design, and that dry systems are also an available option, the potential risks of using antifreeze outweigh the need for antifreeze systems.

3. There are no noncombustible antifreeze products currently available to the industry, and no noncombustible antifreeze products that could be universally applied to fire sprinkler systems have been
identified. The major testing laboratories have indicated that they will not list any antifreeze products that are derived from combustible liquids.

4. The “back-and-forth” nature of the TIA’s for antifreeze create a public image problem for fire sprinkler systems. The public’s perception of the benefit of fire sprinkler systems will also be overshadowed by any further antifreeze incidents involving injury or death. Unfortunately, we cannot say conclusively that such incidents will not occur with the antifreeze systems allowed by current consensus standards.

5. Driving the industry to the use of low concentrations of antifreeze is likely to increase the number of freeze-up incidents, as there is little industry experience with these low concentrations. For the public, freeze-up incidents very much overshadow their perception of fire sprinkler protection benefits.

6. Fire protection codes and standards traditionally permit an increased level of risk for existing situations given the hardships in trying to rearrange and retrofit existing installations.

**Emergency Nature:** According to Paragraph 5.2(d) of the *NFPA Regulations Governing Committee Projects*, a proposed TIA can be considered emergency in nature if “the proposed TIA intends to offer to the public a benefit that would… ameliorate a continuing dangerous condition or situation.” Based on Fire Protection Research Foundation sponsored testing and research, it has been conclusively demonstrated that certain combinations of antifreeze type, antifreeze concentrations, sprinkler discharge pattern, sprinkler operating pressure, and nature of the fire development, can lead to situations where the discharge of antifreeze solutions in fire sprinkler systems exacerbates a fire [a potentially dangerous situation to occupant life safety]. The latest research and testing demonstrates that the concentrations of antifreeze previously acceptable by consensus standards are not actually universally safe [see the February 2012 Fire Protection Research Foundation report - *Antifreeze Solutions Supplied Through Spray Sprinklers: Interim Report*]. Through prohibiting the use of antifreeze for new installations, the proposed amendment ameliorates potential dangers identified by testing/research and actual fire incidents.
MEMORANDUM

TO: NFPA Technical Committee on Residential Sprinkler Systems
FROM: Elena Carroll, Administrator, Technical Projects
DATE: June 25, 2012
SUBJ: NFPA 13D Proposed TIA No. 1060 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 both Question 1 (Technical Merit) and Question 2 (Emergency Nature).

31 Eligible to Vote
1 Not Returned (Ketner)

**Technical Merit:**
1 Abstentions (Hopkins)
9 Agree (Haagensen w/comment)
20 Disagree (Bell, Benn, Bittenbender, Brown, Deegan, Grove, Hoover, Isman, Johnson, Leyton, O’Brian, Puchovsky, Pugsley, Schwab, Skare, Stanley, Van Walraven, Victor, Yu and Webb)

**Emergency Nature:**
1 Abstentions (Hopkins)
23 Agree (Schwab w/comment)
6 Disagree (Bell, Bittenbender, Deegan, Skare, Victor and Yu)

There are two criteria necessary to pass ballot [(1) affirmative $\frac{3}{4}$ vote and (2) simple majority] with both questions needed to pass ballot in order to recommend that the Standards Council issues this TIA.

(1) The number of affirmative votes needed for the report to be published is 22.
   (31 eligible to vote - 1 not returned - 1 abstentions = $29 \times 0.75 = 21.75$)

(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:
   $[31 \text{ eligible} \div 2 = 15.5 = 16]$)

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
Question 1: With respect to the TECHNICAL MERITS of the Proposed TIA to revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3, please record me as voting:

_________ AFFIRMATIVE  ___X___ NEGATIVE*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

We do not believe a ban on all antifreeze solutions in NFPA 13D systems (including listed solutions) is substantiated by the FPRF research.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

_________ AGREEMENT  ___X___ DISAGREEMENT*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

We do not believe this is an emergency revision since we disagree with the technical merits.

[Signature]

Kerry M. Bell

________________________
Name (Please Print)
Kerry M. Bell

________________________
Date
6/4/12

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1060
To revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3 of
NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family
Dwellings and Manufactured Homes, 2010 edition

Question 1: With respect to the TECHNICAL MERITS of the Proposed TIA to revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3, please record me as voting:

_________ AFFIRMATIVE  ______ x ______ NEGATIVE*  _______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

I THINK: VIA Log 1067 Copies THIS TIA

I AGREE WITH VIA Log 1067

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

____ x _____ AGREEMENT  _______ DISAGREEMENT*  _______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

__________________________________________________________
Signature
Fred Benn

Name (Please Print)
June 4, 2012

Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail:
TECHNICAL COMMITTEE LETTER BALLOT
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AFFIRMATIVE  X  NEGATIVE*  ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

FPRF has established acceptable concentrations.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

AGREEMENT  X  DISAGREEMENT*  ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

No technical merit

Signature

Jonathan Bittenbender

Name (Please Print)

18 - June - 2012

Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

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__________________ AFFIRMATIVE  ___ NEGATIVE*  _______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

See my actions on log 1062, 1065 and 1066

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please
record me as voting:

X AGREEMENT  ______________ DISAGREEMENT*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Signature

Philip Brown

Name (Please Print)

06-14-12

Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
TECHNICAL COMMITTEE LETTER BALLOT
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_________ AFFIRMATIVE  ____X____ NEGATIVE*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

Modifications to NFPA 13D (2010) to address the use of antifreeze were made in March 2011 based on FPRF testing specific to residential scenarios. AHJs have stated that the ability to use antifreeze is important in their efforts to encourage sprinklers in one and two family dwellings. In order to support the effort to require sprinklers in homes, and the additional life safety such efforts will provide, it is necessary to keep the ability to use antifreeze as a tool. The currently existing language in the 2010 edition of NFPA 13D, supported by the residential specific research testing by the FPRF, adequately addresses the issue.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

_________ AGREEMENT  ____X____ DISAGREEMENT*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

The use of antifreeze in NFPA 13D systems was addressed by TIA 10-2 issued in March of 2011.

Signature
_Thomas G. Deegan__________
Name (Please Print)
_June 11, 2012  JUNE 14, 2012_
Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
TECHNICAL COMMITTEE LETTER BALLOT
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_______ AFFIRMATIVE  x  NEGATIVE*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

While it is agreed that current anti-freeze solutions have created combustibility
issues, it is not agreed that disapproving all uses of anti-freeze in sprinkler
systems is appropriate. This is too extreme of a position.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please
record me as voting:

x  AGREEMENT  _________ DISAGREEMENT*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

--------------------------
Jeff Grove
Digitally signed by Jeff Grove
Name (Please Print)  Jeffrey S. Grove, P.E.
Date  5/31/12

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
E-mail: ecarroll@nfpa.org
TECHNICAL COMMITTEE LETTER BALLOT
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__________ AFFIRMATIVE   __________ NEGATIVE*   __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

See attached explanation.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

   X AGREEMENT    __________ DISAGREEMENT*   __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

________________________________________
Signature

TAKuya L. Hoover

Name (Please Print)

6/15/2012

Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
A total ban on the use of antifreeze is not realistic and would have a negative impact on the continued efforts to accept mandatory residential fire sprinkler requirements in one and two family dwellings.

The submitter uses the information from the Fire Protection Research Foundation to justify the TIA. This report from the Research Foundation did show that concentrations in excess of 48% glycerine and 38% propylene glycol could cause increased fire behavior at and during the discharge of the system. The research also illustrated that concentrations that did not exceed these amounts did not increase the fire severity at discharge and the test systems performed within the acceptable testing criteria. The research should be used holistically with all factors being considered.

Based on discussions with designers, installers, and AHJs it may be necessary to use antifreeze **within a limited area** in order to protect piping from freezing conditions. The use of antifreeze should not be the first solution to address freezing conditions but could very well be the only method of protecting piping in areas where insulation/protection is not possible and where the potential discharge is not within close proximity of the first item ignited. Also, the AHJ has the authority to require a detailed evaluation of the system installation to determine if the use of antifreeze can be eliminated.

As a secondary note to the complete banned on antifreeze, it seems somewhat contradictory to completely eliminate its use on new systems but to permit its use (with a premixed and limited concentration) on existing systems.
TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1060
To revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3 of
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___________ AFFIRMATIVE  _____✓_______ NEGATIVE*  ___________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

__The complete ban on all antifreeze systems is not supported by the evidence. This would prohibit the use of noncombustible antifreeze solutions that are in development and would discourage the development of additional potential solutions.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

_____✓____ AGREEMENT  ___________ DISAGREEMENT*  ___________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

___________The situation is much better handled in TIA 1067
_________________________________________________________________

__________________________
Signature

__________________________
Kenneth E. Isman
Name (Please Print)

___________6/19/12___________
Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
TECHNICAL COMMITTEE LETTER BALLOT  
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Question 1: With respect to the TECHNICAL MERITS of the Proposed TIA to revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3, please record me as voting:

____________ AFFIRMATIVE  ___ X ___ NEGATIVE*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

The research report, "Antifreeze Systems in Home Fire Sprinkler Systems – Phase II Report (Fire Protection Research Foundation, December 2010)" is still valid and demonstrates how residential sprinklers perform in typical dwelling units of one- and two-family dwellings with a variety of antifreeze solutions tested through a variety of pendent and sidewall residential sprinklers. NFPA 13D calls for the use of residential sprinklers in all locations except mechanical closets and unheated areas not intended for living purposes (see section 7.5.3 and 7.5.4 of NFPA 13D), the results of the latest FPRF research is less important to NFPA 13D.

Based on current data the option to use antifreeze solutions can be done safely in NFPA 13D occupancies.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

___ X ___ AGREEMENT  __________ DISAGREEMENT*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

[Signature]

[Name (Please Print)]  
6/3/12  

Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:  
Elena Carroll, Administrator, Technical Projects  
NFPA  
1 Batterymarch Park  
Quincy, MA 02169  

E-mail: ecarroll@nfpa.org
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Question 1: With respect to the TECHNICAL MERITS of the Proposed TIA to revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3, please record me as voting:

_____________ AFFIRMATIVE  ☒ NEGATIVE*  ___________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

THIS PROPOSAL CONFLICTS WITH MY INTENT AND PREFERENCES ON THE OTHER TIA'S REGARDING ANTI-FREEZE

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

☒ AGREEMENT  ___________ DISAGREEMENT*  ___________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

__________________________
Signature
__________________________
Name (Please Print)
__________________________
Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1060
To revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3 of
NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family
Dwellings and Manufactured Homes, 2010 edition

Question 1: With respect to the TECHNICAL MERITS of the Proposed TIA to revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3, please record me as voting:

__________ AFFIRMATIVE  _____ x _____ NEGATIVE*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

The TIA language covers the 2010 addition which would create a conflict with other proposed TIA for 2013 edition

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

_____ x _____ AGREEMENT  _________ DISAGREEMENT*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

Signature

Name (Please Print)  Michael O'Brian________________________

Date  June 13, 2012

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
E-mail: ecarroll@nfpa.org
Elena,

This e-mail serves as my ballot return.

Question 1 - negative

Question 2 - agree

My reason for voting negatively is as follows:

I am not in favor of a total ban on antifreeze solutions for new systems. However, the options presented by the proposed or existing TIA's do not adequately reflect the test results of the 2010 Research Foundation Test Report. I am restating my previous reasons for voting to disagree with the previous TIA's and proposals below.

"The test reports referenced by the proposed TIA indicate the effect of antifreeze concentration, systems pressure and sprinkler orifice size on a fire's heat release rate under certain conditions. These test results are not properly reflected in the proposed TIA. The TIA proposes concentrations of antifreeze without the limitations on orifice size and system pressure observed during testing.

I am not in agreement with the differences in proposed antifreeze concentration between new and existing systems. Newly introduced antifreeze, whether in an exiting system or new system, will result in the same outcome given the same conditions. Based upon the information put forth, it is not reasonable to subject occupants protected by certain existing systems to a higher life safety risk in exchange for freeze protection of system piping, especially when some existing systems will need to be redesigned in accordance with the proposed TIA anyway.

While the TIA's substantiation indicates that safety factors are considered, discussion and confirmation of the safety factors in an explicit manner are lacking. I am not confident that the changes proposed by the TIA adequately mitigate the risk posed by antifreeze in sprinkler systems intended primarily for life safety."

mp

Milosh Puchovsky, PE, FSFPE
Professor of Practice
Director of Corporate & Professional Education Department of Fire Protection Engineering
Worcester Polytechnic Institute www.wpi.edu/Academics/Depts/Fire/
508-831-5113
milosh@wpi.edu
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_______ AFFIRMATIVE  X  NEGATIVE*  _______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*XAn explanation must accompany a negative or abstaining position.

An all-encompassing removal from the standard is not

Encroaching upon the substitution.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

X AGREEMENT  ________ DISAGREEMENT*  ________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

________________________________________________________

Signature

Scott Roseby

Name (Please Print)

Date 06/13/2012

Please return the ballot on or before June 14, 2012.

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NFPA
1 Batterymarch Park
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_________ AFFIRMATIVE   X   NEGATIVE*   _______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

THIS TIA WOULD PROHIBIT LISTED ANTI-FREEZE SOLUTIONS.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

X AGREEMENT   _______ DISAGREEMENT*   _______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

A TIA IS IN ORDER BUT IT SHOULD ALLOW LISTED SOLUTIONS

Signature

Peter T. Schwab

Name (Please Print)

5/31/12

Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
Question 1: With respect to the TECHNICAL MERITS of the Proposed TIA to revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3, please record me as voting:

______ AFFIRMATIVE  __X____ NEGATIVE*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

___ I don’t believe it is the correct action to eliminate all new antifreeze systems at this time. If/when non-combustible antifreeze is developed and listed the standard would then have to be modified to “re-allow” these systems.

___

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

______ AGREEMENT  __X____ DISAGREEMENT*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

___To correspond with my negative vote on the technical merits.

___

Eric Skare
Signature
___ Eric Skare
Name (Please Print)
___ 6/14/2012
Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
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_______ AFFIRMATIVE  ______ NEGATIVE*  ______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

Based on discussion with AHJs, I don't believe that banning antifreeze is an
option at this time. However, antifreeze concentrations should be limited to the
successful testing criteria found in the Fire Protection Research Foundation’s
report.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please
record me as voting:

X ______ AGREEMENT  ______ DISAGREEMENT*  ______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

________________________
Signature
George W. Stanley

________________________
Name (Please Print)
6/2/12

Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: scarroll@nfpa.org
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____________ AFFIRMATIVE  _____X____ NEGATIVE*  ___________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

I do not believe that a total ban of antifreeze is practical. I believe that the restricted application of protecting piping in specific areas and adherence to accepted concentrations as addressed in TIA 1067 is a more workable solution.

_____________________________________________________________________
_____________________________________________________________________

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

_____X_____ AGREEMENT  ___________ DISAGREEMENT*  ___________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

_____________________________________________________________________
_____________________________________________________________________

Ed Van Walraven_________________
Signature
Ed Van Walraven__________________
Name (Please Print)
6-20-2012_______________________
Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
Question 1: With respect to the TECHNICAL MERITS of the Proposed TIA to revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3 of NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, 2010 edition

_________ AFFIRMATIVE _____ X _____ NEGATIVE* _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

The use of antifreeze in 13D applications is safe when used in lower concentrations as was proven in fire tests. While antifreeze should only be used as a last resort, there is a need in certain system configurations for antifreeze to protect pipes passing through unheated areas.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

_________ AGREEMENT _____ X _____ DISAGREEMENT* _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

The previous TIA to the 2010 edition adequately addresses the concerns of using antifreeze in 13D applications.

Terry L. Victor

----------
Signature
Terry L. Victor

Name (Please Print)
June 7, 2012

Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
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8.3.1, 8.3.2(2), and 8.3.3, please record me as voting:

__________ AFFIRMATIVE  ____X_____ NEGATIVE*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

A complete ban on all antifreeze severely limits the ability to install sprinkler protection
in dwellings or residential occupancies, and lower concentrations of antifreeze and
higher concentrations of antifreeze at lower pressures have been shown not to ignite.
Additionally, a complete ban on antifreeze does not correlate with NFPA 13.

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please
record me as voting:

__________ AGREEMENT  ____X____ DISAGREEMENT*  __________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

See the explanation above. Furthermore, NFPA has already issued guidelines for the
antifreeze system.

______________________________

Signature

Hong-Zeng Yu
Name (Please Print)

June 8, 2012
Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
Question 1: With respect to the TECHNICAL MERITS of the Proposed TIA to revise 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2), and 8.3.3, please record me as voting:

__________ AFFIRMATIVE  ________x____ NEGATIVE*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.

___I don't believe that antifreeze should be completely banned at this time but should be limited in concentration per the Fire Testing that was performed by the Fire Protection Research Foundation.__

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

_________x____ AGREEMENT  _________ DISAGREEMENT*  _________ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

[Signature]

Ron Webb

Name (Please Print)

6-6-12

Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

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_________ AFFIRMATIVE ________ NEGATIVE* _______ X ______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a negative or abstaining position.
It is unclear if a complete ban is the correct action at this time.

________________________________________________________________________

________________________________________________________________________

Question 2: With respect to the judgment that the subject is of an EMERGENCY NATURE, please record me as voting:

_________ AGREEMENT ________ DISAGREEMENT* _______ X ______ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

________________________________________________________________________

________________________________________________________________________

Signature
Mark Hopkins
Name (Please Print)
06/14/2012
Date

Please return the ballot on or before June 14, 2012.

PLEASE RETURN TO:
Elena Carroll, Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169

E-mail: ecarroll@nfpa.org
As per phone conversation, reason for Abstention Vote on Emergency Nature for TIA #1060:

Do not know if this is the correct course of action.

Mark Hopkins
Since there are no listed antifreeze products available, since the industry is looking at several months before there are, and since specific listing requirements have yet to be finalized, I feel the TIA’s permitting nonexist listed antifreeze does a disservice to the document users.

I feel we need to be clear and direct in the standard that antifreeze is not an option until such time that products are available. This is so that users of the standard will know they need to coordinate with architects/builders early in the building design and construction process to ensure that pipe is run in conditioned areas.

I also feel that if antifreeze were appropriate for use in new installations, there should be no restriction on the amount of area in which antifreeze can be used. When a building is constructed, we do not know where a fire will start if it does. What happens if the fire starts in the small areas where antifreeze was allowed? There is also no research to date on the effects of initial antifreeze discharge followed by greater and greater concentrations of water, which would be helpful in terms of distinguishing specific amounts of area that would be appropriate to allow antifreeze.