Standards Council Meeting  
Supplemental Agenda  
August (6) 7-9, 2012  

NFPA  
1 Batterymarch Park  
Quincy, MA 02169  
(617) 770-3000  

| 12-8-1 | Act on the issuance of NFPA 13, *Standard for the Installation of Sprinkler Systems*, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with two amendments as follows: |
| 12-8-1-a | Amendment No. 13-1 (CAM 13-1): Return a portion of a Report in the form of an Identifiable Part of Proposal 13-67 and Comment 13-57. (PASSED TCC ballot and PASSED TC ballot) See Attachment 12-8-1-a See SA 12-8-1-a |
| 12-8-1-b | Amendment No. 13-2 (CAM 13-4): Reject Comment 13-241. (PASSED TCC ballot and PASSED TC ballot) See Attachment 12-8-1-b See SA 12-8-1-b |

| 12-8-2 | Act on the issuance of NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height*, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with two amendments as follows: |
| 12-8-2-a | Amendment No. 13R-1 (CAM 13R-4): Reject an Identifiable Part of Comment 13R-19. (PASSED TCC ballot and PASSED TC ballot) See Attachment 12-8-2-a See SA 12-8-2-a |
| 12-8-2-b | Amendment No. 13R-2 (CAM 13R-6): Reject an Identifiable Part of Comment 13R-16 and Accept Comment 13R-34. (PASSED TCC ballot and PASSED TC ballot) See Attachment 12-8-2-b See SA 12-8-2-b |

| 12-8-3 | Act on the issuance of NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection*, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with two amendments as follows: |
| 12-8-3-a | Amendment No. 20-1 (CAM 20-1): Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27. (PASSED TC ballot) See Attachment 12-8-3-a |
| 12-8-3-b | Amendment No. 20-2 (CAM 20-3): Return a portion of a Report in the form of Proposal 20-181 and related Comment 20-90. (PASSED TC ballot) See Attachment 12-8-3-b |

| 12-8-4 | Act on the issuance of NFPA 59A, *Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)*, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with one amendment as follows: |
| 12-8-4-a | Amendment No. 59A-1 (CAM 59A-1): Accept Comment 59A-5. (PASSED TC ballot) See Attachment 12-8-4-a |
| 12-8-5 | Act on the issuance of NFPA 61, *Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities*, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with three amendments and six appeals as follows: |
| 12-8-5-a | **APPEAL** Appeal of E. Ural of Loss Prevention Science & Technologies, Inc., requesting the Council overturn the Association action and Accept Comment 61-4. This motion (CAM 61-1) failed on the floor of the Association Meeting. See Attachment 12-8-5-a |
| 12-8-5-a-1 | Comment received on the appeal filed by E. Ural to overturn the Association action and Accept Comment 61-4. See SA 12-8-5-a-1 ADDITION |
| 12-8-5-b | Amendment No. 61-1 (CAM 61-6): Accept Comment 61-9. **(FAILED TC ballot)** See Attachment 12-8-5-b |
| 12-8-5-b-1 | **APPEAL** Appeal of E. Ural of Loss Prevention Science & Technologies, Inc., requesting the Council uphold the Association action, and Accept Comment 61-9. This motion (CAM 61-6) passed on the floor of the Association Meeting but failed TC ballot. See Attachment 12-8-5-b-1 See SA 12-8-5-b-1 |
| 12-8-5-b-1-a | Comments received on the appeal filed by E. Ural to uphold the Association action and Accept Comment 61-9 (CAM 61-6). See SA 12-8-5-b-1-a ADDITION |
| 12-8-5-b-2 | Comment received by M. Bujewski, Chair of NFPA 61 on Amendment No. 61-1 (CAM 61-6). See Attachment 12-8-5-b-2 See SA 12-8-5-b-2 |
| 12-8-5-c | Amendment No. 61-2 (CAM 61-9): Accept Comment 61-13. **(FAILED TC ballot)** See Attachment 12-8-5-c |
| 12-8-5-c-1 | **APPEAL** Appeal of E. Ural of Loss Prevention Science & Technologies, Inc., requesting the Council uphold the Association action, and Accept Comment 61-13. This motion (CAM 61-9) passed on the floor of the Association Meeting but failed TC ballot. See Attachment 12-8-5-c-1 See SA 12-8-5-c-1 |
| 12-8-5-c-1-a | Comment on Appeal on Amendment No. 61-2 (CAM 61-9) to Accept Comment 61-13. See SA 12-8-5-c-1-a ADDITION |
| 12-8-5-c-2 | Comment received by M. Bujewski, Chair of NFPA 61 on Amendment No. 61-2 (CAM 61-9). See Attachment 12-8-5-c-2 See SA 12-8-5-c-2 |
| 12-8-5-c-3 | **APPEAL** Appeal of M. Bujewski, Chair of the Agricultural Dusts Technical Committee, regarding the lack of time given to the Chair of the Technical Committee to fully present the Committee’s position on amendments. See Attachment 12-8-5-c-3 |
| 12-8-5-c-3-1 | One comment received on the appeal filed by M. Bujewski regarding the lack of time given to the Chair of the Agricultural Dusts Technical Committee. See Attachment 12-8-5-c-3-1 |
| 12-8-5-d | Amendment No. 61-3 (CAM 61-10): Accept Proposal 61-23. **(FAILED TC ballot)** See Attachment 12-8-5-d |
| 12-8-5-d-1 | **APPEAL** Appeal of E. Ural of Loss Prevention Science & Technologies, Inc., requesting the Council uphold the Association action, and Accept Proposal 61-23. This motion (CAM 61-10) passed on the floor of the Association Meeting but failed TC ballot. See Attachment 12-8-5-d-1 See SA 12-8-5-d-1 |
| 12-8-5-d-2 | Comment received by M. Bujewski, Chair of NFPA 61 on Amendment No. 61-3 (CAM 61-10). See Attachment 12-8-5-d-2 |
| 12-8-5-d-2-a | Comments received on the appeal of E. Ural requesting the Council uphold the |
Association action, and Accept Proposal 61-23 (CAM 61-10). See SA 12-8-5-d-2-a ADDITION

12-8-5-e APPEAL

Appeal of E. Ural of Loss Prevention Science & Technologies, Inc., requesting the Council overturn the Association action, and Accept Proposal 61-26. This motion (CAM 61-12) failed on the floor of the Association Meeting. See Attachment 12-8-5-e

12-8-6

Act on the issuance of NFPA 72, *National Fire Alarm and Signaling Code*, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with six amendments as follows:

12-8-6-a Amendment No. 72-1 (CAM 72-1): Accept Comment 72-6. (PASSED TCC ballot and PASSED TC ballot) See Attachment 12-8-6-a See SA 12-8-6-a

12-8-6-b Amendment No. 72-2 (CAM 72-3): Accept Comment 72-182. (PASSED TCC ballot and PASSED TC ballot) See Attachment 12-8-6-b See SA 12-8-6-b

12-8-6-c Amendment No. 72-3 (CAM 72-5): Reject an Identifiable Part of Comment 72-169c. (Failing TCC ballot and PASSED TC ballot) See Attachment 12-8-6-c See SA 12-8-6-c

12-8-6-c-1 APPEAL

Appeal of M. Pilette of Mechanical Designs Ltd., requesting the Council overturn the Association action to Reject an Identifiable Part of Comment 72-169c. This motion (CAM 72-5) passed on the floor of the Association Meeting and passed TC ballot. See Attachment 12-8-6-c-1

12-8-6-c-1-a Comment received on the appeal filed by M. Pilette to overturn the Association action to Reject an Identifiable Part of Comment 72-169c. See SA 12-8-6-c-1-a ADDITION

12-8-6-d Amendment No. 72-4 (CAM 72-6): Reject an Identifiable Part of Comment 72-251. (PASSED TCC ballot and PASSED TC ballot) See Attachment 12-8-6-d See SA 12-8-6-d

12-8-6-e Amendment No. 72-5 (CAM 72-11): Reject an Identifiable Part of Comment 72-352. (PASSED TCC ballot and PASSED TC ballot) See Attachment 12-8-6-e See SA 12-8-6-e

12-8-6-f Amendment No. 72-6 (CAM 72-15): Accept Comment 72-441. (PASSED TCC ballot and PASSED TC ballot) See Attachment 12-8-6-f See SA 12-8-6-f

12-8-7

Act on the issuance of NFPA 105, *Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives*, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, without amendments. No Attachment

12-8-8

Act on the issuance of NFPA 150, *Standard on Fire and Life Safety in Animal Housing Facilities*, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with one amendment and one appeal as follows:

12-8-8-a Amendment No. 150-1 (CAM 150-1): Accept Proposals 150-11, 150-13, 150-14, and 150-15. (FAILED TC ballot) See Attachment 12-8-8-a

12-8-8-a-1 APPEAL

Appeal of M. Formica of the National Pork Producers Council, requesting that the Council overturn the Association action to Accept Proposals 150-11, 150-13, 150-14, and 150-15. This motion (CAM 150-1) passed on the floor of the Association Meeting, but failed TC ballot. See Attachment 12-8-8-a-1

12-8-8-a-1-a Comments received from B. Cronin, Chair of NFPA 150 on Association action
<table>
<thead>
<tr>
<th>Section</th>
<th>Action</th>
<th>Details</th>
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<tbody>
<tr>
<td>12-8-8-a-2</td>
<td>APPEAL</td>
<td>Appeal of K. Davis of United Poultry Concerns requesting that the Council uphold the Association action to Accept Proposals 150-11, 150-13, 150-14, and 150-15. This motion (CAM 150-1) passed on the floor of the Association Meeting, but failed TC ballot. See SA 12-8-8-a-2 ADDITION</td>
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<td>12-8-8-a-3</td>
<td>APPEAL</td>
<td>Appeal of V. Traina, Centennial, Colorado, requesting that the Council uphold the Association action to Accept Proposals 150-11, 150-13, 150-14, and 150-15. This motion (CAM 150-1) passed on the floor of the Association Meeting, but failed TC ballot. See SA 12-8-8-a-3 ADDITION</td>
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<td>12-8-8-a-4</td>
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<td>Comments received on Association action to Accept Proposals 150-11, 150-13, 150-14, and 150-15. This motion (CAM 150-1) passed on the floor of the Association Meeting, but failed TC ballot. See SA 12-8-8-a-4 ADDITION</td>
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<tr>
<td>12-8-9</td>
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<td>Act on the issuance of NFPA 275, <em>Standard Method of Fire Tests for the Evaluation of Thermal Barriers Used Over Foam Plastic Insulation</em>, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with one amendment as follows:</td>
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<td>12-8-9-a</td>
<td>Amendment No. 275-1 (CAM 275-1):</td>
<td>Reject Comment 275-1. (PASSED TC ballot) See Attachment 12-8-9-a</td>
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<td>12-8-10</td>
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<td>Act on the issuance of NFPA 499, <em>Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas</em>, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with one amendment and one appeal as follows:</td>
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<td>12-8-10-a</td>
<td>Amendment No. 499-1 (CAM 499-1):</td>
<td>Accept an Identifiable Part of Comment 499-6. (PASSED TC ballot) See Attachment 12-8-10-a</td>
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<td>12-8-10-a-1</td>
<td>APPEAL</td>
<td>Appeal of D. Wechsler of Lake Jackson, Texas, requesting that the Council overturn the Association action to Accept an Identifiable Part of Comment 499-6. This motion (CAM 499-1) passed on the floor of the Association Meeting and passed TC ballot. See Attachment 12-8-10-a-1</td>
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<td>12-8-10-a-1-a</td>
<td>Comments received on the appeal filed by D. Wechsler to Accept an Identifiable Part of Comment 499-6. See Attachment 12-8-10-a-1-a</td>
<td>See SA 12-8-10-a-1-a</td>
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<td>12-8-10-a-1-b</td>
<td>Comment received from J. Stullcup Chair of NFPA 499 on the appeal of D. Wechsler requesting that the Council overturn the Association action to Accept an Identifiable Part of Comment 499-6 (CAM 499-1).</td>
<td>See SA 12-8-10-a-1-b ADDITION</td>
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<td>12-8-11</td>
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<td>Act on the issuance of NFPA 1124, <em>Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles</em>, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, without amendments. See Attachment 12-8-11 See SA 12-8-11 See Related Item 12-8-44</td>
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<tr>
<td>12-8-12</td>
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<td>Act on the issuance of NFPA 1127, <em>Code for High Power Rocketry</em>, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, without amendments. No Attachment</td>
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<td>12-8-13</td>
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<td>Act on the issuance of PYR 1128, <em>Standard Method of Fire Test for Flame</em></td>
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<td>Document</td>
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<td>12-8-14</td>
<td>Act on the issuance of PYR 1129, <em>Standard Method of Fire Test for Covered Fuse on Consumer Fireworks</em>, with an issuance date of August 9, 2012 and an effective date of August 29, 2012.</td>
<td>See Attachment 12-8-14</td>
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<tr>
<td>12-8-15</td>
<td>Act on the issuance of NFPA 1144, <em>Standard for Reducing Structure Ignition Hazards from Wildland Fire</em>, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting without amendments.</td>
<td>No Attachment</td>
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<tr>
<td>12-8-16</td>
<td>Act on the issuance of NFPA 1500, <em>Standard on Fire Department Occupational Safety and Health Program</em>, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting without amendments.</td>
<td>No Attachment</td>
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</table>
| 12-8-17    | Act on the issuance of NFPA 1582, *Standard on Comprehensive Occupational Medical Program for Fire Departments*, with an issuance date of August 9, 2012 and an effective date of August 29, 2012, as acted on at the Association Meeting, with one amendment and one appeal as follows: | Amendment No. 1582-1 (CAM 1582-1): Accept Proposal 1582-13 and Comment 1582-5. See Attachment 12-8-17-a
Appeal of J. Arvizu of Bakersfield, CA, requesting that the Council uphold the Association action to Accept Proposals 1582-13 and Comment 1582-5. This motion (CAM 1582-1) passed on the floor of the Association Meeting, but failed TC ballot. See Attachment 12-8-17-a-1
Comment received by R. Krause, Chair of NFPA 1582 on the appeal filed by J. Arvizu to uphold the Association action to Accept Proposals 1582-13 and Comment 1582-5. See SA 12-8-17-a-1-a
Amendment No. 1 (CAM 1991-1): Return the entire report. (PASSED TCC ballot PASSED TC ballot) See Attachment 12-8-21-a
Informational Ballot results recommending the next revision cycle for NFPA 1991. (PASSED TCC ballot PASSED TC ballot) See Attachment 12-8-21-b
The 2012 Revision Cycle Consent Documents were letter balloted by the
Council with an issuance date of May 29, 2012 and an effective date of June 18, 2012 as shown below: No action is necessary

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>13D</td>
<td>Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes</td>
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<tr>
<td>24</td>
<td>Standard for the Installation of Private Fire Service Mains and Their Appurtenances</td>
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<tr>
<td>51</td>
<td>Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes</td>
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<td>55</td>
<td>Compressed Gases and Cryogenic Fluids Code</td>
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<tr>
<td>80</td>
<td>Standard for Fire Doors and Other Opening Protectives</td>
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<tr>
<td>101A</td>
<td>Guide on Alternative Approaches to Life Safety</td>
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<td>110</td>
<td>Standard for Emergency and Standby Power Systems</td>
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<tr>
<td>111</td>
<td>Standard on Stored Electrical Energy Emergency and Standby Power Systems</td>
</tr>
<tr>
<td>291</td>
<td>Recommended Practice for Fire Flow Testing and Marking of Hydrants</td>
</tr>
<tr>
<td>301</td>
<td>Code for Safety to Life from Fire on Merchant Vessels</td>
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<tr>
<td>400</td>
<td>Hazardous Materials Code</td>
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<tr>
<td>402</td>
<td>Guide for Aircraft Rescue and Fire-Fighting Operations</td>
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<tr>
<td>415</td>
<td>Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways</td>
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<tr>
<td>424</td>
<td>Guide for Airport/Community Emergency Planning</td>
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<tr>
<td>450</td>
<td>Guide for Emergency Medical Services and Systems</td>
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<tr>
<td>472</td>
<td>Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents</td>
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<tr>
<td>555</td>
<td>Guide on Methods for Evaluating Potential for Room Flashover</td>
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<tr>
<td>654</td>
<td>Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids</td>
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<td>1001</td>
<td>Standard for Fire Fighter Professional Qualifications</td>
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<td>1122</td>
<td>Code for Model Rocketry</td>
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<td>1221</td>
<td>Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems</td>
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<td>1801</td>
<td>Standard on Thermal Imagers for the Fire Service</td>
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<td>1961</td>
<td>Standard on Fire Hose</td>
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The following document received a Certified Amending Motion (CAM) but the CAM was not pursued by the submitter; therefore, it becomes a consent document. This document will have an issuance date of July 9, 2012 and an effective date of July 29, 2012.

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<tr>
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<tr>
<td>75</td>
<td>Standard for the Protection of Information Technology Equipment</td>
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No Attachment

12-8-23 Act on the issuance of proposed Tentative Interim Amendment (TIA) to Sections
<table>
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<th>Date</th>
<th>Action Description</th>
<th>Text of Proposed TIA No.</th>
<th>Ballot Results of TIA No.</th>
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<td>12-8-23-a</td>
<td>Text of proposed TIA No. 1045. See Attachment 12-8-23-a</td>
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<td>12-8-23-b</td>
<td>Ballot results of TIA No. 1045. FAILED both TC ballot on technical merit and emergency nature. See Attachment 12-8-23-b</td>
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<td>12-8-23-c</td>
<td>No comments received. No Attachment</td>
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<tr>
<td>12-8-24</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Chapter 6 of the proposed 2013 edition of NFPA 13, Standard for the Installation of Sprinkler Systems (TIA No. 1054).</td>
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<td>12-8-24-a</td>
<td>Text of proposed TIA No. 1054. See Attachment 12-8-24-a</td>
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<tr>
<td>12-8-24-b</td>
<td>Ballot results of TIA No. 1054. PASSED the TC ballot on both technical merit and emergency nature; PASSED the TCC on correlation and emergency nature. See Attachment 12-8-24-b</td>
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<td>No comments received. No Attachment</td>
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<td>12-8-25</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Sections 3.4.1.1 Premixed Antifreeze Solution, 7.6.1, 7.6.2, 7.8.3.4, 23.1.3(42), 23.4.2.1.3 and A.7.6.1, A.7.6.2.1, A.7.6.2.2, and A.7.6.3.1 of the proposed 2013 edition of NFPA 13, Standard for the Installation of Sprinkler Systems (TIA No. 1066).</td>
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<td>Text of proposed TIA No. 1066. See Attachment 12-8-25-a</td>
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<td>Ballot results of TIA No. 1066. PASSED the TC ballot on both technical merit and emergency nature; PASSED the TCC on correlation and emergency nature. See Attachment 12-8-25-b</td>
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<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Sections 4.1.4, 5.2.7, 8.3, 8.3.1, 8.3.2(2) and 8.3.3 of the 2010 edition of NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes (TIA No. 1060).</td>
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<td>Text of proposed TIA No. 1060. See Attachment 12-8-26-a</td>
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<td>Ballot results of TIA No. 1060. FAILED the TC ballot on technical merit and FAILED emergency nature; FAILED the TCC on correlation and emergency nature. See Attachment 12-8-26-b</td>
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<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Sections 9.1, 9.1.1, 9.1.2(2), 9.2 and 12.3.5 of the proposed 2013 edition of NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes (TIA No. 1061).</td>
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<td>Text of proposed TIA No. 1061. See Attachment 12-8-27-a</td>
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<td>Ballot results of TIA No. 1061. FAILED the TC ballot on technical merit and FAILED emergency nature; FAILED the TCC on correlation and PASSED on emergency nature. See Attachment 12-8-27-b</td>
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<tr>
<td>12-8-28-b</td>
<td>Ballot results of TIA No. 1067. <strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature. See Attachment 12-8-28-c</td>
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<tr>
<td>12-8-28-c</td>
<td>No Comments received. No Attachment</td>
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<td>12-8-29</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 5.2 of the proposed 2013 edition of NFPA 13R, <em>Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies up to and including Four Stories in Height</em> (TIA No. 1055).</td>
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<tr>
<td>12-8-29-a</td>
<td>Text of proposed TIA No. 1055. See Attachment 12-8-29-a</td>
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<tr>
<td>12-8-29-b</td>
<td>Ballot results of TIA No. 1055. <strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature. See Attachment 12-8-29-b</td>
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<tr>
<td>12-8-29-c</td>
<td>No Comments received. No Attachment</td>
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<td>12-8-30</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 5.4.1, 5.4.2(1), 5.4.3 and 5.4.4 of the 2010 and proposed 2013 editions of NFPA 13R, <em>Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies up to and including Four Stories in Height</em> (TIA No. 1062).</td>
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<td>12-8-30-a</td>
<td>Text of proposed TIA No. 1062. See Attachment 12-8-30-a</td>
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<tr>
<td>12-8-30-b</td>
<td>Ballot results of TIA No. 1062. <strong>FAILED</strong> the TC ballot on technical merit and <strong>PASSED</strong> emergency nature; <strong>FAILED</strong> the TCC on correlation and <strong>PASSED</strong> on emergency nature. See Attachment 12-8-30-b</td>
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<tr>
<td>12-8-30-c</td>
<td>No Comments received. No Attachment</td>
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<tr>
<td>12-8-31</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 5.4.2 and A.5.4.2(1) of the proposed 2013 edition of NFPA 13R, <em>Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies up to and including Four Stories in Height</em> (TIA No. 1065).</td>
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<tr>
<td>12-8-31-a</td>
<td>Text of proposed TIA No. 1065. See Attachment 12-8-31-a</td>
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<tr>
<td>12-8-31-b</td>
<td>Ballot results of TIA No. 1065. <strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature. See Attachment 12-8-31-b</td>
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<tr>
<td>12-8-31-c</td>
<td>No Comments received. No Attachment</td>
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<tr>
<td>12-8-32</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 5.3.4.2 of the 2011 edition of NFPA 25, <em>Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems</em> (TIA No. 1046).</td>
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<tr>
<td>12-8-32-a</td>
<td>Text of proposed TIA No. 1046. See Attachment 12-8-32-a</td>
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<tr>
<td>12-8-32-b</td>
<td>Ballot results of TIA No. 1046. <strong>PASSED</strong> TC ballot on both technical merit and emergency nature. See Attachment 12-8-32-b</td>
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<tr>
<td>12-8-32-c</td>
<td>No comments were received. No Attachment</td>
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<td>12-8-33</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Sections 5.3.4.2, A.5.3.4.2, Table A.5.3.4.2, A.5.3.4.2.1, and A.5.3.4.2.1(3) of the 2011 edition of NFPA 25, <em>Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems</em> (TIA No. 1068).</td>
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<tr>
<td>12-8-33-a</td>
<td>Text of proposed TIA No. 1068. See Attachment 12-8-33-a</td>
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<tr>
<td>12-8-33-b</td>
<td>Ballot results of TIA No. 1068. <strong>PASSED</strong> TC ballot on both technical merit and emergency nature. See Attachment 12-8-33-b</td>
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<td>12-8-33-c</td>
<td>No Comments received. No Attachment</td>
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<tr>
<td>12-8-34</td>
<td><strong>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 29.3.6 of the 2010 edition of NFPA 72, National Fire Alarm and Signaling Code (TIA No. 1048).</strong></td>
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<tr>
<td>12-8-34-a</td>
<td>Text of proposed TIA No. 1048. See Attachment 12-8-34-a</td>
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<tr>
<td>12-8-34-b</td>
<td>Ballot results of TIA No. 1048. <strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature. See Attachment 12-8-34-b</td>
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<tr>
<td>12-8-34-c</td>
<td>No comments were received. No Attachment</td>
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<td>12-8-35</td>
<td><strong>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 18.4.5.3 of the 2010 and proposed 2013 editions of NFPA 72, National Fire Alarm and Signaling Code (TIA No. 1049).</strong></td>
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<td>12-8-35-a</td>
<td>Text of proposed TIA No. 1049. See Attachment 12-8-35-a</td>
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<tr>
<td>12-8-35-b</td>
<td>Ballot results of TIA No. 1049. <strong>FAILED</strong> TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> TCC ballot on correlation and <strong>FAILED</strong> on emergency nature. See Attachment 12-8-35-b</td>
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<tr>
<td>12-8-35-c</td>
<td>Three public comments were received on TIA No. 1049. See Attachment 12-8-35-c</td>
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<tr>
<td>12-8-36</td>
<td><strong>Act on the issuance of proposed Tentative Interim Amendment (TIA) to 14.4.5, Table 14.4.3.2 and 29.10 of the proposed 2013 edition of NFPA 72, National Fire Alarm and Signaling Code (TIA No. 1050).</strong></td>
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<td>12-8-36-a</td>
<td>Text of proposed TIA No. 1050. See Attachment 12-8-36-a</td>
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<tr>
<td>12-8-36-b</td>
<td>Ballot results of TIA No. 1050. <strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature. See Attachment 12-8-36-b</td>
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<tr>
<td>12-8-36-c</td>
<td>Three comments were received. See Attachment 12-8-36-c</td>
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<tr>
<td>12-8-37</td>
<td><strong>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Table 14.3.1 heading, Table 14.4.3.2 Item 4 and Item 27 of the proposed 2013 edition of NFPA 72, National Fire Alarm and Signaling Code (TIA No. 1051).</strong></td>
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<tr>
<td>12-8-37-a</td>
<td>Text of proposed TIA No. 1051. See Attachment 12-8-37-a</td>
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<tr>
<td>12-8-37-b</td>
<td>Ballot results of TIA No. 1051. <strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature. See Attachment 12-8-37-b</td>
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<td>12-8-37-c</td>
<td>No comments were received. No Attachment</td>
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<td>12-8-38</td>
<td><strong>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 26.6.2.4.4(2), 26.6.3.2.2.2(F), and Table A.26.6.1 of the proposed 2013 edition of NFPA 72, National Fire Alarm and Signaling Code (TIA No. 1052).</strong></td>
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<td>12-8-38-a</td>
<td>Text of proposed TIA No. 1052. See Attachment 12-8-38-a</td>
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<tr>
<td>12-8-38-b</td>
<td>Ballot results of TIA No. 1052. <strong>FAILED</strong> TC ballot on technical merit <strong>PASSED</strong> on emergency nature; <strong>PASSED</strong> TCC ballot on both correlation and emergency nature. See Attachment 12-8-38-b</td>
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<tr>
<td>12-8-38-c</td>
<td>No comments were received. No Attachment</td>
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<tr>
<td>12-8-38-d</td>
<td><strong>APPEAL</strong> Appeal of W. Olsen of FSCI Fire Safety Consultants, Inc., requesting that the Council issue the proposed TIA to NFPA 72 (TIA No. 1052). See Attachment 12-8-38-d</td>
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<tr>
<td>12-8-39</td>
<td><strong>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section A.23.6 of the proposed 2013 edition of NFPA 72, National Fire Alarm and</strong></td>
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<table>
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<tr>
<th>Date</th>
<th>Action Description</th>
<th>Text/Attachment</th>
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<tr>
<td>12-8-39-a</td>
<td>Text of proposed TIA No. 1053. See Attachment 12-8-39-a</td>
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<tr>
<td>12-8-39-b</td>
<td>Ballot results of TIA No. 1053. <strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature. See Attachment 12-8-39-b</td>
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<tr>
<td>12-8-39-c</td>
<td>No comments were received. No Attachment</td>
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<td>12-8-40</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 14.4.3.4 of the proposed 2013 edition of NFPA 72, <em>National Fire Alarm and Signaling Code</em> (TIA No. 1056).</td>
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<td>12-8-40-a</td>
<td>Text of proposed TIA No. 1056. See Attachment 12-8-40-a</td>
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<tr>
<td>12-8-40-b</td>
<td>Ballot results of TIA No. 1056. <strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature. See Attachment 12-8-40-b</td>
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<td>12-8-40-c</td>
<td>No comments were received. No Attachment</td>
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<td>12-8-41-a</td>
<td>Text of proposed TIA No. 1040. See Attachment 12-8-41-a</td>
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<td>12-8-41-b</td>
<td>Ballot results of TIA No. 1040. <strong>PASSED</strong> TC ballot on both technical merit and emergency nature. See Attachment 12-8-41-b</td>
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<td>12-8-41-c</td>
<td>No comments were received. No Attachment</td>
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<tr>
<td>12-8-42</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 6.6.2.2.3.2, 6.6.3.1 through 6.6.3.1.2 of the 2012 edition of NFPA 99, <em>Health Care Facilities</em> (TIA No. 1064).</td>
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<td>12-8-42-a</td>
<td>Text of proposed TIA No. 1064. See Attachment 12-8-42-a</td>
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<td>12-8-42-b</td>
<td>Ballot results of TIA No. 1064. <strong>PASSED</strong> TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature. See Attachment 12-8-42-b</td>
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<tr>
<td>12-8-42-c</td>
<td>No comments were received. No Attachment</td>
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<tr>
<td>12-8-43</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 12.5 of the 2012 edition of NFPA 269, <em>Standard for Developing Toxic Potency Data for Use in Fire Hazard Modeling</em> (TIA No. 1057).</td>
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<tr>
<td>12-8-43-a</td>
<td>Text of proposed TIA No. 1057. See Attachment 12-8-43-a</td>
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<tr>
<td>12-8-43-b</td>
<td>Ballot results of TIA No. 1057. <strong>PASSED</strong> TC ballot on both technical merit and emergency nature. See Attachment 12-8-43-b</td>
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<tr>
<td>12-8-43-c</td>
<td>No comments received. No Attachment</td>
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<td>12-8-44</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Section 7.3.18.1 and 7.4.9.2 of the 2011 edition of NFPA 1124, <em>Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks</em> (TIA No. 1047).</td>
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<td>12-8-44-a</td>
<td>Text of proposed TIA No. 1047. See Attachment 12-8-44-a</td>
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<tr>
<td>12-8-44-b</td>
<td>Ballot results of TIA No. 1047. <strong>PASSED</strong> TC ballot on both technical merit and emergency nature. See Attachment 12-8-44-b</td>
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<tr>
<td>12-8-44-c</td>
<td>No comments were received.</td>
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<td>12-8-45</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to Sections 2.3.2, 2.3.8, 8.10.4 and 8.10.5 of the proposed 2013 edition of NFPA 1971,</td>
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<td>Reference</td>
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<td><strong>12-8-45</strong></td>
<td><strong>Text of proposed TIA No. 1058.</strong> See Attachment 12-8-45-a</td>
<td><strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature.  See Attachment 12-8-45-b</td>
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<td><strong>12-8-45-c</strong></td>
<td>One comment was received. See Attachment 12-8-45-c</td>
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<tr>
<td><strong>12-8-46</strong></td>
<td><strong>Text of proposed TIA No. 1044.</strong> See Attachment 12-8-46-a</td>
<td><strong>PASSED</strong> the TC ballot on both technical merit and emergency nature; <strong>PASSED</strong> the TCC on correlation and emergency nature.  See Attachment 12-8-46-b</td>
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<tr>
<td><strong>12-8-46-c</strong></td>
<td>No comments received. No Attachment</td>
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<td><strong>12-8-47</strong></td>
<td><strong>ADMINISTRATIVELY WITHDRAWN FROM THIS AGENDA</strong></td>
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<td><strong>12-8-48</strong></td>
<td><strong>Text of proposed TIA No. 1041.</strong> See Attachment 12-8-48-a</td>
<td><strong>PASSED</strong> TCC ballot on both correlation and emergency nature; <strong>PASSED</strong> TC ballot on both technical merit and emergency nature.  See Attachment 12-8-48-b</td>
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<tr>
<td><strong>12-8-48-c</strong></td>
<td>One public comment was received. See Attachment 12-8-48-c</td>
<td></td>
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<td><strong>12-8-49</strong></td>
<td><strong>ADMINISTRATIVELY WITHDRAWN FROM THIS AGENDA</strong></td>
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<td><strong>12-8-50</strong></td>
<td>At the March 2012 meeting, the Council reviewed the request of Richard Duffy, International Association of Fire Fighters, that NFPA consider the establishment of a new document on the design, performance, testing, and certification of two-way, portable (hand-held) land mobile radios (LMR) for use by emergency services personnel. After review of all the material before it, the Council voted to publish a notice to solicit public comments on the need for the project, information on resources on the subject matter, those interested in participating, if established, and other organizations actively involved with the subject.</td>
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</table>
The comment period has passed and forty-one comments were received; thirty-five responses were in favor of the project. See Attachment 12-8-50

| 12-8-51 | At the March 2012 meeting, the Council reviewed the request of Mark Light, International Association of Fire Chiefs, that NFPA consider the establishment of a new project for the development of a common mass evacuation planning guide. A Summit was held on February 8 & 9, 2012, sponsored by NFPA, the International Association of Fire Chiefs and the National Governors Association. Over forty participants, representing key stakeholders and emergency management agencies, gathered to address the issue of mass evacuation planning. The Summit Summary provided by the facilitator suggested that NFPA might play a key role in developing a national standard on the planning process for mass evacuations that can be used to inform the development of executive level policy for state governors and assist in preparation of mass evacuation plans. After review of all the material before it, the Council voted to publish a notice to solicit public comments on the need for the project, information on resources on the subject matter, those interested in participating, if established, and other organizations actively involved with the subject.

The comment period has passed and seven comments were received; three comments were in favor of the project. See Attachment 12-8-51

| 12-8-52 | At the March 2012 meeting, the Council reviewed the request of Dan Rossos, Chair of the Technical Committee (TC) on Respiratory Protection, on behalf of the TC’s SCBA Task Group, that NFPA consider the establishment of a new document on the use of respiratory protective equipment for emergency response operations that do not involve structural firefighting. After review of all the material before it, the Council voted to publish a notice to solicit public comments on the need for the project, information on resources on the subject matter, those interested in participating, if established, and other organizations actively involved with the subject.

The comment period has passed and five comments were received; all comments were in favor of the project. See Attachment 12-8-52

| 12-8-53 | Consider the request of Chief Randy Bruegman, Anaheim Fire Marshal’s Office, that NFPA establish a new standard for the organization deployment of fire suppression operations to wildland fire operations.

**Proposed Scope:** Develop a standard for the organization deployment of fire suppression operations to wildland fire operations.

See Attachment 12-8-53

| 12-8-54 | Consider the request of Don Turno, Savannah River Nuclear Solutions, LLC, that NFPA establish a new standard for the organization and deployment of fire suppression operations, emergency medical operations, and special operations to private, industrial and government facilities and campuses by career or career oriented fire protection services.

**Proposed Scope:** Develop the minimum requirements relating to the
organization and deployment of fire suppression operations, emergency medical operations, and special operations to Private, Industrial, and Government Facilities and Campuses by Private Career Oriented Fire Protection Services.
See Attachment 12-8-54

| 12-8-55 | ADMINISTRATIVELY WITHDRAWN FROM THIS AGENDA |
| 12-8-56 | Review correspondence received from F. Stanonik of the Air-Conditioning, Heating, and Refrigeration Institute regarding progress being made by the CSST industry in response to Standards Council Decision D#10-2, issued on June 23, 2010. See Attachment 12-8-56 |
| 12-8-57 | Consider the request of the Technical Correlating Committee (TCC) on Professional Qualifications to revise the titles and scopes of the following Technical Committees (TCs):
- Accreditation and Certification to Fire Service Professional Qualifications;
- Fire Fighter Professional Qualifications
- Rescue Technician Professional Qualifications
- Fire Officer Professional Qualifications
- Incident Management Professional Qualifications
- Fire Inspector Professional Qualifications
- Fire Investigator Professional Qualifications
- Public Fire Educator Professional Qualifications
- Fire Marshal Professional Qualifications
- Fire Service Instructor Professional Qualifications
- Wildfire Suppression Professional Qualifications
- Emergency Vehicle Mechanic Technicians Professional Qualifications
- Industrial Fire Brigades Professional Qualifications
- Traffic Control Incident Management Professional Qualifications
See Attachment 12-8-57 |
| 12-8-58 | Consider the request of the Correlating Committee (CC) on Combustible Dusts to approve the new scopes for the Correlating Committee and the Technical Committee (TC) on Fundamentals of Combustible Dusts.

**Combustible Dusts Correlating Committee (CMD-AAC)**

**Proposed Scope:** This Committee shall have primary responsibility for documents on the hazard identification, prevention, control, and extinguishment of fires and explosions in the design, construction, installation, operation, and maintenance of facilities and systems used in manufacturing, processing, recycling, handling, conveying, or storing combustible particulate solids, combustible metals, or hybrid mixtures.

**Fundamentals of Combustible Dusts Technical Committee (CMD-FUN)**

**Proposed Scope:** This Committee shall have primary responsibility for information and documents on the management of fire and explosion hazards from combustible dusts and particulate solids.
Consider the request of the Technical Committee (TC) on Special Operations Protective Clothing and Equipment to enter a new document NFPA 1953, *Standard on Protective Ensembles for Contaminated Water Diving*, into the Fall 2014 revision cycle. The Council approved the establishment of this proposed document at the August 2010 Council Meeting. See Attachment 12-8-59

Consider the request of the Technical Correlating Committee (TCC) on Safety to Life to revise the title of the Technical Committee (TC) on Assembly Occupancies and Membrane Structures to Technical Committee (TC) on Assembly Occupancies. See Attachment 12-8-60

Consider the request of the Technical Committee (TC) on Fire Service Training to enter a new document NFPA 1408, *Fire Service Training on Thermal Imaging*, into the Fall 2014 revision cycle. The Council approved the establishment of this proposed document at the August 2010 Council Meeting. See Attachment 12-8-61

Consider the request of the Technical Correlating Committee (TCC) on Health Care Facilities to revise the scopes of the following Technical Committees (TC):
- Health Care Facilities TCC
- Electrical Systems TC
- Fundamentals TC
- Health Care Emergency Management and Security TC
- Mechanical Systems TC
- Medical Equipment TC
- Piping Systems TC
See Attachment 12-8-62

Consider the request of the Technical Correlating Committee (TCC) on Signaling Systems for the Protection of Life and Property to revise the scopes of the following Committees:

Technical Committee on Single- and Multiple-Station Alarms and Household Fire Alarm Systems (SIG-HOU)

**Proposed Scope:** This Committee shall have primary responsibility for documents on the performance, installation, operation, inspection, testing, maintenance, and use of single- and multiple-station alarms and household alarm systems for fire warning.

Technical Committee on Testing and Maintenance of Fire Alarm and Signaling Systems (SIG-TMS)

**Proposed Scope:** This Committee shall have primary responsibility for documents and requirements for the proper inspection, testing, and maintenance of fire alarm and emergency communications systems and associated components, for both new and existing systems. This
Committee shall not have responsibility for inspection, testing, and maintenance of single- and multiple-station alarms and household alarm systems.

See Attachment 12-8-63

12-8-64 Consider the request of the Inspection, Testing, and Maintenance of Water-Based Systems Technical Committee (TC) for a scope clarification between the Inspection, Testing, and Maintenance of Water-Based Systems TC and the Water Mist Fire Suppression TC.

Inspection, Testing, and Maintenance of Water-Based Systems Technical Committee

**Proposed Scope:** This Committee shall have primary responsibility for documents on inspection, testing, and maintenance of systems utilizing water as a method of extinguishment. These include sprinkler systems (excluding sprinkler systems installed in one- and two-family dwellings and manufactured homes), standpipe and hose systems, fire service piping and appurtenances, fire pumps, water storage tanks, fixed water spray systems, water mist systems, foam-water systems, valves, and allied equipment. This Committee shall also develop procedures for the conduct and reporting of routine system impairments.

Water Mist Fire Suppression Technical Committee

**Proposed Scope:** This Committee shall have primary responsibility for documents on the design, installation, and maintenance of systems which use a water mist for the control, suppression, or extinguishment of fire.

See Attachment 12-8-64  See SA 12-8-64

12-8-65 Consider requests from NFPA Committees to change revision cycles for the following documents:

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See Attachment 12-8-65
See SA 12-8-65

### 12-8-66
Report of the Membership Task Group (K. Bell, Chair)

- **12-8-66-a** Act on pending applications for Committee Members. See Attachment 12-8-66-a
- **12-8-66-b** Review Declared Structure of Electrical Safety in the Workplace Technical Committee. See Attachment 12-8-66-b
- **12-8-66-c** Appointment of Health Care Facilities Technical Committee Chairs to the Technical Correlating Committee as non-voting members. See Attachment 12-8-66-c
- **12-8-66-d** Consider the request of the Professional Qualifications Correlating Committee to revise the additional clarification of interest classifications for all Professional Qualifications Committees. See Attachment 12-8-66-d

### 12-8-67
Report of the Policy and Procedures Task Group (J. Milke, Chair). See SA 12-8-67

### 12-8-68
Consider the request of the NEC Technical Correlating Committee to approve revisions made to the *NEC Supplementary Operating Procedures*. See Attachment 12-8-68

### 12-8-69
Review the dates and locations of upcoming Council Meetings, as follows:

- **October 29-30, 2012**
  (TG Meeting 8:00 AM on October 29) Santa Fe, NM
- **March 6-7, 2013**
  (TG Meeting 8:00 AM on March 6) San Juan, PR
- **August 12-15, 2013**
  (TG Meeting 12:00 PM on August 12) Quincy, MA
- **October 23-24, 2013**
  (TG Meeting 8:00 AM on October 23) TBD
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (13-1)

Document: NFPA 13, Standard for the Installation of Sprinkler Systems

Motion: To Return a portion of a Report in the form of an Identifiable Part of Proposal 13-67 and related Comment 13-57

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS/HAS NOT** achieved the necessary \( \frac{3}{4} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is ____ [19 (eligible to vote) – ____ (ballots not returned) – ____ (abstentions) = ____ \( \times 0.75 = ____ \)]

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**TCC Action: PASS/FAIL**

AUT-SSI FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary \( \frac{2}{3} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 18 [30 (eligible to vote) – 3 (ballots not returned) – 0 (abstentions) = \( 27 \times 0.66 = 17.82 \)]

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<td>30</td>
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25 Agree
2 Do Not Agree (Brock, Hopkins)
0 Abstain

**TC Action: PASS**
Amendment: Return a portion of a Report in the form of an Identifiable Part of Proposal 13-67 and related Comment 13-57

NOTE: This Association Amendment (“Amendment”) is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects (“Regs”). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, there is no existing text therefore the text would be deleted.

Staff Note: The following section will be deleted from both the Pipe and Fitting Sections.

Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.

While the Standards Council generally defers to the default recommendation prescribed by the Regs. that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☐ Do Not Agree*--XXX

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Due to the problems occurring with CPVC piping, particularly with respect to compatibility, the proposed language is important and I oppose the Amendment which will result in the deletion of the proposed material and return to the language of the previous edition.

________________________________________
Signature: _______________________________

Name - Please Print: __Pat D. Brock____________________________

Date: 6/18/12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
EMAIL: ecarroll@nfpa.org
Amendment: Return a portion of a Report in the form of an Identifiable Part of Proposal 13-67 and related Comment 13-57

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Reg s"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, there is no existing text therefore the text would be deleted.

Staff Note: The following section will be deleted from both the Pipe and Fitting Sections.

Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.

While the Standards Council generally defers to the default recommendation prescribed by the Regs. that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☐ Do Not Agree*

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Due to compatibility problems occurring with CPVC piping and fittings, it is important to retain the information included in the previous edition.

________________________________________
Signature:

Name - Please Print: Mark Hopkins

Date: 7-9-12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
EMAIL: ecarroll@nfpa.org
Comment 13-57 Return a portion of a Report in the form of identifiable part(s) of a proposal and related comment

13-57 Log #214 AUT-SSI Final Action: Accept in Principle
(6.1.1.3, 6.3.6.1.1, and 6.3.6.2)

Submitter: Terry L. Victor, Tyco/SimplexGrinnell
Comment on Proposal No: 13-67
Recommendation: Accept in Principle proposal 13-67 Log #CP401 and make the following changes:
Split revised 6.1.1.3 into two parts for clarity and to comply with the manual of style as follows:
6.1.1.3 Equipment as permitted in Table 6.3.1.1 and table 6.4.1 shall not be required to be listed.
(new) 6.1.1.3.1 Nonmetallic pipe and fittings included in Table 6.3.1.1 and table 6.4.1 shall be listed.
Revise new sections 6.3.6 through 6.3.6.6 as follows for clarity and to comply with the manual of style:
6.3.6* CPVC Plastic Pipe. CPVC pipe in accordance with Table 6.3.1.1 shall be investigated for suitability in automatic sprinkler installations and listed for this service.
(new) 6.3.6.1 Listed CPVC shall be installed in accordance with it’s listing limitations; including installation instructions.
(new) 6.3.6.1.1 Manufacturers installation instructions shall include it’s listing limitations.
6.3.6.1.2* (pick up annex text from ROP 6.3.6.1) When CPVC pipe is used in combination systems utilizing internally coated steel piping and CPVC piping, the steel pipe coating shall be investigated for compatibility with CPVC by a testing laboratory. Cutting oils and Lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
6.3.6.2* (pick up annex text from ROP 6.3.6.2) When CPVC pipe is used in combination systems utilizing steel pipe that is not internally coated and CPVC piping, no additional evaluations are required. Cutting oils and Lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
(new) 6.3.6.3 When CPVC pipe is used in combination systems utilizing steel pipe, cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
6.3.6.3.5 Fire stopping materials intended for use on CPVC piping penetrations shall be investigated for compatibility with CPVC materials.
6.3.6.4 Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.
6.3.6.5 CPVC listed for light hazard occupancies shall be permitted to be installed in ordinary hazard rooms of otherwise light hazard occupancies where the room does not exceed 400 ft² (37 m²).
6.3.6.6 CPVC shall not be listed for portions of an occupancy classification.

Substantiation: This new text needed to be separated for clarity and to comply with the manual of style. There are two substantive changes that are included in new 6.3.6.1.1 and in 6.3.6.2.

The new 6.3.6.1.1 changes the requirement that listed CPVC shall be installed in accordance with manufacturer’s instructions. As written in the ROP, this text would have allowed any manufacturer to put any installation requirement in their instructions, and the installer was bound to that requirement as if it were printed in NFPA 13. I’m sure this was not the intent of the technical committee. Instead, the new 6.3.6.1.1 states what I believe was the intent of the technical committee, that any listing limitations must be included in the manufacturer’s installation instructions.

In 6.3.6.2 the word “coating” was added after “steel pipe” to make it clear that the coating is to be investigated for compatibility and not the pipe itself.
This comment is being submitted by the Tyco Codes and Standards Sprinkler Task Group.
Committee Meeting Action: Accept in Principle
Accept in Principle proposal 13-67 (Log #CP401) and make the following changes:
Split revised 6.1.1.3 into two parts for clarity and to comply with the manual of style as follows:
6.1.1.3 Equipment as permitted in Table 6.3.1.1 and table 6.4.1 shall not be required to be listed.

Recommendation: Accept in Principle proposal 13-67 (Log #CP401) and make the following changes:
6.3.6* CPVC Plastic Pipe. CPVC pipe in accordance with Table 6.3.1.1 shall be investigated for suitability in automatic sprinkler installations and listed for this service.
(new) 6.3.6.1 Listed CPVC shall be installed in accordance with it’s listing limitations.
(new) 6.3.6.1.1 Manufacturers installation instructions shall include it’s listing limitations.
6.3.6.1.2* (pick up annex text from ROP 6.3.6.1) When CPVC pipe is used in combination systems utilizing steel piping internally coated with corrosion inhibitors and CPVC piping, the steel pipe coating shall be investigated for compatibility with CPVC by a testing laboratory.
6.3.6.2* (pick up annex text from ROP 6.3.6.2) When CPVC pipe is used in combination systems utilizing steel pipe that is not internally coated with chemical corrosion inhibitors, no additional evaluations are required.
(new) 6.3.6.4 When CPVC pipe is used in combination systems utilizing steel pipe, cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
6.3.6.3.5 Fire stopping materials intended for use on CPVC piping penetrations shall be investigated for compatibility with CPVC materials.
6.3.6.4 Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.
6.3.6.5 CPVC listed for light hazard occupancies shall be permitted to be installed in ordinary hazard rooms of otherwise light hazard occupancies where the room does not exceed 400 ft² (37 m²).
6.3.6.6 CPVC shall not be listed for portions of an occupancy classification.

Committee Statement: Changes made to make specific reference to corrosion inhibitors as internal coating.
Number Eligible to Vote: 29
Ballot Results: Affirmative: 27 Negative: 2
Explanation of Negative: DORNBOS, D.: I don’t believe that compatibility issues are limited to one manufacturer and it is infeasible to single one material out. Compatibility is a concern for all potential system components and the Standard should address the issue for all materials.
MCPHEE, R.: I agree with the comment from Dornbos.

Backup Proposal 13-67 to Comment 13-57
13-67 Log #CP401 AUT-SSI Final Action: Accept
(6.1.1.3)

Submitter: Technical Committee on Sprinkler System Installation Criteria, Recommendation:
Revise text to read as follows:
6.1.3 Equipment, other than non metallic pipe and fittings, as permitted in Table 6.3.1.1 and table 6.4.1 shall not be required to be listed.
6.1.6 The new materials or devices listing instructions shall identify and specify the existing system components, including the fluids conveyed, with which the new listed materials, devices or components are compatible.
6.1.6.1 This listing requirement shall also apply to chemical or material modifications made to components listed in Table 6.3.1.1 and Table 6.4.1.
6.3 Aboveground Pipe and Tubing.
6.3.1 General.
Table 6.3.1.1 Pipe or Tube Materials and Dimensions

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<td>Specification for black and hot-dipped zinc-coated (galvanized) welded and seamless steel pipe for fire protection use</td>
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6.3.1.2 Steel pipe shall be in accordance with 6.3.2, 6.3.3, or 6.3.4.
6.3.1.3 Copper tube shall be in accordance with 6.3.5.
6.3.1.4 Chlorinated polyvinyl chloride (CPVC) shall be in accordance with 6.3.6 and with the portions of the ASTM standards specified in Table 6.3.6.1 that apply to fire protection service.

6.3.2 Steel Pipe—Welded or Roll-Grooved. When steel pipe referenced in Table 6.3.1.1 is joined by welding referenced in 6.3.6 or by roll-grooved pipe and fittings as referenced in 6.3.5, the minimum nominal wall thickness for pressures up to 300 psi (20.7 bar) shall be in accordance with Schedule 10 for pipe sizes up to 5 in. (125 mm), 0.134 in. (3.40 mm) for 6 in. (150 mm) pipe, 0.188 in. (4.78 mm) for 8 in. and 10 in. (200 mm and 250 mm) pipe, and 0.350 in. (8.83 mm) for 12 in. (300 mm) pipe.

6.3.3 Steel Pipe — Threaded. When steel pipe referenced in Table 6.3.1.1 is joined by threading referenced in 6.3.1 or by fittings used with pipe having cut grooves, the minimum wall thickness shall be in accordance with Schedule 30 pipe [in sizes 8 in. (200mm) and larger] or Schedule 40 pipe [in sizes less than 8 in. (200 mm)] for pressures up to 300 psi (20.7 bar).

6.3.4 Specially Listed Steel Pipe. Pressure limitations and wall thickness for steel pipe specially listed in accordance with 6.3.6 shall be permitted to be in accordance with the piping listing requirements.

6.3.5 Copper Tube. Copper tube as specified in the standards listed in Table 6.3.1.1 shall have a wall thickness of Type K, Type L, or Type M where used in sprinkler systems.

6.3.6 CPVC Plastic Pipe. CPVC pipe in accordance with Table 6.3.1.1 shall be investigated for suitability in automatic sprinkler installations and listed for this service. Listed CPVC shall be installed in accordance with its listing limitations, including installation instructions.

6.3.6.1 When CPVC pipe is used in combination systems utilizing internally coated piping and CPVC piping, the steel piping shall be investigated for compatibility with CPVC by a testing laboratory. Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.

6.3.6.2 When CPVC pipe is used in combination systems utilizing steel pipe that is not internally coated and CPVC piping, no additional evaluations are required. Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.

6.3.6.3 Fire stopping materials intended for use on CPVC piping penetrations shall be investigated for compatibility with CPVC materials.

6.3.6.4 Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC.
A.6.4.2 CPVC Plastic Fittings. CPVC fittings shall also be in accordance with 6.4.3 and with the portions of the ASTM standards specified in Table 6.4.3 that apply to fire protection service.

6.4.2.1 CPVC Plastic Fittings. CPVC fittings in accordance with Table 6.3.1.1 shall be investigated for suitability in automatic sprinkler installations and listed for this service. Listed CPVC shall be installed in accordance with the manufacturer’s listing instructions. Compatibility of new and existing material needs to be identified and this section gives guidance to the laboratories and users.

Committee Meeting Action: Accept
Number Eligible to Vote: 30
Ballot Results: Affirmative: 27 Negative: 1
Ballot Not Returned: 2 Kirn, M., Slocum, L.

Explanation of Negative:
LAVERICK, G.: Revisions to the existing 6.1.1.3 completely change the meaning of this section to require only plastic piping to be listed. All other equipment will not require listing which we believe is not the intent of this revision.

The new 6.1.1.6.1 requires modifications in chemical or materials to the equipment in tables 6.3.1.1 and 6.4.1 to be compatible and contained in the listing instructions. However, the equipment referenced in tables (except for plastic piping) is not required to be listed and therefore the information will not be required.

Comment on Affirmative:
MEEHAN, M.: This proposal only addresses the existing known problems and does not address the underlying issue of incompatible materials being manufactured and listed for installation. The building owners, the public and our industry deserve better.

SCHWAB, P.: I believe this is a step in the right direction. However, the only way to ensure that all items are compatible is to require that all products used in sprinkler systems be listed. This includes components as well as items such as lube, thread sealants, antifreeze, etc.
COMMITTEE CHAIR LINDER: The second report is consisting of a partial revision of NFPA 13 Standard for the Installation of Sprinkler Systems. The report was submitted to letter ballot of the Technical Correlating Committee the Technical Committee.


PRESIDING OFFICER MILKE: Thank you, Mr. Linder. Let's now proceed with the discussion on the Certified Amending Motions on NFPA 13. Microphone 5, please.

MR. ISMAN: Thank you, Mr. Chairman. Ken Isman with the National Fire Sprinkler Association, and we move to reject Section 6.3.6.4.6 and 6.4.2.4 as shown in Motion Sequence Number 13-1.

PRESIDING OFFICER MILKE: Thank you. There is a motion on the floor to return a portion of the report in the form of an identifiable part of Proposal 13-67 and related Comment 13-57. Is there a second? Let me point out that this is similar to a Certified Amending Motion at 13R-4 that we've already talked about. There is much testimony already in the record. In the interest of time, I would suggest that we not duplicate those comments. But with that in mind, Microphone 5 to proceed with the discussion on the motion, please.

MR. ISMAN: Thank you, Mr. Chair. And yes, we were just going to say this is exactly what you voted on in 13R, it's just in 13 now, and you did approve it there. We're hoping you approve it here for consistency. And I'll just state in advance, if you approve this as you did with 13R, we will not be making any motion of 13-2.

PRESIDING OFFICER MILKE: Thank you.

Mr. Linder, would you like to offer the committee's position?
COMMITTEE CHAIR LINDER: From the Correlating Committee's perspective, this was a correlating issue, and we want 13 and 13R to be the same, so I would encourage the membership to vote for the amendment.

PRESIDING OFFICER MILKE: Thank you. With that, we will open up debate on the motion. Please provide your name, and affiliation, and whether you are speaking in support or against the motion.

Seeing none, we will move on to a vote. Before we vote, let me restate the motion. The motion on the floor is to return a portion of the report in the form of an identifiable part of Proposal 13-67 and related Comment 13-57. Please record your vote, 1 for in favor of the motion, 2 opposed to the motion.

The balloting is closed.

Thank you. The results of the motion are that the motion has passed.
ASSOCIATION AMENDMENT BALLOT RESULTS

AMENDMENT (13-1)

Document: NFPA 13, *Standard for the Installation of Sprinkler Systems*

Motion: To Return a portion of a Report in the form of an Identifiable Part of Proposal 13-67 and related Comment 13-57

**TCC FINAL Ballot Results**

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary \( \frac{3}{4} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **12** \( [19 \text{ (eligible to vote)} – 4 \text{ (ballots not returned)} – 0 \text{ (abstentions)} = 15 \times 0.75 = 11.25] \)

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**TCC Action:** PASS

**AUT-SSI FINAL Ballot Results**

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary \( \frac{2}{3} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **18** \( [30 \text{ (eligible to vote)} – 3 \text{ (ballots not returned)} – 0 \text{ (abstentions)} = 27 \times 0.66 = 17.82] \)

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**TC Action:** PASS
Amendment: Return a portion of a Report in the form of an Identifiable Part of Proposal 13-67 and related Comment 13-57

NOTE: This Association Amendment (“Amendment”) is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects (“Regs”). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, there is no existing text therefore the text would be deleted.

Staff Note: The following section will be deleted from both the Pipe and Fitting Sections.

Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.

While the Standards Council generally defers to the default recommendation prescribed by the Regs. that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☐ Do Not Agree*--XXX

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Due to the problems occurring with CPVC piping, particularly with respect to compatibility, the proposed language is important and I oppose the Amendment which will result in the deletion of the proposed material and return to the language of the previous edition.

Signature: __________________________

Name - Please Print: __Pat D. Brock_______________________

Date: 6/18/12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
EMAIL: ecarroll@nfpa.org
Amendment: Return a portion of a Report in the form of an Identifiable Part of Proposal 13-67 and related Comment 13-57

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Reg."). Under the Regs, if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, there is no existing text therefore the text would be deleted.

Staff Note: The following section will be deleted from both the Pipe and Fitting Sections.

Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.

While the Standards Council generally defers to the default recommendation prescribed by the Regs. that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree
☐ Do Not Agree*
☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Due to compatibility problems occurring with CPVC piping and fittings, it is important to retain the information included in the previous edition.

Signature: [Signature]

Name - Please Print: Mark Hopkins

Date: 7-9-12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
EMAIL: ecarroll@nfpa.org
ASSOCIATION AMENDMENT BALLOT RESULTS

AMENDMENT (13-4)

Document: NFPA 13, Standard for the Installation of Sprinkler Systems

Motion: To Reject Comment 13-241

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS/HAS NOT** achieved the necessary \( \frac{3}{4} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is \( [19 \text{ (eligible to vote)} - \_ \text{ (ballots not returned)} - \_ \text{ (abstentions)} = \_ \times 0.75 = \_] \)

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TCC Action: PASS/FAIL

AUT-HBS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary \( \frac{2}{3} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **18** \( [30 \text{ (eligible to vote)} - 3 \text{ (ballots not returned)} - 1 \text{ (abstention)} = 26 \times 0.66 = 17.16] \)

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25 Agree (Wellen w/comment)
1 Does Not Agree (Nelson)
1 Abstain (Kirschner)

TC Action: PASS
NFPA 13
TC BALLOT FOR HANGING AND BRACING
OF WATER-BASED FIRE PROTECTION SYSTEMS
JUNE 2012 ASSOCIATION AMENDMENT 13-4

Amendment: Reject Comment 13-241

☐ Agree

If you agree with this amendment, the recommendation will be to return section 9.3.5.3.9 to 2010 text, which would make this requirement apply to all piping, not just feed mains or branch lines as it currently reads with the acceptance of ROC 13-241. This also removes the language from the annex that was added at the ROC, which reverts back to ROP text. In this case the result is:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

A.9.3.5.3.9 Suspended trapeze members are not considered building structure.

☒ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

NO EVIDENCE WAS PROVIDED THAT THE CURRENT METHOD IS A SAFETY ISSUE.

Signature: [Signature]

Name - Please Print: Randy Nelson

Date: 6-19-12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
EMAIL: eccarroll@nfpa.org
PAY- 617.984.7110

617-984-7110

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 30 of 2025
NFPA 13
TC BALLOT FOR HANGING AND BRACING
OF WATER-BASED FIRE PROTECTION SYSTEMS
JUNE 2012 ASSOCIATION AMENDMENT 13-4

Amendment: Reject Comment 13-241

☐ Agree

If you agree with this amendment, the recommendation will be to return section 9.3.5.3.9 to 2010 text, which would make this requirement apply to all piping, not just feed mains or branch lines as it currently reads with the acceptance of ROC 13-241. This also removes the language from the annex that was added at the ROC, which reverts back to ROP text. In this case the result is:

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A.9.3.5.3.9 Suspended trapeze members are not considered building structure.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

☒ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Comment 13-241 was necessary and a correct compromise to limit the intellectual inconsistency promoted in Ch. 9 by the 6” rod rule. The 6” rod rule instructs ignoring the Ch. 9 seismic force tenets and is thus untenable and detrimental to the NFPA 13 Standard. Further, NFSA arguments sighting "No loss experience" are specious. Consider, prior to 2007 at the NFPA/ASCE Task Force the Ch. 9 T.C. promoted that 40ft. Lat. Bracing had a long history of reliable performance. ASCE 7 dictated that going forward Ch. 9 SHALL quantify and limit seismic force specific to project site and system characteristics including pipe size and type. Hence, 9.3.5.3.2 et al and 9.3.5.6, etc.

__________________________
Signature:

__________________________
Name - Please Print: Kraig Kirschner

__________________________
Date: 6/20/2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
EMAIL: ecarroll@nfpa.org
FAX: 617-984-7110
NFPA 13
TC BALLOT FOR HANGING AND BRACING
OF WATER-BASED FIRE PROTECTION SYSTEMS
JUNE 2012 ASSOCIATION AMENDMENT 13-4

Amendment: Reject Comment 13-241

[ ] Agree

If you agree with this amendment, the recommendation will be to return section 9.3.5.3.9 to 2010 text, which would make this requirement apply to all piping, not just feed mains or branch lines as it currently reads with the acceptance of ROC 13-241. This also removes the language from the annex that was added at the ROC, which reverts back to ROP text. In this case the result is:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

[A.9.3.5.3.9 Suspended trapeze members are not considered building structure.]

[ ] Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

[ ] Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I disagree with the floor vote and support the original committee action on this subject. I have to vote agree on this ballot to prevent reverting back to the 2010 edition text. The new annex text is better than no change at all.

Tom Wellen

Signature:

Name - Please Print: Tom Wellen

Date: June 28, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
EMAIL: ecarroll@nfpa.org
FAX: 617-984-7110
Comment 13-241 Reject

13-241 Log #77 AUT-HBS Final Action: Accept (9.3.5.3.9 and A.9.3.5.9 (New))

Submitter: John Deutsch, City of Brea Fire Department

 Recommendation: Add text to read as follows:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes branch lines or feed mains individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure. The exception to the requirements of 9.3.5.3 shall not apply to cross mains.

A.9.3.5.9 The 6" hanger rods exception to the requirements of 9.3.5.3 shall only be used for the pipe or portion of pipe being hung directly from the hanger as limited by hanger spacing rules in section 9.2.2. The exception to the requirements of 9.3.5.3 shall not be permitted to include any tributary loads from other pipes with separate hangers such as the added longitudinal forces from branch lines.

 Substantiation: The requirements of section 9.3.5.1.1 can not be met by allowing the omission of sway bracing in lieu of short rods. The ZOI method uses the sway brace or attachment load capacity limits to control lateral loads on cross mains sway brace. The short rod rule does not have any load capacity limit. Therefore as 9.3.5.3.9 is currently written an unlimited amount of longitudinal seismic force from branch lines can be added to a cross mains lateral seismic force and be controlled by the 6" rod.

Committee Meeting Action: Accept

Number Eligible to Vote: 29

Ballot Results: Affirmative: 24 Negative: 3

Ballot Not Returned: 2 Bonds, R., Laguna, A.

Explanation of Negative:

KIRSCHNER, K.: This proposal highlights several of the many inconsistencies inherent in 9.3.5.3.9. Since NFPA 13 is an emergency system, I submit that this proposal should be subordinate to comment 13-240.

The problem addressed by this proposal is identical to that in 13-240 and 13-242.

Should we continue to ignore the SEI/ASCE 7 analogy, but choose to limit this application, I propose limiting 13-241 to lines ONLY and ONLY 3" maximum pipe size. - Note: 4" hanger load is 50 percent higher than 3" hanger load.

WE MUST sway brace feed mains and bulk mains as these pipes are too important to system performance, without even quantifying variations in Cp.

SCHWAB, P.: The ability to use the 6" rods on cross mains has been acceptable for many cycles. The submitter did not provide any instances of failure associated with this issue.

THACKER, J.: Documentation and or evidence of there being a problem with the current language in section 9.3.5.3.9 was not provided. There has not been evidence of present text language being adequate.

Comment on Affirmative:

DENEFF, C.: I believe the short hanger exception on other piping systems has historically been applied to single pipes, so disallowing the 6" hanger exception for cross mains is definitely justified since this is a system of pipes and there is no upper limit on the lateral force. I don't think this change goes far enough, however. A very large feed main still generates substantial lateral force and there are no requirements for making sure the hanger and its attachments are adequate for this force. The consequences of loss of feed main vertical support are catastrophic. FM Global allows the short hanger exception only on 3.5" and smaller branch lines. The lateral force from these single branch lines is relatively small and the consequences of a branch line break, while not desirable, are much less severe than a main break. NFPA should consider disallowing the short hanger exception on all piping except small branch lines.

Backup Proposal 13-346 to Comment 13-241

13-346 Log #418 AUT-HBS Final Action: Accept in Principle (9.3.5.3.9)

Submitter: Randy R. Nelson, VFS Fire and Security Services

 Recommendation: Revise text to read as follows:

The requirements of 9.3.5.3 shall not apply to pipes individually supported to the building structure by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

 Substantiation: Some contractors are using this paragraph for trapeze hangers, claiming that the rod from the trapeze to the top of pipe is less than 6 in., therefore eliminating lateral bracing on those pipes. The revision clarifies that paragraph 9.3.5.3.9 applies to hangers starting at the building structure.

Committee Meeting Action: Accept in Principle

Add new annex section:

A.9.3.5.3.9 Suspended trapeze members are not considered building structure.

Committee Statement: The new annex language clarifies that these types of trapeze hangers are not in line with the exemption for lateral braces under the 6 in. rod measurement.

Number Eligible to Vote: 28

Ballot Results: Affirmative: 26

Ballot Not Returned: 2 Bonds, R., Laguna, A.
We will now move on to the next motion. Let's proceed with the discussion on Certified Amending Motion 13-4. Microphone 5, please.

MR. ISMAN: Thank you, Mr. Chair. Our last motion of the day. We move to reject Comment 13-241.

PRESIDING OFFICER MILKE: Thank you. There is a motion on the floor to reject Comment 13-241. Is there a second?

Thank you. We do have a second, so let's proceed with discussion on the motion. Microphone 5?

MR. ISMAN: Thank you. Before I get into the technical issue of our motion, I need to spend a minute clarifying the note that's in the Certified Amending Motion report.

The note says that, "We are seeking to return the language to the annex dealing with measuring the length of a hanger rod in a trapeze hanger."

While this note is correct, it underscores the procedural error that occurred in the processing of this comment.

The comment introduced a new subject at the ROC stage of the process. There was a long-standing rule in NFPA 13 that says that, "lateral braces can be omitted from cross mains if the main is supported with hangers that have a maximum rod length of six inches."

The proposal that is tied -- the proposal that this issue is tied to simply sought to clarify how to apply that six-inch rule to trapeze hangers. The original proposal did not ask to eliminate the rule, it just tried to clarify how to measure that six inches. And the committee did this at the ROP stage by inserting this annex note that you see.

For the ROC, the comment was submitted to just completely get rid of the whole concept of the six-inch rod rule and force everybody to put lateral braces on all cross mains.

That subject was not opened in the ROP, and the comment should have been rejected as new business or held for further study. Instead, it was accepted, and we're now seeking to have it overturned.
From a technical perspective, the omission of lateral braces on cross mains has worked well for many editions of NFPA 13. Earthquake experience from systems that have been protected in accordance with this rule has been good. No substantiation has been submitted to show that there is a problem with cross mains hung on maximum six-inch rods. The allowance to omit lateral braces on cross manes with six-inch rods is technically sound. The main just can't move very far and do significant damage if it's hung on short rods. The allowance helps us to install cost-effective sprinkler systems in situations such as hotels where the mains are frequently looped in the corridor and soffitted in along the wall. There isn't room in the soffit for a lateral brace. Taking away the six-inch rod rule will significantly increase the cost of some efficient sprinkler systems with no measurable return benefit. We ask you to vote in favor of our motion and return the rule to the standard that allows us to omit lateral braces from cross mains where the pipe is supported by hangers of rods six inches or less.

PRESIDING OFFICER MILKE: Mr. Linder, would you like to offer the committee's position?

COMMITTEE CHAIR LINDER: I would like to defer the committee's position to the TC Chair for the Hanging and Bracing Committee, Mr. Jim Biggins. TC COMMITTEE CHAIR BIGGINS: Thank you, Jim Biggins, Global Risk Consultants. As Ken spoke to, we did try to address the issue of lateral bracing, and we did address it by further defining that the rod is to the building structure, not to the trapeze hanger. A comment came in trying to further clarify it. We may have overstepped, but the committee did discuss it and we felt it was the proper thing to do. And I know there's a number of committee members here that will speak, as well.

PRESIDING OFFICER MILKE: Thank you, gentlemen. With that, we will open up debate on the motion.
Please provide your name, and affiliation, and whether you are speaking in support of or against the motion. Microphone 3.

MR. DEUTCH: I'm John Deutch representing the City of Brea and I'm in favor of this motion to reject it.

I'm the author of this comment. I made the comment -- I'm in favor of the motion to reject this comment because I believe that this comment is too conservative and may cause added cost to the public. The comment is an all or nothing with respect to the cross main sway braces.

If a four-inch feed main, which is still acceptable, is hung with a three-eighths rod and it had no sway bracing, then a smaller cross main would surely be okay with some limited load.

While I am opposed to having unlimited loads being applied to cross mains, I think that NFPA being a minimum standard, that this would just go too far. I think at this point we should reject this proposal in hopes of a more sophisticated proposal later, something that had an evaluation process similar to what we do with sway braces. Thank you.


MR. KIRSCH: Yes. I'm Craig Kirsch. I'm a TC member. I'm against this proposal -- or this motion. We need to consider the following: The NFPA is an emergency system, and I must espouse the tenants of a surveyed engineering philosophy and not leave desired result to chance.

Chapter 9 tenants were enhanced to control seismic force in conformance to ASC7. We were -- we were -- we defined the seismic force specific to the project site in Chapter 9. We quantify this force by assisting configuration and control its effects specific to discrete characteristics of the system pipe as evidenced by its resistance to deflection, deformation, and fitting failure.

935-939, which we call the six-inch rod rule,
totally ignores the above subject AFCE7 or its parameters. So it's a philosophical problem that we have.

Please be advised that the TC overwhelmingly has supported the proposal and have voted 24 to 3. Doing nothing, as proposed by this motion, is not conservative engineering typical to the NFPA 13 engineering system.

Please support the consensus of Hanging and Bracing Committee, the Technical Committee, by rejecting this motion. Thank you.

PRESIDING OFFICER MILKE: Thank you. Is there any further discussion on Motion 13-4 to reject Comment 13-241?

Seeing none, Mr. Linder, any final comments?

COMMITTEE CHAIR LINDER: I will defer to the TC Chair, Jim Biggins, for final comments.

TC COMMITTEE CHAIR BIGGINS: I ask the group to support the committee action on this, but I do also want to say that this is something that we will be looking at in greater detail during the next cycle.

PRESIDING OFFICER MILKE: Okay. Before we vote, let me restate the motion. The motion on the floor is to reject Comment 13-241.

Please record your vote. 1 is in favor of the motion, 2 is opposed to the motion.

5 seconds.

The balloting is closed.

Thank you. The results of the vote are that the motion has passed.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 24, 2012

AMENDMENT (13-4)

Document: NFPA 13, *Standard for the Installation of Sprinkler Systems*

Motion: To Reject Comment 13-241

TCC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary 3/4 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **12** [19 (eligible to vote) – 4 (ballots not returned) – 0 (abstentions) = 15 × 0.75 = 11.25]

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| Abstain | 0 |

**TCC Action: PASS**

AUT-HBS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **18** [30 (eligible to vote) – 3 (ballots not returned) – 1 (abstention) = 26 × 0.66 = 17.16]

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**TC Action: PASS**
NFPA 13
TC BALLOT FOR HANGING AND BRACING
OF WATER-BASED FIRE PROTECTION SYSTEMS
JUNE 2012 ASSOCIATION AMENDMENT 13-4

Amendment: Reject Comment 13-241

☐ Agree

If you agree with this amendment, the recommendation will be to return section 9.3.5.3.9 to 2010 text, which would make this requirement apply to all piping, not just feed mains or branch lines as it currently reads with the acceptance of ROC 13-241. This also removes the language from the annex that was added at the ROC, which reverts back to ROP text. In this case the result is:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

A.9.3.5.3.9 Suspended trapeze members are not considered building structure.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

No evidence was provided that the current method is a safety issue.

Signature: [Signature]

Name - Please Print: Randy Nelson

Date: 6-19-12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
EMAIL: eccarroll@nfpa.org
PHONE: 617.094.7110

617 - 984 - 7110
NFPA 13
TC BALLOT FOR HANGING AND BRACING
OF WATER-BASED FIRE PROTECTION SYSTEMS
JUNE 2012 ASSOCIATION AMENDMENT 13-4

Amendment: Reject Comment 13-241

☐ Agree
If you agree with this amendment, the recommendation will be to return section 9.3.5.3.9 to 2010 text, which would make this requirement apply to all piping, not just feed mains or branch lines as it currently reads with the acceptance of ROC 13-241. This also removes the language from the annex that was added at the ROC, which reverts back to ROP text. In this case the result is:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

☐ Do Not Agree*
If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

☒ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Comment 13-241 was necessary and a correct compromise to limit the intellectual inconsistency promoted in Ch. 9 by the 6” rod rule. The 6” rod rule instructs ignoring the Ch. 9 seismic force tenets and is thus untenable and detrimental to the NFPA 13 Standard. Further, NFPA arguments sightsing "No loss experience" are specious. Consider, prior to 2007, at the NFPA/ASCE Task Force the Ch. 9 T.C. promoted that 40ft. Lat. Bracing had a long history of reliable performance. ASCE 7 dictated that going forward Ch. 9 SHALL quantify and limit seismic force specific to project site and system characteristics including pipe size and type.
Hence, 9.3.5.3.2 et al and 9.3.5.6, etc.

Signature: ___________________________

Name - Please Print: Kraig Kirschner

Date: 6/20/2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
EMAIL: ecarroll@nfpa.org
FAX: 617-984-7110

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 40 of 2025
NFPA 13
TC BALLOT FOR HANGING AND BRACING
OF WATER-BASED FIRE PROTECTION SYSTEMS
JUNE 2012 ASSOCIATION AMENDMENT 13-4

Amendment: Reject Comment 13-241

☐ Agree

If you agree with this amendment, the recommendation will be to return section 9.3.5.3.9 to 2010 text, which would make this requirement apply to all piping, not just feed mains or branch lines as it currently reads with the acceptance of ROC 13-241. This also removes the language from the annex that was added at the ROC, which reverts back to ROP text. In this case the result is:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

9.3.5.3.9 The requirements of 9.3.5.3 shall not apply to pipes individually supported by rods less than 6 in. (152 mm) long measured between the top of the pipe and the point of attachment to the building structure.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I disagree with the floor vote and support the original committee action on this subject. I have to vote agree on this ballot to prevent reverting back to the 2010 edition text. The new annex text is better than no change at all.

Signature:

Name - Please Print: Tom Wellen

Date: June 28, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
EMAIL: ecarroll@nfpa.org
FAX: 617-984-7110
Item 12-8-2
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (13R-4)

Document: NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height

Motion: To Reject an Identifiable Part of Comment 13R-19

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS/HAS NOT achieved the necessary \( \frac{3}{4} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is \( \frac{19}{19} \) (eligible to vote) \(-\)\( \frac{x}{x} \) (ballots not returned) \(-\)\( \frac{y}{y} \) (abstentions) \( = \frac{19}{19} \times 0.75 = \frac{14.25}{19} \)

\( \frac{19}{19} \) Eligible to Vote
\( \frac{14.25}{19} \) Not Returned

\( \frac{2}{2} \) Approve
\( \frac{2}{2} \) Do Not Approve
\( \frac{0}{0} \) Abstain

TCC Action: PASS/FAIL

AUT-RSS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary \( \frac{2}{3} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is \( \frac{18}{31} \) (eligible to vote) \(-\)\( \frac{\text{not returned}}{\text{not returned}} \) \(-\)\( \frac{\text{abstentions}}{\text{abstentions}} \) \( = \frac{18}{31} \times 0.66 = 17.16 \)

31 Eligible to Vote
5 Not Returned (Hopkins, Ketner, Pillette, Skare, Van Walraven)

26 Agree
0 Does Not Agree
0 Abstain

TC Action: PASS
5.2.2.2 When CPVC pipe is used in combination systems utilizing internally coated steel piping and CPVC piping, the steel pipe shall be investigated for compatibility with CPVC by a testing laboratory. Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.

5.2.2.2.4 When CPVC pipe is used in combination systems utilizing steel pipe that is not internally coated with corrosion inhibitors and CPVC piping, the steel pipe coating shall be investigated for compatibility with CPVC by a testing laboratory. Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.

5.2.2.4* Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory or by a manufacturer with a compatibility program.

5.2.2.5 Fire stopping materials intended for use on CPVC piping penetrations shall be investigated for compatibility with CPVC materials.

5.2.2.6 CPVC shall not be listed for portions of an occupancy classification.

5.2.2.7 Chlorinated polyvinyl chloride (CPVC) fittings shall meet one of the standards listed in Table 5.2.9.2, shall be investigated for suitability in automatic sprinkler installations, and shall be listed for this service. Listed CPVC shall be installed in accordance with its listing limitations, including installation instructions.

5.2.9.2* Chlorinated polyvinyl chloride (CPVC) fittings shall meet one of the standards listed in Table 5.2.9.2, shall be investigated for suitability in automatic sprinkler installations, and shall be listed for this service. Listed CPVC shall be installed in accordance with its listing limitations, including installation instructions.

5.2.9.2.1 Manufacturer’s installation instructions shall include its product listing limitations.

A.5.2.9.2 (Keep existing text) A.5.2.9.2.1 CPVC is a plastic material and consideration is necessary when other materials or chemicals come in contact with CPVC that may cause degradation of performance of the fitting due to interaction of materials. Compliance with Section 5.2.2.2 combined with following manufacturer’s guidance on installation and compatible materials will help prevent premature performance degradation of CPVC fittings. Excessive mechanical stress caused by hanging methods or excessive bending on CPVC piping beyond the recommended limitations can cause stress failure over time and should be avoided.

A.5.2.9.2.2 When fabricating steel pipe for a combination (CPVC – steel) system, the cutting oil and lubricants can cause performance degradation of the CPVC piping. Cutting oils and lubricants found to be compatible are available and should be used.

A.5.2.9.2.2.4 Other construction materials include but are not limited to materials used in fabrication of the sprinkler system, additives to water supplies, cable and wiring and certain insecticides and fungicides.

A.5.2.9.2.3 Fire stopping materials intended for use on CPVC penetrations shall be investigated for compatibility with CPVC materials.

A.5.2.9.2.4 Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory or by a manufacturer with a compatibility program.

Add Appendix:

A.5.2.9.2.2 (add after existing annex to this section) CPVC is a plastic material and consideration is necessary when other materials or chemicals come in contact with CPVC that may cause degradation of performance of the fitting due to interaction of materials. Compliance with Section 5.2.2.2 combined with following manufacturer’s guidance on installation and compatible materials will help prevent premature performance degradation of CPVC fittings. Excessive mechanical stress caused by hanging methods or excessive bending on CPVC piping beyond the recommended limitations can cause stress failure over time and should be avoided.

A.5.2.9.2.2 When fabricating steel pipe for a combination (CPVC – steel) system, the cutting oil and lubricants can cause performance degradation of the CPVC piping. Cutting oils and lubricants found to be compatible are available and should be used.
contact with CPVC that may cause degradation of performance of the pipe due to interaction of materials. Compliance with Section 5.2.2.2 combined with following manufacturer’s guidance on installation and compatible materials will help prevent premature performance degradation of CPVC piping. Excessive mechanical stress caused by hanging methods or excessive bending on CPVC piping beyond the recommended limitations can cause stress failure over time and should be avoided. Section 5.2.2.2 only addresses CPVC pipe because this is the only non-metallic pipe listed for use in accordance with this standard. Other non-metallic pipe being considered for listing in accordance with NFPA 13R should also be investigated for compatibility in accordance with sections 5.2.2.2 through 5.2.2.8.

A.5.2.2.4.4 When fabricating steel pipe for a combination (CPVC – steel) system, the cutting oil and lubricants can cause performance degradation of the CPVC pipe. Cooling oils and lubricants found to be compatible are available and should be used.

A.5.2.2.4.6 Other construction materials include but are not limited to materials used in fabrication of the sprinkler system, additives to water supplies, cable and wiring and certain insecticides and fungicides.

A.5.2.9.2 (Keep existing text)

A.5.2.9.2.1 (add after existing A.5.2.9.2) CPVC is a plastic material and consideration is necessary when other materials or chemicals come in contact with CPVC that may cause degradation of performance of the fitting due to interaction of materials. Compliance with Section 5.2.2.2 combined with following manufacturer’s guidance on installation and compatible materials will help prevent premature performance degradation of CPVC fittings. Excessive mechanical stress caused by hanging methods or excessive bending on CPVC piping beyond the recommended limitations can cause stress failure over time and should be avoided. Section 5.2.9.2 only addresses CPVC fittings because this is the only non-metallic fitting in accordance with this standard. Other fittings for non-metallic pipe being considered for listing in accordance with NFPA 13R should also be investigated for compatibility in accordance with sections 5.2.9.2 through 5.2.9.2.6.

A.5.2.9.2.4 When fabricating steel pipe for a combination (CPVC – steel) system, the cutting oil and lubricants can cause performance degradation of the CPVC fitting. Compatible cutting oils and lubricants are available and should be used.

A.5.2.9.2.6 Other construction materials include but are not limited to materials used in fabrication of the sprinkler system, additives to water supplies, cable and wiring and certain insecticides and fungicides.

Committee Statement: The majority of the changes in the section were made for the purposes of correlation with NFPA 13 (SSI TC). In addition similar changes were made to the fittings section that were not made in NFPA A 13 (SSI TC). Manufacturers compatibility programs were recognized as alternatives to testing laboratory compatibility programs as point of clarification to AHJ’s and contractors. An annex note was added to address another nonmetallic material.

Number Eligible to Vote: 31
Ballot Results: Affirmative: 18 Negative: 11 Abstain: 1
Ballot Not Returned: 1 Shaw, H.

Explanation of Negative:

BENN, F.: New material, did not have time to review. Believe sections 5.2.2.2.6 & 5.2.9.2.6 are unenforceable. Does other construction material include wood, type of steel in hangers, drywall, “mud” for drywall repairs at all possible ratios. A.5.2.9.2.6 and A.5.2.9.2.6 even states additives to water supply need to be evaluated, does this mean domestic water supply additives at any concentration?

BITTENBENDER, J.: More work is necessary within the TC to define the term “or by a manufacturer with a compatibility program”. There is no industry standard for compatibility programs for manufacturers to follow.

BROWN, P.: This proposal does not help clarify the compatibility problem. Vague terms such as “other construction materials” will further confuse the issue. This should be refined and brought back in the next cycle.

DEEGAN, T.: 13R-19 (Log #42) should be rejected. The requirements included in this Comment will lead to limiting costly testing without providing certainty of compatibility with yet unidentified or unknown products or substances. The most likely means of complying with those provisions will be to require installers and other product users to comply with extensive and detailed product limitations which appears to be contrary to the concerns driving this Comment.

Undefined references to “other construction materials”, “compatible”, and “testing laboratories” do not provide adequate detail or direction as to what is necessary. What is the protocol for determining compatibility and does it differ from one testing laboratory to another? Is an in-house testing laboratory adequate and if yes, who are they evaluating compatibility? What constitutes a construction material?

I don’t believe that compatibility issues are limited to one material and it is inequitable to single one material out. Compatibility is a concern for all potential system components and the Standard should address the issue for all materials.

The proposed language for the Annex states that CPVC is the only non-metallic pipe listed for use in accordance with this Standard. This language is inaccurate since at least one manufacturer of polypropylene material has an FM Approval for up to 175 psi. This language could result in the installing contractor inheriting the liability of all conditions which are not adequately or comprehensively defined within the plastics industry itself. The proposed language would attempt to warn the user of the standard regarding these issues but the solutions are too vague.

SCHWAB, P.: During the meeting, the staff liaison stated that this was not considered new material. I don’t agree that this is not new material. 13R-23 was a proposal regarding specially listed and 13R-67 was a proposal in regards to wall insulation. I do agree that compatibility with CPVC is an ever present issue and must be part of any discussion. Proposed section 5.2.9.2.2.4 is too broad and will be open to a wide range of interpretations. I agree with other committee members, that there should be a task group to address these issues and make a recommendation in the next cycle.

VAN WALLRAVEN, E.: Although I agree that material compatibility is an important issue and should be scrutinized. It is my opinion that “Other construction materials...” as stated in 5.2.9.2.6 & A.5.2.9.2.6 is to broad of a stroke and could include any type of material that might eventually come in contact with the fire sprinkler piping.

Explanation of Abstention:

BELL, K.: While we fully agree that material compatibility considerations are important, this new text was introduced during the comment stage and should be given careful consideration by the technical committee. The requirements included in this comment as well as the scope of the criteria should be reviewed to determine what they are appropriate for sprinkler systems installed in accordance with NFPA 13R. We also note that extensive information related to chemicals and materials that have the potential to degrade plastic piping are currently referenced in A.5.2.2.2.6 of NFPA 13R.

Backup Proposal 13R-23 to Comment 13R-19

13R-23 Log #CP7 AUT-RSS

Table 5.2.2.6 Special Listed Pipe or Tube Materials and Dimensions Materials and Dimensions Standard Nonmetallic Piping Standard Specification for Chlorinated ASTM F 442 Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR)


Substantiation: The words are only used in the Table titles and do not appear in the text. There is no difference in meaning between listing and special listing. The words special or specially does not add or change the meaning of any current requirement in the Standard. The Certification Laboratories determine compliance of devices with the Certification requirements and do not designate products that comply as special listed or specially listed when published in the Certification listing list. Rapture the above text. The certification listing instructions indicates the application parameters or limitations for the intended use. Removing this reference will clarify the requirements and eliminate the implication that there is some difference between listed and special listed.

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 45 of 2025
Committee Meeting Action: Accept
Number Eligible to Vote: 31
Ballot Results: Affirmative: 28;
Ballot Not Returned: 3 Hoover, T., Osburn, M., Shaw, H.

Backup Comment 13-57 to Comment 13R-19
TCC Action

13-57 Log #214 AUT-SSI
Final Action: Accept in Principle
(6.1.1.3, 6.3.6, 6.3.6.1, and 6.3.6.2)

Submitter: Terry L. Victor, Tyco/SimplexGrinnell

Committee Meeting Proposal No: 13-57

Recommendation: Accept in Principle proposal 13-57 Log #CP401 and make the following changes:

- Split revised 6.1.1.3 into two parts for clarity and to comply with the manual of style as follows:
  - 6.1.1.3 Equipment as permitted in table 6.3.1.1 and table 6.4.1 shall not be required to be listed.
  - (new) 6.1.1.3.1 Nonmetallic pipe and fittings included in table 6.3.1.1 and table 6.4.1 shall be listed.
- Revise new sections 6.3.6 through 6.3.6.6 as follows for clarity and to comply with the manual of style:
  - 6.3.6.6 *CPVC Plastic Pipe.* CPVC pipe in accordance with Table 6.3.1.1 shall be investigated for suitability in automatic sprinkler installations and listed for this service.
  - (new) 6.3.6.1 Listed CPVC shall be installed in accordance with its listing limitations, including installation instructions.
  - (new) 6.3.6.1.1 Manufacturers installation instructions shall include its listing limitations.
    - 6.3.6.1.2* [pick up annex text from ROP 6.3.6.1] When CPVC pipe is used in combination systems utilizing steel piping, chemical corrosion inhibitors, and CPVC piping, the steel pipe coating shall be investigated for compatibility with CPVC by a testing laboratory.
    - Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
    - 6.3.6.2.3* [pick up annex text from ROP 6.3.6.2] When CPVC pipe is used in combination systems utilizing steel pipe that is not internally coated with corrosion inhibitors and CPVC piping, the steel pipe coating shall be investigated for compatibility with CPVC by a testing laboratory.
    - Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
    - 6.3.6.4 When CPVC pipe is used in combination systems utilizing steel pipe, cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
    - 6.3.6.5 Fire stopping materials intended for use on CPVC piping penetrations shall be investigated for compatibility with CPVC materials.
    - 6.3.6.6 Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.
    - 6.3.6.7 CPVC listed for light hazard occupancies shall be permitted to be installed in ordinary hazard rooms of otherwise light hazard occupancies where the room does not exceed 400 ft² (37 m²).
    - 6.3.6.8 CPVC shall not be listed for portions of an occupancy classification.

Substantiation: This new text needed to be separated for clarity and to comply with the manual of style. There are two substantive changes that are included in new 6.3.6.1.1 and in 6.3.6.2.

The new 6.3.6.1.1 changes the requirement that listed CPVC pipe be installed in accordance with manufacturer’s instructions. As written in the ROP, this text would have allowed any manufacturer to put any installation requirement in their instructions, and the installer was bound to that requirement as if it were printed in NFPA 13. I’m sure this was not the intent of the technical committee. Instead, the new 6.3.6.1.1 states what I believe was the intent of the technical committee, that any listing limitations must be included in the manufacturer’s installation instructions.

In 6.3.6.2 the word “coating” was added after “steel pipe” to make it clear that the coating is to be investigated for compatibility and not the pipe itself.

This comment is being submitted by the Tyco Codes and Standards Sprinkler Task Group.

Committee Meeting Action: Accept in Principle proposal 13-67 (Log #CP401) and make the following changes:

- Split revised 6.1.1.3 into two parts for clarity and to comply with the manual of style as follows:
  - 6.1.1.3.1 Nonmetallic pipe and fittings included in Table 6.3.1.1 and Table 6.4.1 shall not be required to be listed.
  - (new) 6.1.1.3.1 Nonmetallic pipe and fittings included in Table 6.3.1.1 and Table 6.4.1 shall be listed.
- Revise new sections 6.3.6 through 6.3.6.6 as follows for clarity and to comply with the manual of style:
  - 6.3.6.6 *CPVC Plastic Pipe.* CPVC pipe in accordance with Table 6.3.1.1 shall be investigated for suitability in automatic sprinkler installations and listed for this service.
  - (new) 6.3.6.1 Listed CPVC shall be installed in accordance with its listing limitations, including installation instructions.
  - (new) 6.3.6.1.1 Manufacturers installation instructions shall include its listing limitations.
    - 6.3.6.1.2* [pick up annex text from ROP 6.3.6.1] When CPVC pipe is used in combination systems utilizing steel piping internally coated with corrosion inhibitors and CPVC piping, the steel pipe coating shall be investigated for compatibility with CPVC by a testing laboratory.
    - Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
    - 6.3.6.2.3* [pick up annex text from ROP 6.3.6.2] When CPVC pipe is used in combination systems utilizing steel pipe that is not internally coated with corrosion inhibitors and CPVC piping, the steel pipe coating shall be investigated for compatibility with CPVC by a testing laboratory.
    - Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
    - 6.3.6.4 When CPVC pipe is used in combination systems utilizing steel pipe, cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.
    - 6.3.6.5 Fire stopping materials intended for use on CPVC piping penetrations shall be investigated for compatibility with CPVC materials.
    - 6.3.6.6 Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.
    - 6.3.6.7 CPVC listed for light hazard occupancies shall be permitted to be installed in ordinary hazard rooms of otherwise light hazard occupancies where the room does not exceed 400 ft² (37 m²).
    - 6.3.6.8 CPVC shall not be listed for portions of an occupancy classification.

Committee Statement: Changes made to specify reference to corrosion inhibitors as internal coating.

Number Eligible to Vote: 29
Ballot Results: Affirmative: 27; Negative: 2

Explanation of Negative:
DORNBOSS, D.: I don’t believe that compatibility issues are limited to one material and it is inequitable to single one material out. Compatibility is a concern for all potential system components and the Standard should address the issue for all materials.

MCPHEE, R.: I agree with the comment from Dornbos.
Standards Council Supplemental Agenda August 7-9, 2012

Backup Proposal 13-67 to Comment 13-57

13-67 Log #CP401 AUT-SSI Final Action: Accept (6.1.1.3)

Submitter: Technical Committee on Sprinkler System Installation Criteria, Recommendation:
Revise text to read as follows: 6.1.1.3 Equipment, other than non metallic pipe and fittings, as permitted in table 6.3.1.1 and table 6.4.1 shall not be required to be listed. 6.1.1.6 The new materials or devices listing instructions shall identify and specify the existing system components, including the fluids conveyed, with which the new listed materials, devices or components are compatible. 6.1.1.6.1 This listing requirement shall also apply to chemical or material modifications made to components listed in Table 6.3.1.1 and Table 6.4.1.

6.3 Aboveground Pipe and Tubing.

6.3.1 General.

6.3.1.1 Pipe or tube shall meet or exceed one of the standards in Table 6.3.1.1 or be in accordance with 6.3.6.

<table>
<thead>
<tr>
<th>Table 6.3.1.1 Pipe or Tube Materials and Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials and Dimensions</strong></td>
</tr>
<tr>
<td>Ferrous Piping (Welded and Seamless)</td>
</tr>
<tr>
<td>Specification for black and hot-dipped zinc-coated (galvanized) welded and seamless steel pipe for fire protection use</td>
</tr>
<tr>
<td>Specification for welded and seamless steel pipe</td>
</tr>
<tr>
<td>Wrought steel pipe</td>
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<tr>
<td>Specification for electric-resistance-welded steel pipe</td>
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<tr>
<td>Copper Tube (Drawn, Seamless)</td>
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<tr>
<td>Specification for seamless copper tube</td>
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<tr>
<td>Specification for seamless copper water tube</td>
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<tr>
<td>Specification for general requirements for wrought seamless copper and copper-alloy tube</td>
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<tr>
<td>Flues for soldering applications of copper and copper-alloy tube</td>
</tr>
<tr>
<td>Brazing filler metal (classification BCuP-3 or BCuP-4)</td>
</tr>
<tr>
<td>Soldering alloy, Section 1: Solder alloys containing less than 0.2% lead and having solidus temperatures greater than 400°F</td>
</tr>
<tr>
<td>Alloy materials</td>
</tr>
<tr>
<td>CPVC Plastic Piping</td>
</tr>
<tr>
<td>Nonmetallic piping specification for special listed chlorinated polyvinyl chloride (CPVC) pipe</td>
</tr>
</tbody>
</table>

6.3.2 Steel Pipe — Welded. Where new materials referenced in Table 6.3.1.1 are joined by welds referenced in 6.5.1 or by fittings used with pipe having cut grooves, the minimum wall thickness shall be in accordance with Schedule 30 pipe [in sizes 8 in. (200mm) and larger] or Schedule 40 pipe [in sizes less than 8 in. (200mm)] for pressures up to 300 psi (20.7 bar).

6.3.3 Steel Pipe — Threaded. Where new materials referenced in Table 6.3.1.1 are joined by threaded fittings referenced in 6.5.1 or by fittings used with pipe having cut grooves, the minimum wall thickness shall be in accordance with Schedule 30 pipe [in sizes 8 in. (200mm) and larger] or Schedule 40 pipe [in sizes less than 8 in. (200mm)] for pressures up to 300 psi (20.7 bar).

6.3.4 Specially Listed Steel Pipe. Pressure limitations and wall thickness for steel pipe specially listed in accordance with 6.3.6 shall be permitted to be installed in accordance with the piping listing requirements.

6.3.5 Copper Tube. Copper tube as specified in the standards listed in Table 6.3.1.1 shall have a wall thickness of Type K, Type L, or Type M where used in sprinkler systems.

6.3.6 CPVC Plastic Pipe. CPVC pipe in accordance with Table 6.3.1.1 shall be investigated for suitability in automatic sprinkler installations and listed for fire protection service. Listed CPVC shall be installed in accordance with its listing limitations, including installation instructions.

6.3.6.1 When CPVC pipe is used in combination systems utilizing internally coated steel piping and CPVC piping, the steel pipe shall be investigated for compatibility with CPVC by a testing laboratory. Cutting oils and Lubricants, used for fabrication of the steel piping shall be compatible with CPVC materials.

6.3.6.2 When CPVC pipe is used in combination systems utilizing steel pipe that is not internally coated and CPVC piping, no additional evaluations are required. Cutting oils and Lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.

6.3.6.3 Fire stopping materials intended for use on CPVC piping penetrations shall be investigated for compatibility with CPVC materials.

6.3.6.4 Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.

6.3.6.5 CPVC listed for light hazard occupancies shall be permitted to be installed in ordinary hazard rooms of otherwise light hazard occupancies where the room does not exceed 400 ft² (37 m²).

6.3.6.6 CPVC shall not be listed for portions of an occupancy classification.

6.3.6.7* Listed Pipe and Tubing.

6.3.6.7.1 Other types of pipe or tube investigated for suitability in automatic sprinkler installations and listed for this service, including but not limited to CPVC and steel, and differing from that provided in Table 6.3.1.1 or Table 6.3.6.1 shall be permitted where installed in accordance with their listing limitations, including installation instructions.

Delete Table 6.3.6.1

6.3.6.7.2 Pipe or tube listed for light hazard occupancies shall be permitted to be installed in ordinary hazard rooms of otherwise light hazard occupancies where the room does not exceed 400 ft² (37 m²).

6.3.6.7.3 Pipe or tube shall not be listed for portions of an occupancy classification.

6.3.6.7.4 Bending of listed pipe and tubing shall be permitted as allowed by the listing.

6.3.7 Pipe and Tube Bending.

6.3.7.1 Bending of Schedule 10 steel pipe, or any steel pipe of wall thickness equal to or greater than Schedule 10 and Types K and L copper tube, shall be permitted when bends are made with no kinks, ripples, distortions, or reductions in diameter or any noticeable deviations from round.

6.3.7.2 For Schedule 40 and copper tubing, the minimum radius of a bend shall be six pipe diameters for pipe sizes 2 in. (50mm) and smaller and five pipe diameters for pipe sizes 2 1/2 in. (65 mm) and larger.

6.3.7.3 For all other steel pipe, the minimum radius of a bend shall be 12 pipe diameters for all sizes.

6.3.8 Pipe and Tube Identification.

6.3.8.1 All pipe, including specially listed pipe allowed by 6.3.6, shall be marked along its length by the manufacturer in such a way as to properly identify the type of pipe.

6.3.8.2 The marking shall be visible on every piece of pipe over 2 ft (610 mm) long.

6.3.8.3 Pipe identification shall include the manufacturer’s name, model designation, or schedule.

6.4 Fittings.

6.4.1 Fittings used in sprinkler systems shall meet or exceed the standards in Table 6.4.1 or be in accordance with 6.4.2 or 6.4.3.
Table 6.4.1  Fittings Materials and Dimensions

<table>
<thead>
<tr>
<th>Materials and Dimensions</th>
<th>Standard</th>
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<tbody>
<tr>
<td>Cast Iron</td>
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<tr>
<td>Cast iron threaded fittings, Class 125 and 250</td>
<td>ASME B16.4</td>
</tr>
<tr>
<td>Cast iron pipe flanges and flanged fittings</td>
<td>ASME B16.1</td>
</tr>
<tr>
<td>Malleable Iron</td>
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<tr>
<td>Malleable iron threaded fittings, Class 150 and 300 steel</td>
<td>ASME B16.3</td>
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<tr>
<td>Factory-made wrought steel butt weld fittings</td>
<td>ASME B16.9</td>
</tr>
<tr>
<td>Butt welding ends for pipe, valves, flanges, and fittings</td>
<td>ASME B16.25</td>
</tr>
<tr>
<td>Specification for piping fittings of wrought carbon steel and alloy steel for moderate and elevated temperatures</td>
<td>ASTM A 234</td>
</tr>
<tr>
<td>Steel pipe flanges and flanged fittings</td>
<td>ASME B16.5</td>
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<tr>
<td>Forged steel fittings, socket weld and threaded copper</td>
<td>ASME B16.11</td>
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<tr>
<td>Wrought copper and copper alloy solder joint pressure fittings</td>
<td>ASME B16.22</td>
</tr>
<tr>
<td>Cast copper alloy solder joint pressure fittings</td>
<td>ASME B16.18</td>
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<tr>
<td>CPVC</td>
<td></td>
</tr>
<tr>
<td>Chlorinated polyvinyl chloride (CPVC) specification for Schedule 80 CPVC threaded fittings</td>
<td>ASTM F 437</td>
</tr>
<tr>
<td>Specification for Schedule 40 CPVC socket-type fittings</td>
<td>ASTM F 438</td>
</tr>
<tr>
<td>Specification for Schedule 80 CPVC socket-type fittings</td>
<td>ASTM F 439</td>
</tr>
</tbody>
</table>

6.4.2 In addition to the standards in Table 6.4.1, CPVC fittings shall also be in accordance with 6.4.3 and with the portions of the ASTM standards specified in Table 6.4.3 that apply to fire protection service.

6.4.2.1 CPVC Plastic Fittings. CPVC fittings in accordance with Table 6.3.1.1 shall be investigated for suitability in automatic sprinkler installations and listed for this service. Listed CPVC shall be installed in accordance with its listing limitations, including installation instructions.

6.4.2.2 When CPVC fittings are used in combination systems utilizing internally coated steel piping and CPVC fittings, the steel pipe shall be investigated for compatibility with CPVC by a testing laboratory. Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.

6.4.2.3 When CPVC fittings are used in combination systems utilizing non-internally coated steel piping and CPVC fittings, no additional evaluations are required. Cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.

6.4.2.4 Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.

6.4.3 Other types of fittings investigated for suitability in automatic sprinkler installations and listed for this service, including but not limited to, CPVC, and steel differing from that provided in Table 6.4.3. shall be permitted when installed in accordance with their listing limitations, including installation instructions.

Add Appendix:

A.6.3.6 CPVC is a plastic material and consideration is necessary when other materials or chemicals come in contact with CPVC that may cause degradation of performance of the pipe due to interaction of materials. Compliance with Section 6.3.6 combined with following manufacturer’s guidance on installation and compatible materials will help prevent premature performance degradation of CPVC piping. Excessive mechanical stress caused by hanging methods or excessive bending on CPVC piping beyond the recommended limitations can cause stress failure over time and should be avoided.

A.6.3.7 When fabricating steel pipe for a combination (cpvc – steel) system, the cutting oil and lubricants can cause performance degradation of the cpvc piping. Cutting oils and lubricants found to be compatible are available and should be used.

A.6.3.8 Other construction materials include but are not limited to materials used in fabrication of the sprinkler system, additives to water supplies, cable and wiring and certain insecticides and fungicides.

A.6.4.2 CPVC is a plastic material and consideration is necessary when other materials or chemicals come in contact with CPVC that may cause degradation of performance of the fittings due to interaction of materials. Compliance with Section 6.4.2 combined with following manufacturer’s guidance on installation and compatible materials will help prevent premature performance degradation of CPVC fittings. Excessive mechanical stress caused by hanging methods or excessive bending on CPVC piping beyond the recommended limitations can cause stress failure over time and should be avoided.

A.6.4.2.1 When fabricating steel pipe for a combination (cpvc – steel) system, the cutting oil and lubricants can cause performance degradation of the cpvc fitting. Compatible cutting oils and lubricants are available and should be used.

A.6.4.3 Other construction materials include but are not limited to materials used in fabrication of the sprinkler system, additives to water supplies, cable and wiring and certain insecticides and fungicides.

Substantiation: Compatibility of new and existing material needs to be identified and this section gives guidance to the laboratories and users.

Committee Meeting Action: Accept

Number Eligible to Vote: 30
Ballot Results: Affirmative: 27 Negative: 1
Ballot Not Returned: 2 Kirn, M., Slocum, L.

Explanation of Negative:

LAVERICK, G.: Revisions to the existing 6.1.1.3 completely change the meaning of this section to require only plastic piping to be listed. All other equipment will not require listing which we believe is not the intent of this revision.

The new 6.1.1.6.1 requires modifications in chemical or materials to the equipment in tables 6.3.1.1 and 6.4.1 to be compatible and contained in the listing instructions. However, the equipment referenced in tables (except for plastic piping) is not required to be listed and therefore the information will not be required.

Comment on Affirmative:

MEEHAN, M.: This proposal only addresses the existing known problems and does not address the underlying issue of incompatible materials being manufactured and listed for installation. The building owners, the public and our industry deserve better.

SCHWAB, P.: I believe this is a step in the right direction. However, the only way to ensure that all items are compatible is to require that all products used in sprinkler systems be listed. This includes components as well as items such as lube, thread sealants, antifreeze, etc.
Let's now proceed with the discussion on Certified Amending Motion 13R-4. Microphone Number 5, please.

MR. ISMAN: Thank you. Ken Isman with the National Fire Sprinkler Association, and we move to reject Sections 5.2.2.2.6 and 5.2.9.2.6 from Comment 13R-19 as shown in Motion Sequence 13R-4.

PRESIDING OFFICER MILKE: Thank you. There's a motion on the floor to reject an identifiable part of Comment 13R-19. Is there a second?

Thank you. We do have a second. Please proceed with the discussion on the motion.

MR. ISMAN: Thank you. This subject is a bit difficult to follow through the ROP and the ROC, and I wish that NFPA 13 had come first because it's easier to follow there. But since we have to deal with NFPA 13R first, you'll just have to trust us that a series of sections dealing with CPVC compatible was inserted in NFPA 13R during the ROC stage of document development.

We don't have a problem with most of the text. We applaud the NFPA for tackling this very difficult subject. But two of the sections go a bit too far. These two sections read the same, it's just one of them applies to pipe and the other applies to fitting. So you see in the summary report of the motions that the paragraph is just printed once, but it is actually in two sections and so we're moving to remove it twice.

These sections require the compatibility of pipe to be evaluated with a unlimited number of materials that might exist in the construction environment. Since the materials list is infinite that must be compared to CPVC for compatible, this opens the pipe manufacturers and the installing contractors to significant liability in using this product. There is no way that they can guarantee that they have manufactured and installed a product that is compatible with everything.

If you take these paragraphs out, as we've
asked in our motion, then you still have the
requirements for CPVC to be compatible with internal
coding of steel, if steel pipe's going to be used in
the system with CPVC, and you also have the
requirement for draft stopping materials to be
evaluated for compatibility.

These requirements are good steps forward for
the standard, and our motion does not affect these
improvements. We ask you to vote in favor of our
motion.

PRESIDING OFFICER MILKE: Mr. Linder, would you
like to offer the committee's position?

COMMITTEE CHAIR LINDER: Yes, I'd like to say a
few comments. First off, you're going to see this
issue again. It is a correlating issue that the
committee dealt with to make sure that both 13R and 13
read the same.

This particular section originally passed on
the floor, but not the letter ballot in 13R, and
passed in 13 which we'll get to later.

The committee certainly recognizes the
compatibility has been a major issue and has worked
hard to try to put some additional items into the
standard to deal with that.

I would also like the membership to know that
we currently have a TIA in process that would change
the CPVC language to nonmetallic pipe because we
believe it's really a broader thing and not just
limited to one specific product, although CPVC is
where most of the issues have been to date.

And so there's a lot of good work here, and I
think, as Ken mentioned, there's a lot of things that
we don't want to get rid of, and the correlating
committee wanted both sides to be the same.

And if Maurice has anything he'd like to say on
the 13R specific portion, I'd encourage him to say so.

TC COMMITTEE CHAIR PILETTE: I concur with the
TCP Chair on this. We had task groups and worked well
together with the 13 task group to resolve this issue,
and also a favorable TIA.
PRESIDING OFFICER MILKE: Thank you, gentlemen.
With that, we will open up debate on the motion.
Please provide your name, and affiliation, and whether you're speaking in support or against the motion.
Microphone 9.
MR. JOHNSON: My name is Gary Johnson. I'm with the Lukazad (phonetic) Corporation. Most everything's been --
PRESIDING OFFICER MILKE: I'm sorry. Are you speaking for or against?
MR. JOHNSON: I'm speaking for the motion.
PRESIDING OFFICER MILKE: Thank you.
MR. JOHNSON: Most everything has been explained. I just wanted to stress the language on this particular motion. "Other construction materials" is so broad that it's going to create a lot of issues if it stays that way with contractors and with HJs. There's going to be a lot of different interpretations of what that means.
I'm also a principal on 13R, and we did vote against this motion. It was given to us late. But the reason that we voted against it was because there was just -- there was some parts of it that weren't worded properly, and that's -- the largest one is what we've got here, "and other construction" term.
So we're voting -- we're hoping to take that particular paragraph out. Thank you.
PRESIDING OFFICER MILKE: Thank you.
Microphone 7.
MR. BILBO: Cecil Bilbo with Parkland College Sprinkler System Technology Program. We --
PRESIDING OFFICER MILKE: Are you speaking for or against?
MR. BILBO: I speak in favor of the motion.
PRESIDING OFFICER MILKE: Thank you.
MR. BILBO: We feel like Mr. Isman's proposal is -- or the motion is most appropriate. We commend the committee for their action and their movement forward. However, the language creates a situation that is nearly impossible to enforce, specifically
given the nature of the construction that is currently
under way in the United States and other parts of the
world. We would encourage voting in favor of the
motion.

PRESIDING OFFICER MILKE: Thank you. Is there
any further discussion on Motion 13R-4 to reject an
identifiable part of Comment 13R-19?

Seeing none, Mr. Linder, any final comments?

COMMITTEE CHAIR LINDER: The only final comment
I'd like to make is that the committee has worked hard
to try to get some compatibility issues that we think
are long overdue into the standard. And if the
membership thinks we've gone too far with this one,
I'm much happier with 13R-4 than the next one that's
coming up that would throw everything back to the
committee, so I would ask you to vote your conscience.
If you think we've gone too far, that's okay.

PRESIDING OFFICER MILKE: Thank you, Mr. Chair.

Before we vote, let me restate the motion. The motion
on the floor is to reject an identifiable part of
Comment 13R-19.

Please record your vote, 1 being in favor of
the motion, 2 being opposed to the motion.

5 seconds.

The balloting is closed.

Thank you. The results of the motion are that
the motion has passed.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 24, 2012

AMENDMENT (13R-4)

Document: NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height

Motion: To Reject an Identifiable Part of Comment 13R-19

TCC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary $\frac{3}{4}$ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 11 [19 (eligible to vote) – 5 (ballots not returned) – 0 (abstentions) = $14 \times 0.75 = 10.5$]

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<tr>
<td>14</td>
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TCC Action: PASS

AUT-RSS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary $\frac{2}{3}$ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 18 [31 (eligible to vote) – 5 (ballots not returned) – 0 (abstentions) = $26 \times 0.66 = 17.16$]

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TC Action: PASS
ASSOCIATION AMENDMENT BALLOT RESULTS
DATE: July 10, 2012

AMENDMENT (13R-6)

Document: NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height

Motion: To Reject an Identifiable Part of Comment 13R-16 and Accept Comment 13R-34

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS/HAS NOT achieved the necessary $\frac{3}{4}$ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is $[19 \text{ (eligible to vote)} - \_ \text{ (ballots not returned)} - \_ \text{ (abstentions)} = \_ \times 0.75 = \_]$

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TCC Action: PASS/FAIL

AUT-RSS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary $\frac{2}{3}$ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 18 $[31 \text{ (eligible to vote)} - 4 \text{ (ballots not returned)} - 0 \text{ (abstentions)} = 27 \times 0.66 = 17.82$]

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26 Agree
1 Does Not Agree (Schwab)
0 Abstain

TC Action: PASS
Amendment: To Reject an Identifiable Part of Comment 13R-16 and Accept Comment 13R-34

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, the text would read as follows:

6.2.2.3 Residential sprinklers shall be permitted to be used in all light-hazard areas.

6.4.7 Use of Residential Sprinklers Outside of Dwelling Units.
Light Hazard Occupancies shall be permitted to be protected by residential sprinklers using design criteria of Section 7.1.

The following types of spaces shall be permitted to be protected by residential sprinklers in accordance with Section 7.1:

1. Lobbies not in hotels and motels
2. Foyers
3. Corridors
4. Halls
5. Lounges
6. Other areas with fire loads similar to residential fire loads

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs., that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☒ Do Not Agree*

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

I AGREE WITH THE ORIGINAL POSITION OF THE

COMMITTEE

Signature:

Name - Please Print: Peter T. Schwab

Date: 07/30/12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110 Email: ecarroll@nfpa.org
Standards Council Supplemental Agenda August 7-9, 2012

Recommendation:
Comment on Proposal No: 13R-29

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

Recommendation: Revise text to read as follows:
Add new 3.3.8.2
3.3.8.2 Quick Response (QR) Sprinkler. A type of spray sprinkler having a thermal element with an RI of 50 (meters-second) 1/2 or less and is listed as a quick-response sprinkler for its intended use.

Add new 6.2.2.1
6.2.2.1 All sprinklers used outside of the dwelling units shall be in accordance with 6.2.2.

Modify and renumber existing 6.2.2.1 to read
6.2.2.2 Sprinklers outside the dwelling units shall be quick response except as allowed by 6.2.2.3, 6.2.2.4, and 6.2.2.5, and selection shall be based on the requirements of NFPA 13, except where permitted by 6.2.2.

Delete current 6.2.2.2

6.2.2.2 Residential sprinklers shall be permitted to be used in corridors leading to dwelling units and in areas covered by 6.2.2, 7.2.2, and 7.3.2.

Add new 6.2.2.3 and delete modified 6.4.7 (ROP 13R-45)
6.2.2.3 Residential sprinklers shall be permitted to be used in all light hazard areas.

Add new 6.2.2.4
6.2.2.4 Residential sprinklers shall be permitted to be used in garages that are accessible only from and directly connected to a single dwelling unit.

Add new 6.2.2.5
6.2.2.5 Residential sprinklers shall be permitted to be used in ordinary hazard areas that meet the following conditions:

(1) The area is compartmented into 500 ft² (46 m²) or less by 30-minute fire-rated construction.

(2) The sprinklers are spaced at 130 ft² (12 m²) per sprinkler.

(3) Openings have a lintel at least 8 in. (203 mm) in depth.

(4) The total area of openings excluding any overhead garage doors that open to the exterior does not exceed 50 ft² (4.6 m²) for each compartment.

(5) Discharge densities are in accordance with NFPA 13 for ordinary hazard.

Substantiation: This is an organization and consolidation of the rules for use of sprinklers outside the dwelling unit which are scattered throughout the standard. A definition of a quick response sprinkler was added to this standard to eliminate the reference to NFPA 13. Section 6.3 in the current standard addresses spacing aspects. Section 6.4.7 has been moved here as it is appropriate. The allowance for use of sprinklers in garages was added as was the allowance for residential from section 7.2.2. The new language incorporated from 7.2.2 limits the use of residential sprinklers to ordinary hazard. If an extra hazard area is present in a residential occupancy it should be protected with QR sprinklers. A separate comment will address the changes to the design criteria section that incorporate these modifications.

Committee Meeting Action: Accept

Number Eligible to Vote: 31
Ballot Results: Affirmative: 28
Ballot Not Returned: 3 Hoover, T., Osburn, M., Shaw, H.

Substantiation:

Revise 6.4.7 to read:
Light Hazard Occupancies shall be permitted to be protected by residential sprinklers using the design criteria of Section 7.1.

Committee Statement: The Committee agrees with the submitter and extends the principal to lobbies of motels and hotels, where there is no known fire problem.

Number Eligible to Vote: 31
Ballot Results: Affirmative: 28
Ballot Not Returned: 3 Hoover, T., Osburn, M., Shaw, H.

Recommendation: Delete the following text:
6.2.2.2 Residential sprinklers shall be permitted to be used in corridors leading to dwelling units and in areas covered by 6.2.2, 7.2.2, and 7.3.2.

Substantiation: Sections 6.4.7 and 7.3.3 cite specific areas where sprinklers are installed. Section 7.2.2 is a design criteria section and should not be referenced as a location for allowing certain types of sprinklers to be installed.

Committee Meeting Action: Reject

Committee Statement: Paragraph 7.2.2 does contain provisions that describe locations where residential sprinklers can be used. Deletion of the reference to 7.2.2 eliminates a design option.

Number Eligible to Vote: 31
Ballot Results: Affirmative: 28
Ballot Not Returned: 3 Hoover, T., Osburn, M., Shaw, H.

Reference Proposal 13R-45 to Comment 13R-16

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

Recommendation: Delete current 6.4.7 and revise to read 6.4.7 Use of Residential Sprinklers Outside of Dwelling Units

Residential sprinklers shall be permitted to be used in all light hazard spaces excluding lobbies in hotels and motels with dedicated cooking or dining capabilities.

Substantiation: Currently subsection (6) states other areas with fire loads similar to residential fire loads. This is pretty much light hazard per definition. If the standard is allowing .05 densities in garages, this should be acceptable for leasing offices, gathering rooms, lounges, corridors, etc. This revision retains the exception for lobbies in hotels and motels with the fire hazards associated with cooking or warming of food.

Committee Meeting Action: Accept in Principle

Revise 6.4.7 to read:
Light Hazard Occupancies shall be permitted to be protected by residential sprinklers using the design criteria of Section 7.1.

Committee Statement: The Committee agrees with the submitter and extends the principal to lobbies of motels and hotels, where there is no known fire problem.

Number Eligible to Vote: 31
Ballot Results: Affirmative: 28
Ballot Not Returned: 3 Hoover, T., Osburn, M., Shaw, H.

Explanation of Negative:
BELL, K.: The use of 0.05 gpm/sq. ft. for all light hazard occupancies should be properly justified.

DEEGAN, T.: In the absence of test data supporting such a change, it is not appropriate to allow the use of residential sprinklers at 0.05 gpm/sq ft in all Light Hazard areas.

ISMAN, K.: The use of residential sprinklers to protect all light hazard occupancies at a density of 0.05 gpm per sq. ft has not been reasonably established through fire testing or rational analysis.
Comment 13R-34 Accept

13R-34 Log #38 AUT-RSS Final Action: Reject
(6.4.7)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.
Comment on Proposal No: 13R-45
Substantiation: There is no data to support the use of a 0.05 gpm per sq ft
density for all light hazard application. The submitter used the garage rules as
justification, but the 0.05 density in garages only applies to those garages that
are accessible from a single dwelling unit and are separated from the rest of
the dwelling by 1-hr fire rated construction. This would not be true for all light
hazard situations.

The NFSA Engineering and Standards Committee endorses this comment.
Committee Meeting Action: Reject
Committee Statement: The TC accepted that a.05 density is acceptable for
light hazard occupancies. See TC action on 13R-16 (Log #18).
Number Eligible to Vote: 31
Ballot Results: Affirmative: 27 Negative: 3
Ballot Not Returned: 1 Shaw, H.
Explanations of Negative:

DEEGAN, T.: In the absence of test data supporting such a change, it is not
appropriate to allow the use of residential sprinklers at .05 gpm/sq ft in all Light
Hazard areas.

ISMAN, K.: See my Explanation of Negative on Comment 13R-16 (Log #18).

Backup Proposal 13R-45 to Comment 13R-34

13R-45 Log #25 AUT-RSS Final Action: Accept in Principle
(6.4.7)

Submitter: Peter T. Schwab, Wayne Automatic Fire Sprinklers, Inc.
Recommendation: Delete current 6.4.7 and revise to read
6.4.7 Use of Residential Sprinklers Outside of Dwelling Units
Residential sprinklers shall be permitted to be used in all light hazard spaces
excluding lobbies in hotels and motels with dedicated cooking or dining
facilities.
Substantiation: Currently subsection (6) states other areas with fire loads
similar to residential fire loads. This is pretty much light hazard per definition.
If the standard is allowing .05 densities in garages, this should be acceptable for
leasing offices, gathering rooms, lounges, corridors, etc. This revision retains
the exception for lobbies in hotels and motels with the fire hazards associated
with cooking or warming of food.

Committee Meeting Action: Accept
Revise 6.4.7 to read:
Light Hazard Occupancies shall be permitted to be protected by residential
sprinklers using the design criteria of Section 7.1.
Committee Statement: The Committee agrees with the submitter and extends
the principal to lobbies of motels and hotels, where there is no known fire
problem.
Number Eligible to Vote: 31
Ballot Results: Affirmative: 28
Ballot Not Returned: 3 Hoover, T., Osburn, M., Shaw, H.

Reference Comment 13R-16 to Comment 13R-34

13R-16 Log #18 AUT-RSS Final Action: Accept
(3.3.8.2 Quick Response (QR) Sprinkler (New), 6.2.2.1 through 6.2.2.5, and
6.4.7)

Submitter: Peter T. Schwab, Wayne Automatic Fire Sprinklers, Inc.
Comment on Proposal No: 13R-29
Recommendation: Revise text to read as follows:
Add new 3.3.8.2
3.3.8.2 Quick Response (QR) Sprinkler. A type of spray sprinkler having a
thermal element with an RTI of 50 (meters-second) 1/2 or less and is listed as a
quick-response sprinkler for its intended use.
Add new 6.2.2.1
6.2.2.1 All sprinklers used outside of the dwelling units shall be in
accordance with 6.2.2.
To proceed with the discussion on Certified Amending Motion 13R-6. Microphone 5, please.

MR. ISMAN: Thank you. My name is Ken Isman. I'm with the National Fire Sprinkler Association. And we move to reject the new Section 6.2.2.3 that was added to the standards a part of Comment 13R-16, and also to accept Comment 13R-34.

PRESIDING OFFICER MILKE: Thank you. There's a motion on the floor to reject an identifiable part of 13R-16 and to accept Comment 13R-34. Is there a second?

Thank you. We do have a second. Please proceed with the discussion on the motion.

MR. ISMAN: Thank you. I'd like to thank the NFPA for allowing me to make these two motions together and have the discussion once since the topic is exactly the same, the text just appears twice in the standard. So we can have this discussion once and vote on it once and save some time.

The issue here is the use of residential sprinklers at a minimum .05 density in areas outside the dwelling unit in any space considered light hazard by NFPA 13.

We do not believe that the technical data supports the use of residential sprinklers at a .05 density in all of these spaces that are considered light hazard. Our concern is that there are light hazard spaces outside the dwelling unit with high ceilings and large compartments that may not adequately be protected by residential sprinklers.

Meeting rooms and four-story atriums are examples of spaces that can be considered light hazard but might not adequately be protected by residential sprinklers at a .05 density.

Fire tests have been performed with residential sprinkles in ceilings up to 26 feet in height with the residential sprinkles performing well, but the compartments in these fire tests were limited to 600 square feet. The compartmentation helps the residential sprinkler perform.
While the spaces inside the dwelling units might be assumed to be fairly well-compartmented, the same cannot be said for spaces outside the dwelling unit. There is no evidence that residential sprinklers at a .05 density can protect every conceivable space that would be considered light hazard. We urge you to vote in favor of our motion.

PRESIDING OFFICER MILKE: Thank you. Let me clarify for the audience here that the screen is partially correct that you see on the displays here. So that we have two items that are going here. This is rejecting an identifiable part of Comment 13R-16 and to accept Comment 13R-34. So it's an "and" statement we're looking to here.

Mr. Linder, comments on a position from the committee, please.

COMMITTEE CHAIR LINDER: I will defer to the TC Chair, Maurice Pilette.

TC COMMITTEE CHAIR PILETTE: In a committee discussion on this item here, it set conditions for the use of residential sprinklers outside the dwelling unit and voted in favor of going forward with that with a 27 to 3 vote.

I would urge the membership to accept the consensus process that the committee went with conditions when using residential sprinklers outside the dwelling units. It wasn't a clearcut. You had to examine the conditions that they saw fit for the applications at hand.

PRESIDING OFFICER MILKE: Thank you, gentlemen. With that, we can open up debate on the motion.

Please provide your name, and affiliation, and whether you are speaking in support or against the motion.

Microphone 7.

MR. SHAPIRO: Jeff Shapiro, National Multi-housing Council, a/k/a The Evil Empire, and I'm speaking in support of the motion.

It is essential from the multi-family industry's perspective that residential sprinklers in multi-family occupancies work and work effectively.
I think that the points that have been brought up by the National Fire Sprinkler Association with regard to the limitations on the use of residential sprinklers in some of these spaces bear further merit, and I do think it's reasonable for the committee to reconsider these issues before they go into the standard. I urge you to support the motion on the floor.

PRESIDING OFFICER MILKE: Thank you. Is there any further discussion on Motion 13R-6 to reject an identifiable part of Comment 13R-16 and accept Comment 13R-34? Seeing none, Mr. Linder, final comments?

COMMITTEE CHAIR LINDER: Maurice, do you have any further comments?

TC COMMITTEE CHAIR PILETTE: No further comments. I stand by the -- I urge you the membership to stand by the actions of the committee itself.

PRESIDING OFFICER MILKE: Thank you, gentlemen. Before we vote let me restate the motion. The motion on the floor is to reject an identifiable part of Comment 13R-16 and accept Comment 13R-34.

Please record your vote, 1 in favor of the motion, 2 opposed to the motion.

5 seconds.

Balloting is closed.

Thank you. The results of the vote are that the motion has passed.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE:    July 24, 2012

AMENDMENT (13R-6)

Document: NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height

Motion: To Reject an Identifiable Part of Comment 13R-16 and Accept Comment 13R-34

TCC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary ¾ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 11 [19 (eligible to vote) – 5 (ballots not returned) – 0 (abstentions) = 14 × 0.75 = 10.5]

<table>
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<th></th>
<th>19 Eligible to Vote</th>
<th>5 Not Returned (Bax, Ketner, Sheppard, Spaulding, Underwood)</th>
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<tbody>
<tr>
<td>Yes</td>
<td>0</td>
<td>14 No, Correlation Issues</td>
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<tr>
<td>Abstain</td>
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</table>

TCC Action: PASS

AUT-RSS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 18 [31 (eligible to vote) – 4 (ballots not returned) – 0 (abstentions) = 27 × 0.66 = 17.82]

<table>
<thead>
<tr>
<th></th>
<th>31 Eligible to Vote</th>
<th>4 Not Returned (Ketner, Pillette, Skare, Van Walraven)</th>
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<tbody>
<tr>
<td>Agree</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Does Not Agree</td>
<td>1</td>
<td>(Schwab)</td>
</tr>
<tr>
<td>Abstain</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

TC Action: PASS
Amendment: To Reject an Identifiable Part of Comment 13R-16 and Accept Comment 13R-34

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, the text would read as follows:

6.3.2.3 Residential sprinklers shall be permitted to be used in all light hazard areas.

6.4.7 Use of Residential Sprinklers Outside of Dwelling Units.
Light Hazard Occupancies shall be permitted to be protected by residential sprinklers using design criteria of Section 7.1.
The following types of spaces shall be permitted to be protected by residential sprinklers in accordance with Section 7.1:
   (1) Lobbies not in hotels and motels
   (2) Foyers
   (3) Corridors
   (4) Halls
   (5) Lounges
   (6) Other areas with fire loads similar to residential fire loads

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs., that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☒ Do Not Agree*

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

I AGREE WITH THE ORIGINAL POSITION OF THE

Committee

Signature:

Name - Please Print: Peter T. Schwab

Date: 06/28/12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110 Email: ecarroll@nfpa.org
Item 12-8-3
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (20-1)

Document: NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection

Motion: To Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

TC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 18 [31 (eligible to vote) – 2 (ballots not returned) – 2 (abstentions) = 27 × 0.66 = 17.82]

31 Eligible to Vote
2 Not Returned (LaRose, Petrus)

20 Agree (Huff w/comment)
7 Do Not Agree (Aaron, Ballengee, Fuller, Nasby, Pennel, Schneider, Whitney)
2 Abstain (Castles, Kovacik)

TC Action: PASS
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1

Amendment: To Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends the proposed requirements for series fire pumps to be located in the same pump room (with certain exceptions) return back to the previous edition text.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs., that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☐ Do Not Agree* I don’t agree.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:
I continue to support the original majority committee action for the reasons given in the substantiations.

Signature: Michael Aaron

Name - Please Print: Michael Aaron

Date: 28 June 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: ecarroll@nfpa.org
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1

Amendment: To Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Reggs"). Under the Reggs, if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Reggs, at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends the proposed requirements for series fire pumps to be located in the same pump room (with certain exceptions) return back to the previous edition text.

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☐ Agree

X ☐ Do Not Agree*

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

Pumps and controls operating in series should be in the same pump room. Service interruption, damage to the upper zone pump(s), testing and operational issues all can be mitigated when all pumps are in the same room.

Signature: [Signature]

Name - Please Print: Timothy Ballenger

Date: 6/27/12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Eileen Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: ecarroll@nfpa.org
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1

Amendment: To Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

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☐ Agree
☐ Do Not Agree*
☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

It is disappointing to see the loss of a great deal of effort and progress that was made to address many of concerns with pumps in series. The pros and cons of this issue have been thoroughly debated. I would only add that the two most significant cons that remain for me are (1) the inability to properly flow test most pumps installed in upper floor levels of buildings and (2) fire service interaction with the building pumping system during a fire. The practical issue of getting large quantities of water from the pump discharge to a drain or off the roof has not been resolved. This has and will result in pumps which are depended upon to supply fire protection water to the building not being flow tested ever. With pumps located at high levels within the building which depend on pumps beneath them, it will remain extraordinarily difficult and time consuming for the fire service to assess the condition of and restore a malfunctioning fire pump.

Signature: __________________________

Name - Please Print: __David B. Fuller__________________________

Date: __6/21/12__________________
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1

Amendment: To Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs, if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c).
Please note that the Amendment that is the subject of this ballot recommends the proposed requirements for series fire pumps to be located in the same pump room (with certain exceptions) return back to the previous edition text.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs, that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree
☒ Do Not Agree* 
☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

Staging Pumps is very Problematic. This is Especially Risky with "Protect in Place" Zones. Cost savings are Minimal. Emergency Service is also Very Problematic.

Signature: [Signature]

Name - Please Print: [James S. Nashby]

Date: 2012-06-28

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: ecarroll@nfpa.org
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1


NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("RegA"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends the proposed requirements for series fire pumps to be located in the same pump room (with certain exceptions) return back to the previous edition text.

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☐ Agree
☒ Do Not Agree
☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain": This action will leave issues regarding vertical staging of fire pumps including proper supervision and operation of these pumps, especially under emergency conditions unaddressed. In addition, testing issues remain unaddressed.

__________________________________________________________
Signature: Gayle Permel

Name - Please Print: Gayle Permel

Date: June 15, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: eccarroll@nfpa.org

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 69 of 2025
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1

Amendment: To Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs, if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. st 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends the proposed requirements for series fire pumps to be located in the same pump room (with certain exceptions) return back to the previous edition text.

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☐ Agree
☒ Do Not Agree*
☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

When fire pumps are arranged where one pump is the sole water supply to the other (Hi-Lo arrangement) having both pumps in the same room will facilitate corrective action

in the event of problems. Additionally, electric wiring, both power and control, will not be

subject to unnecessary exposure to hazards in the event of fire.

Signature: ____________________________

Name - Please Print: R. Schneider, P.E.

Date: 6/21/2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: ecarroll@nfpa.org
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1

Amendment: To Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends the proposed requirements for series fire pumps to be located in the same pump room (with certain exceptions) return back to the previous edition text.

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☐ Agree
☒ Do Not Agree*
☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

This issue has been thoroughly discussed in TC and I believe the TC actions are the correct actions. Additionally I believe that pump reliability during an emergency can be achieved when all pumps that are pumping series are in the same area.

Signature: [Signature]

Name - Please Print: John Whitney

Date: 2 Jul 12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: ecarroll@nfpa.org
Attachment 12-8-3-a
Page 9 of 27

NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1

Amendment: To return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs, if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs, at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends the proposed requirements for series fire pumps to be located in the same pump room (with certain exceptions) return back to the previous edition text.

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☐ Agree
☐ Do Not Agree*
☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

It is not clear what action is being taken from the ballot materials as a result of the Convention Technical Session action.

______________________________
Signature: Hugh D. Castles

Name - Please Print: Hugh D. Castles

Date: June 27, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elton Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-9110
Email: scarrow@nfpa.org
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1

Amendment: To Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends the proposed requirements for series fire pumps to be located in the same pump room (with certain exceptions) return back to the previous edition text.

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☐ Agree

☐ Do Not Agree*

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

"Although there are merits to the arguments being made on both sides of this issue, further review and discussion of the issue is needed before any changes are made to the Standard."

[Signature]

Name - Please Print: John R. Kovacik

Date: June 26, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: ecarroll@nfpa.org
NPPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-1

Amendment: To Return a portion of a Report in the form of Proposal 20-46 and related Comments 20-25 and 20-27

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs, if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends the proposed requirements for series fire pumps to be located in the same pump room (with certain exceptions) return back to the previous edition text.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs, that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

X Agree

☐ Do Not Agree*

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

Old text does not protect the control wiring between the pumps, except for the TIA action which would go away
I believe that having a water supply or at least positive pressure at the suction flange of the high zone pump is important and necessary
I also want the additional alarm requirements and communications

Signature: [Signature]

Name - Please Print: [Name]

Date: [Date]

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
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Comment 20-25 Return a portion of a Proposal in the form of a proposal and related comments

20-25 Log #CC2 Final Action: Accept
(4.19.2)

Submitter: Technical Committee on Fire Pumps,
Comment on Proposal No: 20-46, 20-47
Recommendation: Revise as follows:
High Rise Task Group Recommended Committee Comment on Series Pumps

4.19.2 Series Fire Pump Unit Arrangement, Pumps Arranged in Series

4.19.2.1* Fire Pumps operating in series Except as permitted by 4.19.2.2, all of the pumps that are a part of a series fire pump unit shall be located within the same fire pump room.

A.4.19.2.1 Where pumps are installed in series and are located in the same pump room, the discharge pressure from the second (or third) pump is typically at a pressure that is too high for the outlets on a fire sprinkler or standpipe system on the lower floors of the building. Rather than use this high discharge pressure with pressure reducing valves, it is a common, and accepted practice, to take the fire protection supply from the discharge of the preceding pump through a connection between that pump and subsequent pump(s) as shown in Figure A.4.19.2.1.

Figure A.4.19.2.1 Series Fire Pump Unit with Discharge from First Pump

Feeding the Low Zone Fire Protection Systems

4.19.2.2 Pumps that are a part of a series fire pump unit shall be permitted to be located in separate pump rooms when all of the following conditions are met:
(a) Each pump is capable of having a positive pressure at the suction flange at maximum flow in accordance with section 4.14.3.1 even if all preceding pumps fail to start.
(b) The interconnect control wiring between the controllers in different pump rooms complies with Section 4.19.2.3.
(c) The alarms and signals are annunciated in the other pump rooms for all pumps that are a part of the series fire pump unit in accordance with Section 4.19.2.4.
(d) A pump room communication system that complies with Section 4.19.2.5 is provided.

4.19.2.3 No more than three pumps shall be allowed to operate in series as a part of a series fire pump unit.

4.19.2.4 No pressure reducing or pressure regulating valves shall be installed between fire pumps arranged in series as a part of a series fire pump unit.

4.19.2.5 The pressure at any point in any pump in a series fire pump unit, with all pumps running at shut off and rated speed at the maximum static suction supply, shall not exceed any pump suction, discharge, or case working pressure rating.

4.19.2.7 Protection of Control Wiring for Series Fire Pump Units

4.19.2.7.1* Interconnect control wiring of fire pumps in series which are not located in the same room and which affects starting of the supply (lower zone) pump(s) shall be protected against fire and physical damage in the same manner as power conductors described in NFPA 695.

A.4.19.2.7.1 The following methods should be considered acceptable:
(1) Be encased in a minimum 50 mm (2 in.) of concrete
(2) Be protected by a fire-rated assembly listed to achieve a minimum fire rating of 2 hours and dedicated to the fire pump circuit(s)
(3) Be a listed electrical circuit protective system with a minimum 2-hour fire rating.
(4) Be protected by a listed fire-rated assembly that has a minimum fire rating of 2 hours and contains only emergency alarm and/or control wiring, circuits dedicated to fire pumps or emergency systems generators or legally required generators, and no power wiring circuits

4.19.2.8 Status Signals for Series Fire Pump Units

4.19.2.8.1 Audible and visual status signals shall be provided in each pump room indicating the status of the associated series pump(s) which is not located in the same pump room.

4.19.2.8.1.1 The following audible and visual signals shall be provided in each pump room for each series electric fire pump(s):
(1) Pump running in accordance with paragraph 12.4.3(1)
(2) Control Switch in Off or Manual position in accordance with paragraph 12.4.3(2)
(3) Trouble on controller or engine in accordance with paragraph 12.4.3(3)

4.19.2.9 Communications for Series Fire Pump Units

4.19.2.9.1 A two-way, in-building emergency services communications system in accordance with NFPA 72 shall be provided in each pump room where pumps in series are not located in the same room.

4.19.2.9.1.1 The communication system shall meet the survivability requirements of NFPA 72.

Substantiation: The term “series fire pump unit” was inserted to consistently use the term that was defined last cycle and refined by Proposal 20-19.

The combination of a flooded suction condition for the second (or even third) pump, even if the first (or second) pump does not start along with improved communication and protected interconnection controls between pumps and controllers in separate pump rooms creates an acceptable condition under which pumps can be located in separate pump rooms, even when they are a part of a series fire pump unit, as long as the communication and circuit protection requirements are followed.

Figure A.4.19.2.1 Series Fire Pump Unit with Discharge from First Pump Feeding the Low Zone Fire Protection Systems

Figure A.4.19.2.1 Series Fire Pump Unit with Discharge from First Pump Feeding the Low Zone Fire Protection Systems
Committee Meeting Action: Accept
Committee Statement: The term "series fire pump unit" was inserted to consistently use the term that was defined last cycle and refined by Proposal 20-19.

The combination of a flooded suction condition for the second (or even third) pump, even if the first (or second) pump does not start along with improved communication and protected interconnection controls between pumps and controllers in separate pump rooms creates an acceptable condition under which pumps can be located in separate pump rooms, even when they are a part of a series fire pump unit, as long as the communication and circuit protection requirements are followed.

This action supersedes the actions taken in proposal 20-46 and 20-47.

Number Eligible to Vote: 32
Ballot Results: Affirmative: 28 Negative: 4

Explanation of Negative Vote:

BEALS, J.: The proposed language as written is too restrictive in that fire pumps arranged in series and separated vertically are limited to the water pressures available through the water supply system (defined as a "positive pressure...at maximum flow" in the proposed revision). I do not feel that there is sufficient evidence to indicate the appropriate reliability or pressure data has been presented to suggest a problem. I would support an option to have a redundant "primary" fire pump arrangement for a fire pump used in series with a second pump not able to comply with the positive pressure requirement.

HAAGENSEN, D.: Acceptance of this Comment will likely lead to frequent use of master pressure reducing valves and zone pressure reducing valves, which this Committee has been opposed to for proper reasons. Property owners in this economy meet the minimum requirements of the standard, not necessarily what is good fire protection. The diagram shows a very good way to install pumps in the same room while having multiple-zones. However, property owners, in meeting the minimum design requirements, will likely go with a single pump with pressure reducing valves in the lower elevations, as opposed to installing multiple pumps in the suggested (non-required) arrangement.

HAGUE, D.: It is still not clear what problem the committee is attempting to solve with this proposed change. The substantiation for Proposal 20-46 makes reference to only two case studies suggesting problems associated with pumps in series. In both case studies, the fire pumps either did not start or started inadvertently indicating that an inspection or maintenance problem, not a design problem, exists. The committee has not made any effort to determine how often fire pumps fail to start or to determine how often pumps in series are used in highrise buildings. Further, no information has been provided by the committee indicating how often the lower level pump in a series pumping system fails to start.

The submitter of proposal 20-46 indicates that previous floor testimony regarding this issue was inaccurate, yet fails to specifically point out what these inaccuracies are. The submitter also claims that the only impact of water filled tanks on the building structure of the upper floors of a highrise building will result in minimal impact: citing that a 30,000 gal. steel tank filled with water weighing 290,000 lbs is equivalent to only 10% of the weight of a 6 in. concrete slab on a 20,000ft2 floor. The actual structural impact of adding a load such as a water filled tank is more likely additional structural support in the form of beams and or trusses to support the additional weight of the tank and water.

The submitter also outlines the difficulty of monitoring fire pumps on different floors of a highrise building. Monitoring fire pumps with either design method; vertical staging or series pumping in one fire pump room with tanks and pumps on upper floors is equally problematic and should not be cause for prohibiting vertical staging.

The submitter states that the city of Chicago requires automatic shutdown of all fire pumps making vertical staging more challenging. Why is this pertinent? NFPA 20 prohibits this practice where the pump constitutes a sole supply!

The fact that the committee has established such a restrictive design without demonstrating the real problem and that the two case studies does not indicate a trend) and has neglected to consider the alternate design options developed by its own Task Group on Vertical Staging, such as redundant pumping for vertical staging is unacceptable and lacks technical substantiation.

What are we talking about here is the protection of pump #2, not good fire protection but protection of equipment. The bottom line is, under any circumstance and given any pump configuration, whether vertically staged, flooded suction, or series pumping within the same pump room, if pump #1 fails to start, the water supply is compromised because pump #2 is reliant on pump #1.

The committe action has the effect of prohibiting practices that are now permitted, even though these practices have acceptable performance reliability. For example, vertically staged pumps in series, with redundant pump(s) in the lower stages have similar (if not better) reliability as compared to pumps in series in the same pump room with no redundancy. For the pumps in the same pump room and no redundancy, if the first pump fails to start, the second pump will not be damaged if the second pump starts, but the second pump will not be able to deliver water at sufficient pressure for fire protection to the upper floors. This makes the situation with vertically staged pumps and redundant lower stage pumps better than a flooded suction system. A flooded suction system has a back-up if it fails to start and, with the redundant first pump and the second pump running, fire protection can be provided at the proper pressure to the upper floors of a building. We recognize that this comparison is only valid for situations where redundant pumps are not required, but that situation occurs often enough that the valid design concept should not be prohibited by the standard.

Comment on Affirmative:

PENNEL, G.: I support this action. While I still have concerns about the affect of placing fires pumps in separate rooms on fire department operations, 20-25 (Log #CC2) does address the issue of maintaining positive pressure on the downstream pump(s) in a series arrangement, and is an appropriate position for this edition. If it is desired to introduce vertical staging of fires pumps in a future edition, it should be a well thought out modification that addresses all concerns, including 1) positive pressure on the downstream pump(s) under all conditions, 2) Acceptance testing and annual testing of fire pump systems (3) communication between fire pumps (verify if the requirements in 20-25 (Log #CC2 work in the field)) 4) servicing of fire pumps including a review of whether it is desirable to be able to control all fires pumps in a fire pump series unit from each fire pump room.

Backup Proposal 20-46 and 20-47 to Comment 20-25

20-46 Log #140 Final Action: Accept in Part (4.19.2.1)

Submitter: Gayle Pennel, Aon Fire Protection Engineering

Recommendation: Add new text to read as follows:

4.19.2.1 Fire pumps operating in series and their controllers shall be located within the same fire pump room.

Substantiation: The requirement for series fire pumps to be in the same room was accepted by the NFPA 20 Committee by a significant margin, but was overturned on a floor action at the NFPA Technical Meeting. Much of the floor testimony was inaccurate. The inaccuracies are documented in the appeal before the Standards Council. The issues raised are still current are addressed herein.

High rise fire fighting and fire department total reliance on fire pumps in buildings exceeding 400-500 feet in height are unique. At this height, the building must be self contained and the occupants must be protected in place. A series fire pump arrangement and the standpipe / sprinkler distribution piping that exist in high rise buildings are some of the most complex fire pump installations.

More than any other occupancy, high rise occupants are dependent on the building fire pump to function reliably during a fire. High rise evacuation plans, which can incorporate "refuge floors", depend on the building automatic and manual fire fighting systems to be fully operational. It is typical that automatic sprinkler systems and standpipes to be integrated into a single system and from one or more fire pumps.

There is some inherent decrease in reliability and increase in operational complexity when pumps operate in series. Vertical staging of fire pumps adds to both the decrease in reliability and the increase in operational complexity. The current concept of reducing pressures by placing pumps on different levels is appealing as a way to lower pressures, with this arrangement, failure of the low zone fire pump would result in the loss of fire protection to all zones supplied. In addition, damage to the higher zone pumps could result in significant protection interruption. There are known instances of the high zone pump starting when the low zone pump failed to start. The potential service interruption, damage, and operational and reliability issues override this consideration. Inadvertent operation of the high zone pump when working on the low zone is more likely when the pumps are on diferent levels.

Placing interdependent pumps on diferent level increases (not decreases) their susceptibility to deliberate harm. This appears counterintuitive, because independent pump located in separate locations do increase reliability. With independent pumps, the system will still function when there is damage to a single location. However, with interdependent pumps located at separate locations damage to either location results in the loss of the system.

The current field practice of testing though the standpipe and discharging water. This comparison alone is cause for questioning the accuracy of the statement. An actual comparison was provided by Marinus Both, who reported an actual case on the impact of water storage tanks on the structural design.

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The building was the 51 story, Condos & Time Share Units, Planet Hollywood Towers by Westgate in Las Vegas. During construction, and after structural design was completed, the fire department added the requirement of backup water to be located in the tower. Two steel water tanks were added on the roof: one tank had a capacity of 27,900 gallons with a water filled weight of 247,100 lbs. The second tank had a capacity of 4,500 gallons with a water filled weight of 42,500 lbs. The required structural modifications were minimal. On the roof deck, the rebar sizing was increased, additional rebar was added, and equipment pads were provided underneath the tanks. This was the extent of the structural modification, at an accurately cost savings gained by vertical staging of fire pumps by eliminating express risers must be of set by 1) the cost of running a pump test header from the upper level pump to the ground level, 2) the cost of running electrical power to the higher floor, and 3) the loss of reliable space necessary to house the fire pumps on the upper level.

5. Requiring series fire pumps provides fire department response and monitoring of the fire pumps.

6. Requiring series fire pumps in the same room simplifies fire pump maintenance and restoring fire pumps to operation in the event of an emergency occurring during maintenance.

7. Requiring series fire pumps in the same room provides higher reliability against an intentional harm event.

8. Requiring series fire pumps in the same room simplifies acceptance testing and maintenance, and allows testing of each zone independently.

4. Requiring series fire pumps in the same room minimizes the likelihood of damage to the wiring between the control panels which control the sequencing.

In vertically staged pumps, the 2\textsuperscript{nd} pump will cavitate and fail within 3-5 minutes if it runs without the 1\textsuperscript{st} pump running. With series pumps in the same room water will pass through a non running pump and prevent cavitation of the second pump at churn and low to moderate flows. In addition, if a pump bypass pressure is provided it will prevent cavitation and high pressures. This is confirmed both by pump manufacturers, and a case history, discussed later in this rational, where the low zone pump to start. In this case history, the fire pumps were in the same room and the high zone pump was not damaged even though it ran without the low zone pump.

Requiring series fire pumps does increase the discharge pressure on the 2\textsuperscript{nd} (and 3\textsuperscript{rd}) pump over vertical staging, but does not increase reliance on pressure reducing valves. The higher pressures are applied to express risers where pressure reducing valves are not required.

A separate proposal is being submitted to address the potential misinterpretation that prevents feeding a fire pump in a high rise building from a “campus style” distribution loop.

The fire department may need to do more than monitor the fire pumps from a fire alarm control panel. The fire department can tell if the fire pumps are running from the main fire alarm panel once the alarm system is operating correctly. BUT, they cannot manually stop from here if the fire pumps have operated until it was destroyed due to no water supply. They cannot manually start or stop the fire pumps, and they cannot observe pressures or abnormal functioning of a fire pump. The fire department cannot shutdown the fire pumps from the main fire alarm panel. The chances of shutting down the pumps in the wrong sequence are much higher when they are on different fire alarm panels; communication is difficult. NFPA 20 requires a fire pump room to be supervised by personnel when a fire pump is running.

It should also be noted that the fire alarm system may not be reporting correctly at the time of commissioning, and that until the fire alarm system is total verified information presented at the panel may not be accurate.

The city of Chicago requires all fire pumps to be on automatic shutdown. In case of a fire a fireman is assigned to go to the pump room and press the manual run button to override the automatic shutdown. This introduces the possibility that an automatic timed shutdown of the low zone may occur while the high zone pump is still running. In a vertically staged system this could damage the high zone pump.

Brett Scharpenter reported a case history of the low zone fire pump failing to start at a building located at 1720 South Michigan Ave Chicago, IL. The high zone fire pump was arranged in series with the low zone fire pump. Both pumps were in the same room. In August 2007, the fire pumps passed an acceptance test. On September 8, 2007, the high zone pump was found operating without the low zone pump operating. The pump running alarm was ignored by building security. No pressure drop was recorded. The actual cause was speculative and undetermined.

On September 24, 2007 the high zone pump was again found operating without the low zone pump operating. This time momentary 25 psi drop was noted. The processors of both controls were replaced and the condition has not repeated since.

Had the high zone pump been on an upper level the high zone pump would have operated until it was destroyed due to no water supply.

In summary, series fire pumps for high-rise applications should be in the same room for the following reasons:

1. The primary reasons to allow vertical staging of fire pumps are:
   a. Reduced discharge pressures on the downstream series fire pump(s).
   b. Reduced pressure protection system cost by eliminating pressure differences and possibly lower pressure ratings for some pipe and fittings.
   c. These reasons are offset by a decrease in reliability and an increase in the complexity of operation. In addition the cost savings of eliminating express risers is partial offset by the additional pump test header piping.

2. Requiring series fire pumps in the same room minimizes the likelihood of cavitation and damage to higher zone pumps if the low zone pump fails to start or shutdown prematurely. A manufacturer has indicated a pump will cavitate within 3-5 minutes of running dry. With pumps in the same room the suction will stay flooded even if the first pump fails to operate. This is confirmed by the case history presented above.

3. Requiring series fire pumps in the same room minimizes the likelihood of fire pumps being out of service because of damage caused by improper pump start / stop sequencing.

4. Requiring series fire pumps in the same room minimizes the likelihood of damage to the wiring between the control panels which control the sequencing.

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3. Requiring series fire pumps in the same room minimizes the likelihood of fire pumps being out of service because of damage caused by improper pump start / stop sequencing.

4. Requiring series fire pumps in the same room minimizes the likelihood of damage to the wiring between the control panels which control the sequencing.

The Committee’s actions fail to take into account the very real situation of pumps operating in the rear of a building, and the second pump will have water even if the first pump does not start. The Committee’s action prohibits this installation. Most of the submitters’ justification is based on very tall high rise buildings that are beyond the fire department’s capability to provide fire-fighting water without the fire pump, but those situations are already taken care of by NFPA 20 and NFPA 14, which taken together require redundant tanks and pumps high up in the building, essentially eliminating pumps in series as they have been defined in NFPA 20. Therefore, the only pumps that will be affected by this committee action are the ones that don’t fit the justification of the submitters.

Comment on Affirmative:

HAGUE, D.: Action should be Accept in Principle with reference to 20-47, (Log #141).

PENNEL, G.: Notwithstanding the justification submitted for this proposal is inadequate, comments questioning the justification should be addressed. Vertical staging of fire pumps is permissible by NFPA 20 and NFPA 14. The vertical staging is not limited to conditions where the lower pump is on the ground floor. There is currently nothing in NFPA 14 or NFPA 20 that would prevent installing a tank and fire pump on the 20\textsuperscript{th} floor of a high rise building, and in the event of a fire, the fire pumps in series on the 20\textsuperscript{th} floor. Redundancy requirements in NFPA 20 must be met, but vertical staging is currently permitted.

While modifying the requirement to allow series fire pumps in different rooms allows the second pump will have water even if the first pump does not start addresses one very real concern of the committee: the fire department may need to do more than monitor the fire pumps during operation. It is unclear to me why putting series fire pumps in different rooms on the same floor is such a hardship that it deserves special consideration.

Ballot Results:

Affirmative: 30

Ballot Results: Accept in Part

Add new text to read as follows:

4.19.2.1 Fire pumps operating in series shall be located within the same fire pump room.

Committee Statement: The phrase “and their controllers” is redundant, since the controller is already required to be in the same room with its pump. The Technical Committee has appointed a Task Group to develop Annex information to address this issue.

Number Eligible to Vote: 30

Ballot Results: Affirmative: 29 Negative: 1

Explanation of Negative:

ISMAN, K.: Our disagreement with this proposal was well-documented in the previous cycle. The committee’s actions fail to take into account the very real situation of pumps operating in the rear of a building, and the second pump will have water even if the first pump does not start. The committee’s action prohibits this installation. Most of the submitters’ justification is based on very tall high rise buildings that are beyond the fire department’s capability to provide fire-fighting water without the fire pump, but those situations are already taken care of by NFPA 20 and NFPA 14, which taken together require redundant tanks and pumps high up in the building, essentially eliminating pumps in series as they have been defined in NFPA 20. Therefore, the only pumps that will be affected by this committee action are the ones that don’t fit the justification of the submitters.

Comment on Affirmative:

HAGUE, D.: Action should be Accept in Principle with reference to 20-47, (Log #141).

PENNEL, G.: Although I think the justification submitted for this proposal is inadequate, comments questioning the justification should be addressed. Vertical staging of fire pumps is permissible by NFPA 20 and NFPA 14. The vertical staging is not limited to conditions where the lower pump is on the ground floor. There is currently nothing in NFPA 14 or NFPA 20 that would prevent installing a tank and fire pump on the 20\textsuperscript{th} floor of a high rise building, and in the event of a fire, the fire pumps in series on the 20\textsuperscript{th} floor. Redundancy requirements in NFPA 20 must be met, but vertical staging is currently permitted.

While modifying the requirement to allow series fire pumps in different rooms allows the second pump will have water even if the first pump does not start addresses one very real concern of the committee: the fire department may need to do more than monitor the fire pumps during operation. It is unclear to me why putting series fire pumps in different rooms on the same floor is such a hardship that it deserves special consideration.

Ballot Results:

Affirmative: 30
Related Comments 20-26 through 20-29

20-26 Log #13  Final Action: Reject
(4.19.2.1)

Submitter: David R. Hague, Liberty Mutual Commercial Markets
Comment on Proposal No: 20-46
Recommendation: Revise text to read as follows:
A.4.19.2.1 Fire pumps operating in series and their controllers shall be
located with the same fire pump room.
Substantiation: This issue was acted on during the previous revision cycle
and was ultimately overturned on the floor of the Association Meeting. An
appeal to the standards council was not accepted. While it is clear that the
association membership wishes to allow the vertical staging of fire pumps to
be determined by the registered design professional and the AHJ not
mandated by NFPA 20.
There still is no technical justification for the change. The substantiation
provided in the proposal is anecdotal at best. There are arguments for either
configuration and as such, each project should be based on the judgment of
the engineering team, building owner and AHJ. Until such time as technical
loss data can be presented indicating a problem exists, this proposal should
be rejected.
Committee Meeting Action: Reject
Committee Statement: The technical committee believes that the pumps in
series should be installed in the same pump room to ensure the best possible
performance and reliability of the pump system. NFPA 20-25 (Log #CC2)
provides some degree of flexibility where there are building limitations that
make the installation in the same room impossible.
Number Eligible to Vote: 32
Ballot Results: Affirmative: 29 Negative: 3
Explanation of Negative:
HAAGENSEN, D.: See my Explanation of Negative on Comment 20-25 (Log
#CC2).
ISMAN, K.: See my Explanation of Negative Comment 20-25 (Log
#CC2).

20-27 Log #52  Final Action: Accept in Principle
(4.19.2.1)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.
Comment on Proposal No: 20-46
Recommendation: Revise the two new sections that were both given section
numbers 4.19.2.1 as follows:

4.19.2.1 Fire pumps operating in series, that are a part of series fire pump
units shall be located within the same fire pump room.

4.19.2.4.2 When fire pumps are located in the same room. Series fire pump
units shall be arranged with no more than three pumps shall be allowed to
operate in series.
Renumbe the rest of 4.19.2.
Substantiation: First, the committee needs to deal with the fact that it adopted
two revisions to section 4.19.2.1 and it does not want to lose either one of
them.
Second, the committee needs to use the term “Series Fire Pump Unit” that
it adopted in Proposal 20-19. The whole purpose of this new definition was to
help clarify this issue, so the committee needs to use the term in the section
where the issue is discussed.
Committee Meeting Action: Accept in Principle
Committee Statement: See committee action on 20-25 (Log #CC2).
Number Eligible to Vote: 32
Ballot Results: Affirmative: 31 Negative: 1
Explanation of Negative:
HAAGENSEN, D.: See my Explanation of Negative Comment 20-25 (Log
#CC2).

20-28 Log #33  Final Action: Reject
(4.19.2.1)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.
Comment on Proposal No: 20-46
Substantiation: The committee has never addressed the issues we have
brought up in our negative ballots in the ROP for this cycle or the ROP and
ROC for the previous cycle. While the committee chair has attempted to begin
to address the issues in his affirmative ballot, these statements do not appear to be
correct given the combination of requirements in NFPA 20 and NFPA 14.
If the committee is truly concerned with super high rise buildings, they could
put this rule in the new Chapter 5 with less push-back from the installation
and design community. While the chair may not see the value in clarifying
installation rules for other than super high-rise situations where water can
get to the second pump in series even if the first pump does not start, the
installation and design community sees this design option often enough that
it does not want to fight against the requirements of the standard each time it
comes up.
If the committee is aware of an installation technique that is valid and works
correctly, they should not specifically outlaw that technique just because they
don’t want to take the time to address it.
This comment was agreed to by the E&S Committee at the July 2011 meeting.

Committee Meeting Action: Reject
Committee Statement: The technical committee believes that the pumps in
series should be installed in the same pump room to ensure the best possible
performance and reliability of the pump system. NFPA 20-25 (Log #CC2)
provides some degree of flexibility where there are building limitations that
make the installation in the same room impossible.
Number Eligible to Vote: 32
Ballot Results: Affirmative: 30 Negative: 2
Explanation of Negative:
HAAGENSEN, D.: See my Explanation of Negative on Comment 20-26
(Log #13).
ISMAN, K.: See my Explanation of Negative on Comment 20-25 (Log
#CC2).

20-29 Log #52  Final Action: Reject
(4.19.2.1)

Submitter: Terry L. Victor, Tyco/SimplexGrinnell
Comment on Proposal No: 20-46
Recommendation: Reject proposal 20-46 (Log #140).
Substantiation: This proposal contradicts other requirements and allowances
related to fire pumps in series. The action taken on proposal 20-19 and the
revisions to the definition of a Series Fire Pump Unit makes it clear that pumps
in series are only to be considered a “unit” when in the same building. The new
annex text explains that campus type water distribution systems do not have to
have the pumps in series in the same pump room.
Proposal 20-46 doesn’t address or allow an exception for campus or plant
type arrangements where one or more pumps feed a dedicated under ground fire
loop and other pumps boost pressure in individual buildings coming off of the
loop. There are many other applications where it’s not practical to have pumps
in series in the same pump room, including foam water systems and water mist
sprinkler systems.
This comment is being submitted by the Tyco Codes and Standards Sprinkler
Task Group.
Committee Meeting Action: Reject
Committee Statement: The technical committee believes that the pumps in
series should be installed in the same pump room to ensure the best possible
performance and reliability of the pump system. NFPA 20-25 (Log #CC2)
provides some degree of flexibility where there are building limitations that
make the installation in the same room impossible.
Number Eligible to Vote: 32
Ballot Results: Affirmative: 29 Negative: 3
Explanation of Negative:
HAAGENSEN, D.: See my Explanation of Negative on Comment 20-26
(Log #13).
HAGUE, D.: See my Explanation of Negative on Comment 20-25 (Log
#CC2).
ISMAN, K.: See my Explanation of Negative on Comment 20-25 (Log
#CC2).
DAVID HAIG: Thank you, Mr. Chairman. My name is David Haig representing Liberty Mutual Insurance and I move 20-1.

DANNY McDANIEL: There's a motion on the floor to return a portion of the report in the form of 20-46 and related comments 20-25 and 20-27. I heard a second. Please proceed with the discussion on the motion.

DAVID HAIG: Thank you, Mr. Chairman.

This issue went to the floor on the last revision cycle of NFPA 20 and has to do with vertical staging of fire pumps and it was overturned on the floor primarily by members of the stand pipe committee. Presenting vertical staging of fire pumps in the high-rise building unnecessarily complicates stand pipe system design. As a result the committee formed the task group to deal with this issue and the task group report of which I was a member.

Just prior to the ROC meeting would have permitted vertical staging of fire pumps given redundant pumping on the lower zone. However, that provision was removed at the last minute just prior to the ROC meeting. I thought we had achieved consensus on the issue, but now we're back to square one. I did oppose it during the ROC.

I'd like to read a short portion of the technical committee's position statement on this issue which was written actually dated on June 1st and it reads as follows.

I quote: There currently is no statistical data on either successful or unsuccessful operation of vertically staged or non-vertically staged fire pumps. So then I had need to ask what problem we're trying to fix if we don't know that there is a problem. I dove into my own database at Liberty Mutual involving impairments of systems. That report returned 10,683 reported impairments over a period of several years. Of those, 51 directly related to fire pumps. That's less than one half of one percent.

Half of those reported impairments were
considered by us to be major; in other words, the pump would not provide water and pressure. That's less than one quarter of one percent. That appears to me to be exemplary performance.

What I think needs to happen here --

PRESIDING OFFICER McDaniel: One minute.

David Haid: Thank you. What I think needs to happen here is we need a joint task force between pumps and stand pipes so both sides of the issue can be addressed and we can fix this for the next revision cycle. I want to encourage the membership to support this motion. Thank you.

PRESIDING OFFICER Owen: Thank you.

Mr. Pennel, would you to offer the committee's position?

Mr. Pennel: Yes. The net effect of the NITMAN would be to allow, as David mentioned, vertical staging of fire pumps. What that means is that you could put a fire pump on the lower level first floor say and another fire pump up on the 30th floor in series with that fire pump.

This from an operational testing viewpoint is just very difficult to deal with. And the statistics on failures seem to indicate that the more complex the system, the higher the probability of failure.

We did go through a very detailed discussion of this. We have looked at it from really all aspects. And basically for vertical staging, there's a list of what I would call three pros.

One, it will eliminate high pressure express risers in stand pipe and sprinkler system design. And this only occurs in buildings probably 30 floors and higher.

The second advantage of this arrangement is that it reduces the discharge pressure downstream of the downstream fire pump. The second pump in series to discharge pressure on that pump is lower.

The third advantage, it reduces the square footage required for the fire pump on the lower floor, which sometimes the architect might prefer if given that
option. On the opposite side of this, it does nothing to reduce the pressure requirements. It just changed the portions of the system where the higher pressures come into play.

With this method, you have to run your fire department connection all the way up to the second pump. That offsets some of the cost savings that you might get with your express riser reduction.

You also complicate indicate pump testing. You either need to run a test riser down to the floor, which again is a high pressure situation, or you're going to have to make arrangements discharge on the roof if the stand pipe goes that high, in which case you better pre-coordinate it with the plumbing engineer, make sure that the drains are sized appropriately, which my add to the cost of the drains.

You also have to run the electrical power up to the higher zone. This is an increase in cost. It makes no different from the analysis I have done, it does not make a difference where tanks are required for water supply systems.

It definitely makes servicing of the fire pumps much more difficult. You run into situations where if somebody comes in and they want to service the low zone fire pump and they are unaware or overlooked the higher zone fire pump and don't coordinate the two, you can end up with problems with the high zone running without the low zone even being available to supply it.

And if you happen to have a fire during the time that you're servicing the fire pimp, and you've got both of them done, now you've got the issue of getting two pumps back in service on two floors that are 30 floors apart.

In summary, you're talking about a very expensive building. Starting at 30 floors going on up, you're talking, I don't know, a hundred million or higher. You're talking about a very expensive fire protection system.

And the difference in cost, if there is any
difference, it's kind of hard to tell which is actually
different, but the cost differential is pretty minimal
when you really look at it from the viewpoint of even
the cost of the fire protection system or the building
as a whole.
PRESIDING OFFICER OWEN: Mr. Pennel, could
you wind up your presentation, please?
COMMITTEE CHAIR FENNEL: So in summary, what
you're trying to avoid, what you're trying to install is
the simple design as you can to make it so that it can
be serviced and maintained. Thank you.
PRESIDING OFFICER OWEN: Thank you, Mr.
Pennel.

With that, we'll open up debate on the
motion. Please provide your name, affiliation and
whether you're speaking in support of or against the
motion.

KEN ISMAN: Thank you. My name is Ken
Isman. I'm with the National Fire Sprinkler
Association.
The concept of pumps --
PRESIDING OFFICER OWEN: Are you speaking
for or against the motion?
KEN ISMAN: I'm sorry. I'm speaking for the
motion.
The concept of pumps and series was brought
before you last cycle. At that time the NFPA membership
told the committee on fire pumps that they did not want
to put all the pumps and series in the same pump room.
The committee expressed a concern then and
continues express a concern now about the concept of
vertically staging fire pumps. The issue is similar
this time, but it's not the same.
The committee has made progress in
recognizing that there are some situations where pumps
and series do not need to be in the same pump room. I
want to recognize that progress and thank the committee
for that.
But unfortunately, the committee did not go
far enough. And so we need to support this motion to
once again return to the language of the 2010 edition of
NFPA 20 which is sufficiently handled this design
decision for the life of NFPA 20.

One example of a situation we were believe
you should be allowed to vertically stage fire pumps and
series, but the committee wants to require them to be in
the same pump room is where redundant fire pumps are
installed in the building.

We believe with redundant systems,
vertically staged fire pumps offer a reasonable level of
fire protection, but the committee rejected this
concept.

The committee put together a document
regarding our motion which was circulated outside o this
room and some people have seen it, although mount it was
not distributed to everyone who is here now.

For the part, if you've looked at that
document we agree with it. In fact, we help to write
some of this. The document lays out the pros and cons
of vertically staging fire pumps.

As you can see from the document, it is
mostly a cost issue. We understand that there are
financial benefits to vertically staging pumps as well
as additional costs. And whether the pros outweigh the
cons will be different in every situation.

We sure there are situations where the cost
of vertically staging pumps outweigh the benefits. And
in those situations, we will not want to vertically
stage the pumps. But in those few situations where the
benefits outweigh the costs, we would like the right to
continue to do so.

PRESIDING OFFICER OWEN: One minute, please.
KEN ISMAN: Thank you. To continue to do
what NPFA 20 has always allowed us to do to vertically
stage the pumps. All we're asking is that designer be
allowed to decide whether it makes sense to vertically
stage the pumps and not to have NFPA 20 outlaw technique
that's been successfully used for years in fire
protection. We ask you to vote in favor of our notion.
PRESIDING OFFICER OWEN: Thank you.

Microphone 9?

STEVE LATHAM: Thank you, Mr. Chair. My name is Steve Latham, principal member of the NFPA 14 technical committee speaking for the myself as a member of the committee and also for the American Fire Sprinkler Association. In the position --

PRESIDING OFFICER OWEN: Are you speaking in favor or against?

STEVE LATHAM: I'm speaking in favor of the motion.

Several points about existing widely accepted practice. And to Mr. Isman's comment about maintaining the option of the designer.

There are situations where there's tangible benefits to vertically staging the pumps and there may be unintended consequence of the committee's action that they did not consider.

That if pumps in tall buildings so-called very high and super high-rise buildings are restricted to being kept in the same room, that room is at a much lower base level of the building, extremely high pressure express will be utilized to push water to the upper floors and the zones created by the use of pressure reducing valves as allowed and prescribed in NFPA 14 or that point of connection valve such as pressure reducing hose valves and sprinkler control valves to manage pressure at the lower floors to very high pressure.

And that the ownership of the first clause on the ownership of the maintenance of those valves will in fact being much more expensive over the life of the building than the ownership and the maintenance thereof if inspections maintenance is undertaken under NFPA 25.

Then with any additional cost or savings we can measure at the time the building is built.

As the chairman of the 20 committee did state, we're dealing with a generally expensive building. Whether that number is 30 or 40 or $50 million, these costs are not necessarily
consequential and I don't think should be measured in
the consideration good fire protection.

But the chain of events in all the systems
is only as strong as its weakest link as we know from
NPFA data sprinkler failure is oftentimes related to
inadequate or failed inspections.

Personally I would like to see stand pipe
systems allowed to be designed in that chain of event.
I also do not agree with the chairman statement
vertically staged stand pipes are difficult to deal with
schematically. There's no difference in the
functionality between a pump that's been removed --
PRESIDING OFFICER OWEN: 30 seconds, sir.
STEVE LATHAM: -- vertically removed from
the one staged below it. I believe that it is depend on
good maintenance and the functional of the pump at the
first stage to drive the second one. They have the
power within the sequence that is mandated with NFPA 20.
I would ask that this motion be supported
and urge task group be created between 14 and 20 and I
do volunteer my time and energies to that effort in the
future.
PRESIDING OFFICER OWEN: Thank you.
Microphone 7?
JEFF SHAPIRO: Jeff Shapiro. I'm speaking
on my own behalf primarily because I think more people
need to speak to this than just to. I'll speak in favor
of the motion.
I was a member of the 14 commitment for 20
plus years and authored the NFPA handbook chapter on
stand pipes some three editions. I'm pretty familiar
with the subject matter.

What the standard has allowed in series fire
pumps for many, many years has not been shown to be
inadequate. What I looked for in the committee reason
statement and in listening to the committee chair's
statement was a compelling reason for NFPA 20 to
disallow this practice. I haven't read it. I didn't
hear it.

If it's difficult to deal with from a design
perspective, that's dealt with by the designer. If it's
difficult to deal with from a maintenance perspective,
that's dealt with by the owner.

It's not role of NFPA 20 to determine that
something is difficult, therefore, we shouldn't allow
it. It's been allowed. It's commonly been used. There
are severe disadvantages to disallowing the use of these
series pumps in all cases.

And I think it's improper as was stated by
to this membership last year that the 20 committee to
impose this restriction.
The offer to do something between and 20
jointly is a good one. If you accept this motion, it
will send this back to the committee and hopefully
initiate a joint action and I urge your approval of the
motion.

PRESIDING OFFICER OWEN: Thank you.
Is there any further discussion at the
microphones?

Microphone 7?

CECIL BILBO: Thank you. Cecil Bilbo with
the sprinkler system technology program at Hartman
College. I rise in favor of the motion. I am the fifth
of six people to speak in favor of this motion.
The NFPA membership is second a clear signal
to the NFPA 20 committee. I am also a principal member
of NFPA 14 which has also sent a message to the NFPA 20
committee that we seek approval of vertical staging of
fire pumps.

This is somewhat different, but very similar
to the horizontal staging the water supply that we
currently have across the United States and in other
parts of the world and I would absolutely endorse this
one.

PRESIDING OFFICER OWEN: Thank you.
Any further discussions at the microphone?
KENNETH ISMAN: Before that you close?
PRESIDING OFFICER OWEN: Is there any
further discussion to return a portion of the report in
the form of proposal of 20-46 and related comments 20-25
and 20-27?

Mr. Chair.

KENNETH ISMAN: Couple of points. First, the discussion on the valves. There's no difference whether you horizontally stage or whether you stage the pumps from the same room or vertically stage them as far as the requirements for the valving.

Either you have pipe pressure express risers. You don't get into the valves until you get into the zones. The pressure is the same on testing those zones.

There is a potential in 14, they do allow a pressure reducing valve to supply a hole stand pipe zone which is a whole different issue.

And as far as complexity, it's much easier to deal with two pumps that are running together when they were together. I talked about the complexity of it. It's not a situation of having to deal with two pumps in two different rooms that have to run together. That is tough to do.

It's easy to design. It's easy to make work under normal circumstances. Testing is more difficult. It is the responsibility of this standard or this NFPA to try to ensure the best reliability we can get. Keep it simple. That's where you get your reliability.

Thank you.

PRESIDING OFFICER OWEN: Thank you, Mr. Chair.

Before that we vote, let me restate the motion.

The motion on the floor is to return a portion of the report in the form of proposal 20-46 -- oh, I'm sorry. You're going to have to have somebody with a lighter back there to show you there.

Microphone 9.

STEVEN LATHAM: Steven Latham, principal member of the NFPA 14 committee speaking for myself for committee and for the American Fire Sprinkler Association in favor of the notion.

In response to the chairman's most recent
comments, I do want to quote from the NFPA 20 position statement on fire pumps operating series on a high-rise application dated June 1, 2012.

Excerpted quotation. The system design should be as simple as possible so the operation can be understood and maintained. In an emergency there's little time to make adjustment or correct a malfunction thinking or to switch from a primary to a backup pump.

I agree. And that is why I favor allowing vertical staging of pumps. I'm not sure I clearly understood the chairman's comments about complexity.

In fact, I have designed dozen of high-rise buildings that utilize multiple zones where there is vertical separation. It's a standard practice in the markets where I've done my work over the course of my career.

And it does allow us to provide pressure across a wide range from 100 to 173 psi without using a single pressure regulator. And that I think is a more simple design.

I believe that it simplifies the inspection, testing and maintenance protocol. I think it increases reliability.

I believe that when we talk about cost and complexity, when we -- this proposal, which would have vertically staged pumps required to be furnished with their own water supply if they're used, we're adding complexity and we're adding weaker links in that chain of reliability and dependability.

Mr. Pennel also spoke to contractors who might not understand there is vertically staged pump in high-rise building when they do inspection, testing or maintenance.

And I would say the standard of care needs to be raised about that contractor or the licensing for that contractor in the markets they serve. Any contractor or service provider who would go into a building and not understand the arrangement of the water supply in a high-rise building isn't qualified to be there. And I would hope that's not a qualifying or
disqualifying criteria in this discussion.

PRESIDING OFFICER OWEN: One minute, sir.

STEVE LATHAM: Again, I just want to reiterate that it is in the same spirit as apparently the committee itself is trying to substantiate their action that I ask you to vote in favor of the motion for the most reliable and simple and cost beneficial arrangements which will be at the designer's option.

Thank you.

PRESIDING OFFICER OWEN: Thank you.

JEFF SHAPIRO: Jeff Shapiro again. I have client interest in this. I'm speaking on my own behalf in favor of the motion. I do want to remind the membership here all you're being asked to do is put this back to the committee to work with the 14 committee to come up with a solution.

Nobody is asking you to make a technical judgment on in here today. You're simply being asked to send it back. If you read the technical basis in the committee statement and if you read the technical basis in the negative ballots, you will see there is some significant differences of opinion that need to be worked out. They have not been worked out in the documents. So this motion sends it back so that it will be worked out. You're not being asked to make a technical decision here or second guess anybody. There has been no substantiation that I've heard to make this document change as has been proposed by the committee and the motion on the floor is a good motion that you should support.

PRESIDING OFFICER OWEN: Thank you.

Anything else?

Mr. Chair, any final words?

COMMITTEE CHAIR PENNEL: No, that's fine.

PRESIDING OFFICER OWEN: All right. Before we vote, let me restate the motion. The motion on the
floor is return the portion of the report in the form of proposal 20-46 and related comments 20-25 and 20-27.

Please record your vote. One in favor of the motion accept or two opposed to the motion reject.

Five seconds. Balloting is closed. Motion passes.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (20-3)

Document: NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection

Motion: To Return a portion of a Report in the form of Proposal 20-181 and related Comment 20-90

TC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **18** [31 (eligible to vote) – 2 (ballots not returned) – 2 (abstentions) = $27 \times 0.66 = 17.82$]

<table>
<thead>
<tr>
<th>Eligible to Vote</th>
<th>31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Returned</td>
<td>2</td>
</tr>
</tbody>
</table>

20 Agree (Clark w/comment)
7 Do Not Agree (Aaron, Ballengee, Huff, Pennel, Schneider, VanDen Boogard, Whitney)
2 Abstain (Castles, Kovacik)

TC Action: PASS
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-3

Amendment: To Return a portion of a Report in the form of Proposal 20-181 and related Comment 20-90

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case the result would be to:

Return Section 11.6.4.3 and associated subsections and annex material relating to fuel supply maintenance to previous edition text.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs. that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☐ Do Not Agree* I don't agree.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":
I continue to support the original majority committee action for the reasons given in the substantiations.

__________________________________________________________

Signature: Michael Aaron

Name - Please Print: Michael Aaron

Date: 28 June 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: ecarroll@nfpa.org
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-3

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☐ Agree
X ☐ Do Not Agree*
☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

As fuel supplies are very inconsistent across the globe regarding bio-fuel content, it is necessary to maintain the highest quality fuel to run the diesel engine driven fire pump. The fuel maintenance system should be required.

Signature: [Signature]
Name - Please Print: Timothy Ballenger
Date: 6/27/12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

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National Fire Protection Association
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TC BALLOT FOR FIRE PUMPS
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☐ Agree

☒ Do Not Agree* 

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Fuel maintenance requirements do not belong in NFPA-20 at all

If fuel cleaning is required it should be as described by NFPA-25

Mandating fuel maintenance systems on new fire pump systems is not the answer:

Signature: [Signature]

Name - Please Print: [Name]

Date: [Date]

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

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National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
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July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 94 of 2025
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-3

Amendment: To Return a portion of a Report in the form of Proposal 20-181 and related Comment 20-90

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☐ Agree

☒ Do Not Agree*

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

Diesel fuel is changing and becoming subject to more degradation. This needs to be addressed

__________________________
Signature: 

__________________________
Name - Please Print: Gayle Pennel

__________________________
Date: 6/13/2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
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July 31, 2012

Standards Council Supplemental Agenda August 7-9, 2012

Page 95 of 2025
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-3

Amendment: To Return a portion of a Report in the form of Proposal 20-181 and related Comment 20-90

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☐ Agree

☒ Do Not Agree*

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

Diesel fuel used in fire protection is stored in tanks for extended periods of time. Thus recent additives including up to 15% bio-fuel make fuel deterioration a unique problem not encountered in other industries. This deterioration has been shown to clog up filters.

A formal maintenance program to monitor fuel quality in fire protection is mandatory.

Signature: _____________________________

Name - Please Print: R. Schneider, P.E.

Date: 6/21/2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
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Email: ecarroll@nfpa.org
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Return Section 11.6.6.3 and associated subsections and annex material relating to fuel supply maintenance to previous edition text.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Rgs., that recommendation is not binding, and, in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations.

It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☒ Do Not Agree*

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

There are other critical applications such as critical start generating sets that do not require fuel polishing. Engine manufacturers set standards for their engine which should be followed.

Signature: [Signature]

Name - Please Print: [Name]

Date: [Date]

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617- 984-7110
Email: ecarmoll@nfpa.org
Diesel Fuel

- Diesel fuel is recommended for emergency and standby applications. ASTM D975 No. 2-D Grade diesel fuel is recommended for good starting performance and maximum engine life. Consult the engine manufacturer distributor regarding the use of alternative grades of diesel fuel for various engines.

- On-site fuel storage must be provided, however the tank should not be too large. Diesel fuel lasts up to two years in storage, so the supply tank should be sized to allow for fuel turnover based on a schedule exercise and testing in that time period. A microbicide may need to be added if fuel turnover is low, or if high-moisture conditions promote the growth of fuel microbes. Microbes in the fuel can clog fuel filters and disable or damage the engine.

- Cold climates — Premium No. 1-D Grade fuel should be used when ambient temperatures are below freezing. Fuel heating may be required to prevent fuel filters from clogging when temperatures fall below the cloud point of the fuel — approximately 20°F (−6°C) for No. 2-D and −15°F (−26°C) for No. 1-D.

- Emissions requirements may be applicable. See Environmental Considerations.

Biodiesel Fuel

- Biodiesel fuels are derived from a broad variety of renewable sources such as vegetable oils, animal fats, and cooking oils. Collectively, these fuels are known as Fatty Acid Methyl Esters (FAME). When used in diesel engines, typically smoke, power, and fuel economy are all reduced. While smoke is reduced, the effect on other emissions varies, with some pollutants being reduced while others are increased. Biodiesel fuel is a substitute fuel, meaning the performance and emissions of the engine cannot be warranted when operated on this fuel.

- A blend of up to 5% volume concentration biodiesel fuel with quality diesel fuel should not cause serious problems. Above 5% concentration serious operational problems should be expected. Cummins neither approves nor disapproves of the use of biodiesel blends. Consult Cummins for additional information.
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-3

Amendment: To Return a portion of a Report in the form of Proposal 20-181 and related Comment 20-90

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case the result would be to:

Return Section 11.6.4.3 and associated subsections and annex material relating to fuel supply maintenance to previous edition text.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs., that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree
☒ Do Not Agree*
☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

The subject of changing fuel and quality is a fact of our changing world. This is a growing problem for fuels being held in storage. We have the opportunity to start the gestation time from Standard change to real world installation time to address this problem. We should not wait until we have losses to change the Standard and then begin the gestation time.

This was discussed at length in the TC. It was during the ROC the TC 28-4 decided this equipment should be included on new installations and added this requirement.

Who will tell the owner with a loss, this equipment would have prevented his loss.

I have no commercial interest in this equipment; my interest is to insure diesels have clean quality fuel to run on.

Signature: [Signature]

Name - Please Print: John Whitney

Date: 2 Jul 12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-3

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☐ Agree

☐ Do Not Agree*

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

It is not clear what action is being taken from the ballot materials as a result of the Convention Technical Session actions

__________________________________________

Signature: _____________________________

Name - Please Print: Hugh D. Castles

Date: June 27, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: eccarroll@nfpa.org
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-3

Amendment: To Return a portion of a Report in the form of Proposal 20-181 and related Comment 20-90

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☐ Agree
☐ Do Not Agree*
☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

"Although there are merits to the arguments being made on both sides of this issue, further review and discussion of the issue is needed before any changes are made to the Standard."

| Signature: |
| Director |

Name - Please Print: John R. Kovacik
Date: June 26, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
Email: ecarroll@nfpa.org
NFPA 20
TC BALLOT FOR FIRE PUMPS
JUNE 2012 ASSOCIATION AMENDMENT 20-3

Amendment: To Return a portion of a Report in the form of Proposal 20-181 and related Comment 20-90

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Return Section 11.6.4.3 and associated subsections and annex material relating to fuel supply maintenance to previous edition text.

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☐ Agree
☐ Do Not Agree*
☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Based on my 25 yrs experience in the property insurance industry of testing fire pumps, I do not believe the added expense of a fuel maintenance system is warranted for diesel fuel tanks. I do not have any experience with biodiesel, but NFPA 20 currently recommends it (and other alternative fuels) not be used for diesel engine-driven fire pumps.

______________________________

Signature: ____________________________

Name - Please Print: _______Stephen A. Clark, Jr., P.E.______________________________

Date: _______July 10, 2012______________________________

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Elena Carroll, Administrator, Technical Projects
National Fire Protection Association
Comment 20-90 Return a portion of a Report in the form of a proposal and related comments

20-90 Log #91 Final Action: Accept in Principle (11.6.4.3 and A.11.6.4.3.3)

Submitter: Russell B. Leavitt, Telgian Corporation
Comment on Proposal No: 20-181
Recommendation: Revise text to read as follows:
11.6.4.3 Where environmental or fuel quality conditions result in degradation of the fuel while stored in the supply tank from items such as water, micro-organisms and particulates, or destabilization, a listed active fuel maintenance system shall be installed to maintain fuel quality with all fuel storage tanks.
A.11.6.4.3.3 When required, the listed active fuel maintenance system shall be permanently connected to the fuel tank as follows:
Substantiation: This entire section reads as a reactive action. It states that “Where environmental or fuel quality conditions result [emphasis added] in degradation...” Reactive actions are not appropriate for an installation standard and should be assigned to NFPA 25. If the intent is for the installer to somehow make a determination that the conditions exist from the onset, then how is that determined?
The committee must either explain how to determine the conditions exist for degradation and then add the word could before “result in degradation of the fuel” or require it for all fuel storage tanks. If the problem is as pervasive as the committee seems to believe, then it should be a requirement for all storage tanks.
Committee Meeting Action: Accept in Principle
Revise section 11.6.4.3 and section A.11.6.4.3.3 to read as follows:
11.6.4.3 Where environmental or fuel quality conditions result in degradation of the fuel while stored in the supply tank from items such as water, micro-organisms and particulates, or destabilization, a listed active fuel maintenance system shall be installed to maintain fuel quality with all fuel storage tanks.
A.11.6.4.3.3 When required, the listed active fuel maintenance system shall be permanently connected to the fuel tank as follows:
Committee Statement: The annex statement changed the “shall” to a “should” to remove the requirement.
Number Eligible to Vote: 32
Ballot Results: Affirmative: 28 Negative: 4
Explanation of Negative:
DORINI, A.: If the fire pump system is properly maintained and run weekly, the fuel should not be a problem. I do not enough about the fuel maintenance system, it’s cost or listing requirements. It is a simple enough process to clean/ polish the fuel if there is a problem. I cannot agree to requiring this on every diesel fire pump system.
ISMAN, K.: The proponent has not justified the expense of a fuel maintenance system on all installations with diesel engine drivers. We understand this cost to be several thousand dollars, and there has been no evidence that standard diesel fuel needs to have such a maintenance system. Discussion: At the committee meeting centered around concerns with bio-diesel products. But NFPA 20 already tells the user not to use bio-diesel because we don’t know enough about the shelf life of the product. We could understand the requirement for fuel maintenance systems where bio-diesel was going to be used. That way, a building owner could make a decision. But to just add thousands of dollars to every diesel driven fire pump installation with no technical justification is a mistake.
KHEIR, H.: I support Mr. Isman, and Mr. Nasby comments, I feel it is better to move it as appendix material as guide line, not to be as part of the main code.
NASBY, J.: Since this standard is applied world-wide, I don’t feel that this requirement is justified. It may be well worthwhile as appendix material, or as an alternative to suitable fuel if such were specified.

Backup Proposal 20-181 to Comment 20-90

20-181 Log #248 Final Action: Accept in Principle (11.6.4.1, 12.4.1.4(7), and A.11.6.4.3)

Submitter: John Whitney, Clarke Fire Protection Products, Inc.
Recommendation: Revise text to read as follows:
11.6.4 Fuel Supply Maintenance.
11.6.4.3 Where environmental or fuel quality conditions result in degradation of the fuel while stored in the supply tank, from items such as water, micro-organisms and particulates, or destabilization, a listed active fuel maintenance system shall be installed to maintain fuel quality.

IL.6.4.3 Active fuel maintenance system shall be equipped with a visible indicator to indicate when the system is in need of maintenance.
IL.6.4.3.2 Active fuel maintenance system shall be equipped with contact closure for connection to the controller (ref. par. 12.4.1.4.7) to indicate when the system is in need of maintenance.
IL.6.4.3.3 When required the listed active fuel maintenance systems shall be permanently connected to the fuel tank as follows:
(1) All connections made directly to the tank ((this language is from current par. A.11.6.4.4))
(2) The supply from the tank to the maintenance system shall be connected to the bottom of the fuel storage tank.
(3) The return from the maintenance system to the fuel storage tank shall be installed as directed by the fuel maintenance system manufacturer.
(4) No connections are interconnected with the engine or its fuel supply and return piping in any way. ((This language is from current par. A.11.6.4.4))
(5) No valves or other devices shall be added to the engine or its fuel supply and fuel return in any way. ((This language is from current par. A.11.6.4.4))
A11.6.4 old par completely
A11.6.4.3 Commercial distillate fuel oils used in modern diesel engines are subject to various detrimental effects from storage. The origin of the crude oil, refinement processing techniques, time of year, and geographical consumption location all influence the determination of fuel blend formulas. Sulfur, naturally occurring gums, waxes, soluble metallic soaps, water, dirt, blends and temperature all contribute to the degradation of the fuel as it is handled and stored. These effects begin at the time of fuel refinement and continue until consumption. Proper fuel storage is critical for engine operation, efficiency, and longevity.
Commercial tanks should be kept water-free. Water contributes to tank corrosion and the development of microbiological growth where fuel and water interface. This and the metals of the system provide elements that can react with fuel to form certain gels or organic acids, resulting in clogging of filters and system corrosion.
Scheduled fuel maintenance helps to reduce fuel degradation. Fuel maintenance filtration can remove contaminants and water and maintain conditions to provide reliability and efficiency for standby fire pump engines. Fuel maintenance and testing should be performed on a regular basis to maintain required fuel quality. Consult your active fuel maintenance system supplier or fuel supplier for guidance regarding fuel additives and maintenance requirements for long term storage.
12.4.1.4 (7) low fuel level. Fuel supply trouble. Signal at two-thirds tank capacity, or when active fuel maintenance system needs maintenance.
Substantiation: The characteristics of diesel fuel are changing and proper storage are becoming extremely important to insure reliable operation of engines. Even when the proper fuel has been purchased and put into the fuel storage tank long term reliability can not be assured. For reasons as explained in the proposed annex text and governmental mandated addition of various blends of bio-fuel, diesel fuel is requiring additional attention to insure reliable use in diesel engines for stand-by service.
Committee Meeting Action: Accept in Principle
1. Remove the asterisk from 11.6.4 and delete Annex A.11.6.4.
2. Add a new 11.6.4.3 to read as follows:
11.6.4.3 Where environmental or fuel quality conditions result in degradation of the fuel while stored in the supply tank, from items such as water, micro-organisms and particulates, or destabilization, a listed active fuel maintenance system shall be installed to maintain fuel quality.
11.6.4.3.1 The active fuel maintenance system shall be equipped with a visible indicator to indicate when the system is in need of maintenance.
11.6.4.3.2 The active fuel maintenance system shall be equipped with a contact closure for connection to the controller see 12.4.1.4.7) to indicate when the system is in need of maintenance.
11.6.4.3.3 When required, the listed active fuel maintenance system shall be permanently connected to the fuel tank as follows:
(1) All connections shall be made directly to the tank.
(2) The supply from the tank to the maintenance system shall be connected to the bottom of the fuel storage tank.
(3) The return from the maintenance system to the fuel storage tank shall be installed as directed by the fuel maintenance system manufacturer.
(4) No connections shall be interconnected with the engine or its fuel supply and return piping in any way.
(5) No valves or other devices shall be added to the engine or its fuel supply and fuel return in any way.
A.11.6.4.3 Commercial distillate fuel oils used in modern diesel engines are subject to various detrimental effects from storage. The origin of the crude oil, refining process techniques, time of year, and geographical consumption location all influence the determination of fuel blend formulas. Sulfur, naturally occurring gums, waxes, soluble metallic soaps, water, dirt, blends, and temperature all contribute to the degradation of the fuel as it is handled and stored. These effects begin at the time of fuel refinement and continue until it is consumed. Proper fuel storage is critical for engine operation, efficiency, and longevity.
ASTM D975 allows for biofuel blends up to B5 (5 percent biofuel in diesel fuel). With biofuel being declared that biofuel is contained in the state and country governments have already mandated biofuel blends of B5 and B7 (5 and 7 percent biofuel). The trends of government requiring biofuel blends and the percent of biofuel in diesel is expected to increase.

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 103 of 2025
Storage tanks should be kept water-free. Water contributes to steel tank corrosion and the development of microbiological growth where fuel and water interface. This and the metals of the system provide elements that can react with fuel to form certain gels or organic acids, resulting in clogging of filters and system corrosion.

Scheduled fuel maintenance helps to reduce fuel degradation. Fuel maintenance filtration can remove contaminants and water and maintain conditions to provide reliability and efficiency for standby fire pump engines. Fuel maintenance and testing should begin the day of installation and first fill. In addition to an active fuel maintenance system, a fuel stabilizer or other additives may be necessary to ensure quality fuel for engine operation. Consult your active fuel maintenance system supplier or fuel supplier for guidance regarding fuel additives and maintenance requirements for long term storage.

3. Revise 12.4.1.4(7) to read: "Low fuel level. Fuel supply trouble. Signal at two-thirds tank capacity, or when active fuel maintenance system needs maintenance.

Committee Statement: The Technical Committee has accepted this proposal as submitted and has added to A.11.6.4.3 the paragraph discussing biofuels, as this is important information for the user of the standard.

Number Eligible to Vote: 30
Ballot Results: Affirmative: 30
We'll now move on the next motion. We'll now proceed with the discussion on Certified Amending Motion 20-3.

Microphone 5, please.

KENNETH ISMAN: Thank you. My name is Ken Isman. I'm with the National Fire Sprinkler Association and I move to return proposal 20-181 and its related comments 20-90 to the committee.

PRESIDING OFFICER OWEN: Is there a second?

Second.

Please proceed.

KENNETH ISMAN: Thank you. During the ROC stage of developing NFPA 20 the committee inserted a requirement for all new diesel fuel tanks to have listed fuel maintenance systems. No data was presented to the committee to justify this requirement. No lost history has been provided to show there's a problem.

More importantly, there is insufficient evidence that this is the only solution to the perceived problem of fuel quality going down.

A few days ago during a conference call, the manufacturers of these fuel maintenance system presented their opinions that the quality of diesel fuel is going down worldwide.

We're not in a position to debate that subject because nobody's presented us with any facts we can check or any analysis of this situation. I guess we just have to take their word for that.

But during the conference call they admitted that there are other ways that the problem can be solved besides their listed fuel maintenance systems. They admitted that their fuel maintenance systems are not the only way to deal with a poor diesel quality fuel situation.

Yet the NFPA 20 has -- I'm sorry -- NFPA 20 has been written to require the use of their fuel maintenance systems and we're not now allowed to consider other options.

All we were asking for here is the language of NFPA 20 be returned to the 2010 edition and that the
committee study this issue for the next edition with a
more thoughtful approach and perhaps even some science
and data starting with the public input stage of the
process rather than having one solution forced on us at
the ROC stage.

We ask you to vote in favor our motion.

PRESIDING OFFICER OWEN: Thank you.

Mr. Pennel, would you like to offer the
committee's position?

COMMITTEE CHAIR PENNEL: This was discussed
in pretty good detail. We had a field expert in that
kind of went over the situation of what is changing in
the world.

There is not a lot of the reported failures
at this point. There's been a few that I've heard
about, but certainly at this point that would not be the
basis for this kind a change.

What is changing is that the way fuels are
made. And the sulfur content is being lowered in diesel
fuel and bio fuel is being introduced. You're currently
allowed I believe five percent bio fuel without even
distinguishing that any bio fuel has been added to the
diesel fuel.

This is a big change in the industry. This
bio fuel works well when it's put in diesels and used
quickly, which is not the situation in stationery fire
pumps.

This is an issue that is coming. We either
address it now or we wait until we start seeing problems
and failures.

So the position that the committee took on
this was let's address it now and try to avoid what we
know is coming. Thank you.

PRESIDING OFFICER OWEN: Thank you,
Mr. Pennel.

We'll now open up debate on the motion.

Please provide your name, affiliation and whether you're
speaking in support or against the motion.

Microphone 5, please.

DAVE DESHONAY: My name is Dave Deshonay.
I'm speaking on behalf of the health care section support of the motion.

Yesterday at the health care section business meeting, the health care membership voted to support this motion. There has been no technical justification or no data to support the need for this additional requirement.

Health care as we all know is living in patrolled financial uncertainty. An additional unjustified cost to our industry is something we just cannot support.

The reality is there's nothing to support the need for this. The thought of doing it so that it doesn't become a problem is a wonderful thought; however, the reality there's no justification to do it now. Let's get the data to support the need, then we can look at it at that point. Thank you.

PRESIDING OFFICER OWEN: Thank you.


RICHARD WOOD: Yes, Richard Wood representing myself speaking against the motion.

I do want to point out to the assembly that in a session today on NFPA 110 the very same issue was occurring in that standard. So this is more of a broad based perspective than just dealing in fire pumps.

There is a fuel degradation issue that is of concern. It is being looked at and certainly bio diesel does add to degradation. Days to ignore it is irresponsible to make sure these systems are reliable.

So I'd ask you to not support this motion.

PRESIDING OFFICER OWEN: Thank you.

Microphone 8.

JOHN WHITNEY: John Whitney. Clark Firefighter protection. I speak against this motion.

I am the original submitter of the proposal to which the resulted in the final language coming out of the ROC. I represent Clark. Clark has no commercial interest in this proposal I submitted. Our interest is strictly in the product that we produce and that is listed diesels for driving an our fire pump. Our
interest is it ensure these diesels are reliable and is
have the proper quality fuel to provide the fire
protection.
NFPA 20 by default is a worldwide standard.
We see multinational companies taking the standard
around the world building buildings. We see countries
around the world adopting these standards.
Around the world bio diesel fuel is made in
a lot of different recipes. There's soy bean methol
ester here in North America. There's grape seed methol
ester throughout Europe. There is palm methol ester in
Asian. There's sugar cane bio in South America.
All of these bios are different. They are
different characteristics and yet our product is
expected to run on them.
The fact is these engines will run on all
these fuels. The problem is the storage of the fuels is
a big problem.
We need to accept the fact bio is here. We
do not have an opportunity to avoid it. To return 20
back to its 2010 language would be an extremely
diservice to our clients and our customers and our
people using the product because 2010 rev of 20 said do
not use bio, which I'm not recommending.
The fact of the matter is our customers
buying fueling does not have an opportunity.
PRESIDING OFFICER OWEN: One minute, please.
JOHN WHITNEY: They do not have an
opportunity to provide pure petroleum fuel any longer.
PRESIDING OFFICER OWEN: Thank you.
Microphone 5.
SKIP GREGORY: My name is Skip Gregory
speaking in favorite motion.
Yes, the diesel fuel is suspect in many
cases. In 2002 PA10 added a section for annual fuel
testing and in the next edition of NFPA 110.
The annex material suggests strongly that
the testing be done in accordance with AST 975, which is
a continuance of AST tests for fuel testing.
So when you have these problems and no one
is saying you're not going to have problems storage in
diesel fuel, another way to go about testing that or
being sure that your fuel has a complete quality is to
go to the appropriate ASTM standards and have that fuel
tested and cleaned if necessary.
That's another option and shouldn't just
latch on to one particular way to do something with
sometimes a very expensive method when there are many
other methods recognized. Thank you.
PRESIDING OFFICER OWEN: Thank you.

Microphone 8.
HOWARD CHESNOW: Yes. My name is Howard
Chesnow. I'm with Fuel Quality Services, Inc. I'm
speaking for myself. However, I am a voting member of
ASTM 975.
PRESIDING OFFICER OWEN: Excuse me, sir.
Are you speaking for or against the motion.
HOWARD CHESNOW: I'm speaking against the
motion.
PRESIDING OFFICER OWEN: Thank you.
HOWARD CHESNOW: Basically ASTM 975 is
written to deal with diesel fuel as well as other fuels.
And we've been dealing with this issue now for a bunch
of years.
But the changes recently in the last four,
five years have been greater than the changes 20 years
prior to this. And the industry itself continues to
morph.
The problem is it's not so much what we
know, it's what we don't know. And you have to
understand that diesel fuel is produced by the majors to
be consumed within 90 days. You guys do not deal with
that industry.
You're in a long term storage situation and
quite frankly all the testing that's been done has not
really dealt with all of the new fuels that are being
introduced.
And we're not talking about just the United
States. This is a worldwide situation. And there have
been issues that have arisen across the world.
So what we're dealing with right now is a preventative maintenance system that's designed to basically level the field somewhat to areas all over the place that don't have access to the so-called alternative methods.

And you have to understand that this removes a tremendous responsibility and the need for basically the mistakes of human error.

I know this has been a real long day so I'll just leave you guys with a couple quick thoughts. Preventative maintenance does not mean fixing it after it breaks. And denial not a river in Egypt.

PRESIDING OFFICER OWEN: Thank you.

Microphone 1.

UNIDENTIFIED SPEAKER: (Inaudible.) I'm speaking in favor of the motion. I work with Kinder Morgan, but I'm speaking for myself.

We have talked a lot about sludge in fuels which don't grow in fuels, they grow in water interface. Part of a responsible fuel management program is remove that water. Part of testing and maintaining your diesels is to run them. We have talked about bad maintenance and inspection in diesels which is often not running them.

So we're trying to fix the wrong problem. Run the diesels, burn the diesel, keep it fresh and keep it moving. Adding another do-dad on to the system is one more thing to complicate it.

Just two proposals ago we spoke about keeping things simple because it was the best thing. And now we're talking about adding complexity, recirculation systems, some other kind of detergent to clean up the fuel instead of saying stick to the standard, do what's already approved and been done for years and years, burn the diesel, test your motor and keep it fresh. Thank you.

PRESIDING OFFICER OWEN: Thank you.

Microphone 4, please.

CHARLES MARK: Charles Mark speaking for myself against the motion.
In looking at exactly what's written in the standard, this doesn't require the fuel maintenance system. It says where environmental fuel quality conditions result in degradation of the fuel. If you can manage your fuel by burning it, by testing it, by doing some other methods, this is not required. And those other methods are generally required anyway.

PRESIDING OFFICER OWEN: Thank you.

Microphone 8.

JOHN BLIGHTWIT: My name is John Blighwit. I'm from Scotland. I'd like to tell you my perspective.

PRESIDING OFFICER OWEN: Excuse me, sir. Can you say whether you're for or against the motion?

JOHN BLIGHTWIT: I'm against the motion.

PRESIDING OFFICER OWEN: Thank you, sir.

JOHN BLIGHTWIT: I'm going to talk slow because I've been told you might have slight difficulty understanding me. Maybe I should have had a translator.

Anyway, here it goes. NFPA 20 is seen as the world good practice in our industry globally. I'm going to emphasize globally. Fuel supply has become very complicated. There are many factors which have previously been mentioned which degrade fuel. So I'm not going to go through them again.

There's debate taking place in the UK which I've been fortunate to be a part of. I've attended the houses of parliament. I've also attended meetings across Europe.

Fuel degradation with bio fuel is a hot topic. We are concerned that even if you offered 100 percent petroleum based fuel, you will still get bio fuel through the system, i.e., the fuel supply system.

Seven percent up to ten percent is available in Europe. In Oklahoma at a filling station you can be 15 percent supplied at the pump. And in Arizona it can be 20 percent supplied at the pump.

PRESIDING OFFICER OWEN: One minute, sir.

JOHN BLIGHTWIT: That's five percent theory.

That's not a problem out there is wrong. NFPA 20, from
my facility in Europe, as seen as again I emphasize the
world, we supply more NFPA 20 product worldwide than we
have ever done.

As a result, NFPA 20 has to address this.
Preventative maintenance has to be the key here. Are we
going to wait to till there's a disaster and then
address it? Thanks very much.

PRESIDING OFFICER OWEN: Thank you.

Microphone 8.

HOWARD CHESNOW: Howard Chesnow with Fuel
Quality Services again voting against the motion.
Since he brought up 975, I just wanted to
read a quote out of 975 in the appendix.

Fuels from various sources can interact to
give stability properties worse than expected based on
characteristics of each individual fuel.

In 1951, I have a fuel bulletin by Detroit
Diesel that said exactly the same thing that's 60 some
odd years ago.

So just understand we're adding variability
to these fuels now based on the political and the
environmental considerations and the testing is
incomplete as to the exact, you know, ramifications of
the additions of these different fuels.

And it's not just bio fuel. We're talking
bio fuels, et cetera. And this is worldwide. The jury
is still out. All that's being suggested here is that
you level the playing field a little bit and take some
of the responsibility away from people that really don't
know and don't have access to some of these other
variable methods. Thank you.

PRESIDING OFFICER OWEN: Thank you.

Microphone 8.

JOHN WHITNEY: John Whitney from Clark
speaking against the motion.
I heard the comment here that why impose the
cost of this equipment on these owners. The fact of the
matter is it the options that is thrown around here as
being viable will cost that owner three to $500 every
time he has to come in and filter that tank.
And at that point when he leaves, that tank
starts to degrade and it will not be clean again until
the day he comes back and cleans it the next time. So
if we want the tank to be clean every day, we need a
system that is there working every day.
Knowing the changes that have happened to
date and the future changes that are coming and the
instability of the fuel that goes along with this, we
will be remiss if we do not do something to protect our
client. We are the experts. We're supposed to tell
them how to build a good system that that's reliable.

To ensure quality to every fire pump, every
day with a built-in system that prevents losses. We
would not build a system and put batteries in there that
does not have a charger to maintain it. Depending upon
an outside source to come once a week to charge those
batteries. Why would we depend on outside source to
come and make sure the fuel is maintained in a quality
manner?

I urge this group to vote along with the
actions and the work that was done by the technical
committee to vote against this motion and rely upon the
work out of the ROC. Thank you.

PRESIDING OFFICER OWEN: Thank you.
Microphone 5.
DAVE DESHUNAY: Dave Deshunay speaking on
behalf of myself. You've heard a lot of conversation --
PRESIDING OFFICER OWEN: Excuse me. For or
against?
DAVE DESHUNAY: In favor of the motion.
PRESIDING OFFICER OWEN: Thank you.
DAVE DESHUNAY: We have heard a lot of
conversations about things that could happen, things
that might happen, yet we have seen no technical data to
support any of these issues even exist.
The whole premise of NFPA process is based
on technical substantiation. Find out if there's a
problem, find the fix for it and fix it.
The reality is we're trying to fix something
that quite frankly we don't even know exists at this
point. The key here is there's no and was no technical data or anything supported the admit to justify this requirement. I urge you to vote in favor of the motion.

PRESIDING OFFICER OWEN: Microphone 2.

MARCELO HIRSCHLER: Marcelo Hirschler, GBH International. I call the question.

PRESIDING OFFICER OWEN: The question has been called. Is there a second? There is a second.

Debate will cease and we'll now vote on the motion to call the question.

Please record your vote, one in favor of the motion, accept or call the question, or two oppose to the motion reject.

Five seconds. Motion passes.

We'll immediately go to the main motion.

Before we vote, let me restate the motion. The motion on the floor is return a portion of a report in the form of proposal 20-181 and related Comment 20-90.

Again, record your vote, one in favor of the motion or two opposed to the motion reject.

Five seconds. Motion passes.
Item 12-8-4
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (59A-1)

Document: NFPA 59A, Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)

Motion: To Accept Comment 59A-5

TC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 17 \[33 \text{ (eligible to vote)} - 6 \text{ (ballots not returned)} - 2 \text{ (abstentions)} = 25 \times 0.66 = 16.5\]

33 Eligible to Vote
6 Not Returned (Brightwell, Felleisen, Humes, Passtuhov, Roue, Sawchuk)

18 Agree (Gaughan w/comment)
7 Do Not Agree (Eisentrout, Hoffmann, Mahnken, Miccicne, Poe, Raj, Ritz)
2 Abstain (Helm, Turpin)

TC Action: PASS
NFPA 59A
TC Ballot for Liquefied Natural Gas
June 2012 ASSOCIATION AMENDMENT 59A-1

Amendment: Accept Comment 59A-5

[ ] Agree

If you agree with this amendment, the recommendation will be to revise the definition of "Noncombustible Material" and add new Section 4.6 and associated annex material as follows:

3.3.19 Noncombustible (Material). See 4.6. [101, 3.3.160.3, 2012]

4.6* Noncombustible Material.
4.6.1* A material that complies with any of the following shall be considered a noncombustible material. [101, 4.6.14.1, 2012]

(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]

(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]

(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]

A.4.6 The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.14, 2012]


[ ] Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, the annex is deleted and the previous edition text reads as follows:

3.3.19 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

[ ] Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

[See Attachment]

Signature: Brian L. Eisenhour

Name - Please Print: Brian L. Eisenhour

Date: June 20, 2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@afpa.org or via fax to 617-984-7070.
Do Not Agree

Comment on June 2012 Association Amendment S9A-1

While the proposal text is consistent with revisions to NFPA 101 the wording is vague and confusing. The original intent is that materials pass the criteria in ASTM E 136 to be considered noncombustible. The new wording in 4.6.1(3) is “complying with the pass/fail criteria of ASTM E 136” whereas the original wording and the wording in proposed 5.6.2 (2) as “passing ASTM E 136”. I am not sure what complying with pass/fail criteria means. Wouldn’t the material need to pass the criteria to be considered noncombustible. The original wording of “passing ASTM E 136” could be improved to say “passing the noncombustible criteria of E136”. A 4.6 annex material could then say the test methods and procedures of either ASTM E 135 or ASTM E2652 could be used for determining the material performance.

Brian Elsentrouth
June 20, 2012
NFPA 59A TC member
Amendment: Accept Comment 59A-5

☐ Agree

If you agree with this amendment, the recommendation will be to revise the definition of "Noncombustible Material" and add new Section 4.6 and associated annex material as follows:

3.3.19 Noncombustible (Material). See 4.6. [101, 3.3.160.3, 2012]

4.6* Noncombustible Material.
4.6.1* A material that complies with any of the following shall be considered a noncombustible material. [101, 4.6.14.1, 2012]
1. A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]
2. A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]
3. A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]
4.4.6 The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.14, 2012]

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, the annex is deleted and the previous edition text reads as follows:

3.3.19 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":
Based on the attached comments, it is my opinion this subject requires additional review, therefore, I Do Not Agree with this amendment. Therefore, I recommend that a task force be formed to review the issues associated with this comment and corrective action be developed. This is not the first time this has been discussed, and requires a correct amendment at this time.

Signature: Richard A. Hoffmann
Name - Please Print: Richard A. Hoffmann
Date: July 8, 2012
NFPA 59A
TC Ballot for Liquefied Natural Gas
June 2012 ASSOCIATION AMENDMENT 59A-1

Amendment: Accept Comment 59A-5

☐ Agree

If you agree with this amendment, the recommendation will be to revise the definition of "Noncombustible Material" and add new Section 4.6 and associated annex material as follows:

3.3.19 Noncombustible (Material). See 4.6. [101, 3.3.160.3, 2012]

4.6 Noncombustible Material.
4.6.1* A material that complies with any of the following shall be considered a noncombustible material. [101, 4.6.14.1, 2012]
(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]
(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]
(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2552, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]
A.4.6 The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.14, 2012]

☒ Do Not Agree*. If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, the annex is deleted and the previous edition text reads as follows:

3.3.19 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

Existing definition is good.
Definitions should stay in the definitions section. This would not preclude adding 4.6 in the next edition.

Signature: Glenn Malhenk

Name - Please Print: Glenn Malhenk

Date: June 29, 2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to johed@inha.org or via fax to 617-994-7070.
Amendment: Accept Comment 59A-5

Agree

If you agree with this amendment, the recommendation will be to revise the definition of “Noncombustible Material” and add new Section 4.6 and associated annex material as follows:

3.3.19 Noncombustible (Material). See 4.6. [101, 3.3.160.3, 2012]

4.6* Noncombustible Material.
4.6.1* A material that complies with any of the following shall be considered a noncombustible material. [101, 4.6.14.1, 2012]
(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]
(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]
(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]
A.4.6 The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.14, 2012]

Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, the annex is deleted and the previous edition text reads as follows:

3.3.19 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The new definition adds no value due to the fact that 4.6.1(3) clarifies the expectation adequately to serve as a definition.

Signature: [Signature]

Name - Please Print: [Name]

Date: [Date]

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@npga.org or via fax to 617-984-7070.
NFPA 59A
TC Ballot for Liquefied Natural Gas
June 2012 ASSOCIATION AMENDMENT 59A-1

Amendment: Accept Comment 59A-5

☐ Agree

If you agree with this amendment, the recommendation will be to revise the definition of "Noncombustible Material" and add new Section 4.6 and associated annex material as follows:

3.3.19 Noncombustible (Material). See 4.6. [101, 3.3.160.3, 2012]

4.6* Noncombustible Material.
4.6.1* A material that complies with any of the following shall be considered a noncombustible material. [101, 4.6.14.1, 2012]
(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]
(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]
(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]
A.4.6 The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.14, 2012]

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, the annex is deleted and the previous edition text reads as follows:

3.3.19 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":
I have seen no additional information that would clear up the questions we had at the ROC meeting and the reason we kept this item on hold.

Signature: ____________________________

Name - Please Print: Gilford W. Poe

Date: 18 June 2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
If you agree with this amendment, the recommendation will be to revise the definition of "Noncombustible Material" and add new Section 4.6 and associated annex material as follows:

3.3.19 Noncombustible (Material). Sec 4.6. [101, 3.3.160.3, 2012]

4.6* Noncombustible Material.
4.6.1* A material that complies with any of the following shall be considered a noncombustible material. [101, 4.6.14.1, 2012]
(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]
(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]
(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]
A.4.6* The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.14, 2012]

Do Not Agree*. If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, the annex is deleted and the previous edition text reads as follows:

3.3.19 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

*Please give reasons for voting "Do Not Agree" or "Abstain":
I do not agree with the wording. This section is defining, by a performance standard, what a non-combustible material is. Therefore, I object to the wording "a material reported to have...", in items 2 and 3. A material either complies or not with the ASTM test cited. What is meant by "reported" and by whom? The onus to prove that a material used is non combustible is on the user who should rely on a certifying agency's assertion that the material has passed (and not reported to have passed) a test.

Signature: ____________________________

Name - Please Print: Phani K. Raj

Date: 18 June 2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
Amendment: Accept Comment 59A-S

☐ Agree
If you agree with this amendment, the recommendation will be to revise the definition of "Noncombustible Material" and add new Section 4.6 and associated annex material as follows:

3.3.19 Noncombustible (Material). See 4.6. [101, 3.3.160; 3, 2012]

4.6.1. A material that complies with any of the following shall be considered a noncombustible material: [101, 4.6.14.1, 2012]
(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]
(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C; shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]
(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2552, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone Shaped Airflow Stabilizer, at 750 Degrees C; shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]

A 4.6. The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.14.1(4), 2012]

☒ Do Not Agree
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, the annex is deleted and the previous edition text reads as follows:

3.3.19 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C; shall be considered noncombustible materials.

☐ Abstain

*Please give reasons for voting "Do Not Agree" or "Abstain".
I do not agree that the existing definition be deleted and the proposed text be added to the General Requirements chapter. This is clearly a definition and as such should remain as currently in the 2009 edition and remain in the definitions chapter in the 2012 edition. Moving the definition to the general requirements chapter may generate confusion and miss-application. The term noncombustible is used 6 times within the 2009 edition of NFPA 59A and only once is it applicable to a building for possible human occupancy. The Life Safety Code (NFPA, 101) which is being leveraged for this definition is primarily focused on protection of human life where as the in NFPA 59A the term noncombustible is focused on process and storage container protection. Finally, as written the proposed annex material (A 4.6) call out the provisions of 4.7 which does not currently exist and will not exist as a result of the proposed changes.

July 31, 2012
Kevin Ritz
Standards Council Supplemental Agenda August 7-9, 2012
Page 124 of 2025
Warren, Mary

From: charles.helm@dot.gov  
Sent: Friday, June 29, 2012 1:14 AM  
To: Shea, Kimberly  
Subject: RE: NFPA 59A Amendment Ballot Reminder

Kimberly –

I am travelling in rural Alaska. Should be in the Anchorage office tomorrow. Should be able to fax in. I abstain based on the fact that we haven’t worked with the test apparatus in question.

******************************************************************************

Charles A. Helm  
Department of Transportation  
Pipeline & Hazardous Materials Safety Administration  
Inspector Training and Qualifications  
6500 South MacArthur Blvd.  
PHP-70, MPB, Room 335  
Oklahoma City, OK 73169  
Charles.Helm@dot.gov  
405-431-9329 Cell  
405-954-7219 Office  
405-954-0206 Fax  
www.phmsa.dot.gov  
******************************************************************************

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From: Shea, Kimberly [mailto:kshea@NFPA.org]  
Sent: Monday, June 25, 2012 6:15 AM  
To: Shea, Kimberly  
Subject: NFPA 59A Amendment Ballot Reminder

Technical Committee on Liquefied Natural Gas:

Please note that amendments ballots are due no later than Thursday, June 28, 2012 and as of this time, your ballot has not been received.

Kimberly Shea  
Administrator, Technical Projects  
NFPA  
1 Batterymarch Park  
Quincy, MA 02169  
617-984-7953

Each Fourth of July, thousands of people are injured while using

July 31, 2012  
Standards Council Supplemental Agenda August 7-9, 2012  
Page 125 of 2025
NFPA 59A
TC Ballot for Liquefied Natural Gas
June 2012 ASSOCIATION AMENDMENT 59A-1

Amendment: Accept Comment 59A-5

☐ Agree

If you agree with this amendment, the recommendation will be to revise the definition of "Noncombustible Material" and add new Section 4.6 and associated annex material as follows:

3.3.19 Noncombustible (Material). See 4.6. [101, 3.3.160.3, 2012]

4.6* Noncombustible Material.
4.6.1* A material that complies with any of the following shall be considered a noncombustible material. [101, 4.6.14.1, 2012]
(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]
(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]
(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]

A.4.6 The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.14, 2012]

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, the annex is deleted and the previous edition text reads as follows:

3.3.19 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

☒ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":
As a recently appointed Committee member, I have not had time to review the test apparatus differences between the current ASTM E136 test apparatus and the proposed ASTM E2652 test apparatus, nor the potential ramifications of using these different apparatuses with the same pass/fail criteria of ASTM E136. As a result, I do not have sufficient knowledge to comment and must abstain.

Signature: ________________________________

Name - Please Print: Terry Turpin ________________________________

Date: June 27, 2012 ________________________________

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
If you agree with this amendment, the recommendation will be to revise the definition of “Noncombustible Material” and add new Section 4.6 and associated annex material as follows:

3.3.19 Noncombustible (Material). See 4.6. [101, 3.3.160.3, 2012]

4.6* Noncombustible Material.
4.6.1* A material that complies with any of the following shall be considered a noncombustible material. [101, 4.6.14.1, 2012]
(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]
(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]
(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]
A.4.6 The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials. [101, A.4.6.14, 2012]

Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, the annex is deleted and the previous edition text reads as follows:

3.3.19 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

*Please give reasons for voting “Do Not Agree” or “Abstain”:

7.9.7.3 Refers to a max. temperature of 538 °C which is below than ASTM E2652 test method (380 °C). This section may need to be considered for changes and consistency.

Signature: [Signature]

Name - Please Print: James Gaughan Leo Campos

Date: 06-28-12

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
Comment 59A-5 Accept [Note: The section at the start of the Recommendation is a typo, it should be 3.3.19]

59A-5 Log #59 Final Action: Hold
(3.3.19 Noncombustible Material and 4.6)

Submitter: Marcelo M. Hirschler, GBH International
Comment on Proposal No: 59A-26
Recommendation: Revise text to read as follows:

3.3.29 Noncombustible (Material). See 4.6. [101, 2012] A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials. [101, 2009] [101, 3.3.160.3, 2012]

4.6 Noncombustible Material.

4.6.1* Noncombustible Material.

4.6.1.1 A material that complies with any of the following shall be considered a noncombustible material: [101, 4.6.14.1, 2012]

(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. [101, 4.6.14.1(1), 2012]

(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(2), 2012]

(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652. Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material. [101, 4.6.14.1(3), 2012]

A.4.6 The provisions of 4.7 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials.


Substantiation: The definition in the ROP for NFPA 59A is being extracted from NFPA 220. In the new edition of NFPA 101 the committee made a change to do two things: (a) comply with the NFPA Manual of Style and ensure there are no requirements in the definition and that the definition is in a single sentence and (b) to include two ways of testing for non combustibility, namely by using ASTM E 136 or by using ASTM E 2652. The proposal recommends that the text still be extracted from NFPA 101 but that the additional text that NFPA 101 placed in section states that definitions need to be in single sentences. The second sentence in the present text is truly clarification and is best placed in the annex, although it could also be placed somewhere in the body of the standard, outside of the definitions Sections 4.6.14.1 and 4.6.14.2 also be extracted.

The action, at the ROP, from the NFPA 101 committee on fundamentals can be found in the NFPA ROP for proposals 101-54a and 101-64. The details of the NFPA 101 action at the ROP stage follow:

NFPA 101-54a Accept: 3.3.160.3 Noncombustible (Material). A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

A.4.6.14.3 See 4.6.14 for additional information on noncombustible material.

Substantiation: The action taken on Proposal 101-64 adds text on Noncombustible Material as a new 4.6.14 so as to permit the definition of Noncombustible Material to be simplified - removing requirements from the definition.

NFPA 101-64 Accept in Principle:
Add new text to read as follows:

4.6.14 Noncombustible Material.

4.6.14.1 A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered a noncombustible material.

4.6.14.2 A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material.

4.6.14.3 Where the term limited-combustible is used in this Code, it shall also include noncombustible.


Committee Statement: The Committee Meeting Action does what the submitter requested but rewords the title from “Combustibility” to “Noncombustible Material” as the added text speaks specifically to noncombustible materials.

At the ROC stage, NFPA 101 acted as follows (NFPA 101-31):
Replace the text of 4.6.14 as proposed by the action at the ROP Proposal 101-64 with the following:

4.6.14* Noncombustible Material.

4.6.14.1 A material that complies with any of the following shall be considered a noncombustible material:

(1) A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat.

(2) A material that is reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C.

(3) A material that is reported as complying with the pass/fail criteria of ASTM E 136 when tested in accordance with the test method and procedure in ASTM E 2652, Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750 Degrees C, shall be considered a noncombustible material.

4.6.14.2 Where the term limited-combustible is used in this Code, it shall also include noncombustible.

A.4.6.14 The provisions of 4.6.14 do not require inherently noncombustible materials to be tested in order to be classified as noncombustible materials.

A.4.6.14.1 (1) Examples of such materials include steel, concrete, masonry and glass.


The complete NFPA 101 action also includes information on a term, limited combustible, not used in NFPA 59A, and that portion is not proposed to be extracted from NFPA 101.

Committee Meeting Action: Hold
Committee Statement: The committee placed the comment on hold to allow time for further study of the NFPA 101 revision and to determine the applicability of ASTM 2652 to materials in NFPA 59A.

Element Eligible to Vote: 31
Ballot Results: Affirmative: 25 Abstain: 1
Ballot Not Returned: 5 Humes, C., Legatos, N., Micciche, P., Pastuhov, A., Roue, R.

Explanation of Abstention: STANNARD, JR., J.: I have been unable to attend the last meetings of the Committee and have not had an opportunity to review the material. Therefore, I must abstain.

Backup Proposal to Comment 75-34

59A-26 Log #CP3 Final Action: Accept
(3.3.19 Noncombustible Material)

Submitter: Technical Committee on Liquefied Natural Gas
Recommendation: Revise text to read as follows:

Adopt the preferred definition from the NFPA Glossary of Terms as follows:

3.3.19 Noncombustible Material. A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials.

[220, 2009]

Substantiation: This is the preferred definition from the Glossary of Terms. Changing the secondary definition to the preferred definition complies with the Glossary of Terms Project.

Committee Meeting Action: Accept
Number Eligible to Vote: 30
Ballot Results: Affirmative: 21 Abstain: 1

Explanation of Abstention: BARBER, D.: My reasons for this decision are based on the fact that I am an overseas member of the committee, and much of the voting relates to what is essentially US requirements. I do not therefore feel fully competent to comment on this occasion.
Now let's proceed with the discussion of the certified amending motions on NFPA 59-A.

Microphone 5, please.

MR. HIRSCHLER: Marcelo Hirschler, GBH International and I move acceptance of Comment 59A-5.

PRESIDING OFFICER McDANIEL: Thank you.

There is now a motion on the floor to accept Comment 59A-5. Is there a second? There is a second.

Please proceed with the discussion on the motion.

MARCELO HIRSCHLER: Thank you, Mr. Chair.

This is a very simple issue. As some of you may know, Standards Council appointed a few years ago an advisory committee on the glossary of terminology and I happen to be chosen as chair. I am not here representing that committee, I want to make it very clear, but I still serve on that committee and I want to recognize the great contribution from our staff. As a result of that, we now have a new glossary of terminology that has been published.

With that, I want to come to the exact material that we're dealing with here. What we're dealing with here is that the NFPA rules state that the definitions shall not contain requirements. The definition of noncombustible material contained in 59A contains a requirement. You will hear more than one of these motions today and tomorrow.

What has happened at the last year was that all the major NFPA documents, NFPA 101, 5001 and various others took this type of action. What the action is is taking out the wording of the -- with the requirement in the section definition and just put a note that says see a certain section in the body of the standard and then put all the requirements in the body of the standard.

All that happened last year as I say 101, 5001, 703 several documents. All this is doing is doing exactly that. So since this definition in 59A was extracted from 101, it will be basically by doing this it automatically falls in line with all the other
documents. Thank you.

PRESIDING OFFICER McDANIEL: Thank you.

Mr. Jablonski?

COMMITTEE CHAIR JABLONSKI: Thank you.

Brief statement. The definition for the noncombustible material and the related new requirements were presented to the NFPA 59 committee during the comment phase to seek to introduce new requirements, specifically a test method that was referenced in the motion.

That was not previously presented to or reviewed by the technical committee on LNG prior to that point. The concepts incorporated in Comment 59A-5 were not present at the technical committee ROP action.

Paragraph 4.4.6.2.2A of the NFPA regulations governing committee projects states that a technical committee shall hold for processing as a proposal for the next revision cycle a comment that would introduce a concept that has not had a public review by being included in a related proposal as published in the report on proposals.

Therefore, the committee acted in accordance with the NFPA regulations by holding this comment until such time the LNG technical committee and members of the public familiar with NFPA 59A would have a chance to fully review and comment on the inclusion of these new concepts.

PRESIDING OFFICER McDANIEL: Thank you, Mr. Jablonski.

We'll open the debate for any discussion on this.

Microphone 5.

MARCELO HIRSCHLER: Marcelo Hirschler, GBH International in support of the motion.

Just to clarify, if this document will remain with the reference as an extract, it will have a confusing extracting, it will be extract from an addition that is incomplete. This doesn't do anything new, doesn't add any information. It will just simply bring it in line with the NFPA 101 and 5001 and the
other codes.
    And this couldn't be brought before the
comment stage because that was when it had been approved
at all the other NFPA major codes and that's why it was
put in place.
    And again, if this stays the way it is, then
we would have something that contravenes the regulation
requirements that are in the definition. Thank you.
    PRESIDING OFFICER McDANIEL: Thank you.
    COMMITTEE CHAIR JABLONSKI: Really the only
other comment I have is we understood that there was the
new definition coming in, but at the point in time that
it was introduced it was already at the comment stage
and that's why the committee acted the way they did.
    PRESIDING OFFICER McDANIEL: Thank you, Mr.
Chair.
    Before we vote, let me restate the motion.
The motion on the floor is to accept Comment 59A-5.
Please record your vote, one in favor of the
motion accept or two opposed to the motion reject.
Balloting will close in five seconds.
Balloting is closed. Thank you. Result of the votes
are accept.
Are there any other discussion of the NFPA
59A? Motion passes.
NFPA CAM 61-1 Appeal
NITMAM Log #1031
NFPA 61: STANDARD FOR THE PREVENTION OF FIRES AND DUST EXPLOSIONS IN AGRICULTURAL AND FOOD PROCESSING FACILITIES

(1) Name, affiliation, and address of the appellant
   Dr. Erdem A. Ural
   659 Pearl Street
   Stoughton, MA 02072
   (781) 818-4114
   Erdem.ural@lpsti.com

(2) Statement identifying the particular action to which the appeal relates
   the floor action on CAM 61-1

(3) Argument setting forth the grounds for the appeal
   Please see below.

(4) Statement of the precise relief requested
   Accept Comment 61-4.

TOP SIX REASONS TO SUPPORT NFPA 61-1 NITMAM APPEAL

This appeal is seeking to implement the ROP text into the 2012 edition of NFPA 61. If the appeal is not successful, the 2008 text shown in the left column of the table below will be published. If the appeal is successful, the ROP text shown in the right column of the table below will be published.

<table>
<thead>
<tr>
<th>2008 Text</th>
<th>Proposed Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will be re-published in the next edition of NFPA 61 if this appeal is NOT successful</td>
<td>Will be published in the next edition of NFPA 61 if this appeal is successful</td>
</tr>
</tbody>
</table>

3.3.1* Agricultural Dust. Any finely divided solid agricultural material 420 microns or smaller in diameter (material passing a U.S. No. 40 Standard Sieve) that presents a fire or explosion hazard when dispersed and ignited in air.

3.3.1* Agricultural Dust. Any finely divided agricultural solid material that presents a flash fire or explosion hazard when dispersed and ignited in air or process specific oxidizer, regardless of particle size and shape.
The old school 2008 text is patently flawed, and can create unreasonably dangerous work places. If the 2008 version of the text is re-published in the next edition, the users of this standard will, much to their detriment, believe that agricultural dust, even with an addition of a single particle greater than 420 microns cannot pose a flash fire or explosion hazard. Since the science and available test data unquestionably contradict this claim, re-publication of the 2008 text will tarnish the reputation of the NFPA 61 committee, and may incur significant liability for National Fire Protection Association.

Here are some additional reasons that must be considered supporting the appeal before the Standards Council.

**Reason #1**

**Violates Science and Published Data**

There exist a number of research reports which demonstrate that particles larger than 420 microns present fire and explosion hazards, especially when the particles are flaky or fibrous as in agricultural dust. See, for example:


In this work, oat bran flakes that will not pass through 500-micron sieve produced a hefty Pmax of 7 barg, Kst of 60 bar-m/s, and MEC of 110 g/m3.

Yet, the 2008 definition falsely proclaims oat bran flakes will not present a flash fire or explosion hazard. Most other NFPA standards (e.g. 68, 69, 484, 499, 654) recognized this serious problem and fixed their definition.

**Reason #2**

**ROC Text is Open to Misinterpretation and Abuse**

An ignorant user or a mal-intentioned intentioned user can easily misuse the 2008 definition. No matter how fine his dust is, this user can add large pieces of agricultural dust or grain to it, and incorrectly claim this dust is rendered not explosible.

**Reason #3**

**One sieve size criterion cannot reasonably apply to all dusts**

Sieves work well with dusts that have a high particle density, that are nearly spherical and flowable (non-cohesive). On the other hand, most agricultural dusts, by nature, are made up of low-density non-spherical particles and are not flowable. Therefore, sieving is not a reliable particle size determination technique for all agricultural dusts.

Other NFPA technical Committee recognized the convenience and desirability of a single size criterion, and spent a quite a bit of time to come up with a criterion that will cover the non-spherical particles including fibers and flakes. During the committee deliberations, the least objectionable criterion was to apply the 420 micron (or 500 micron) threshold to the smallest
dimension of the smallest particle in the sample. At the end, the committee recognized this would not be a practical and cost effective approach. In response, ASTM Committee E27, Hazard Potential of Chemicals, developed a low cost (approximately $250) test method to screen dust samples for explosibility.

One size shoe does not fit everybody, unless the shoes are clown shoes. Even then, not everyone can walk with them.

**Reason #4**
**We Will All Sleep Better**

Knowing that we have
- protected the workers, employers, owners and operators from a known hazard, and
- protected NFPA from tort liability

we will all sleep better.

**Reason #5**
**Quick, Easy and Elegant Fix is Possible**

As discussed above, the 2008 definition is laden with serious problems. Fortunately, a quick, easy and elegant fix of all these problems can be achieved by simply adopting the proposed definition. The proposed definition also makes NFPA 61 consistent with more progressive dust standards such as NFPA 654, NFPA 484, NFPA 499, NFPA 68, and NFPA 69.

**Reason #6**
**The Bottom Line**

The bottom line is, before the OSHA grain standard was implemented, agricultural and food processing industry had a horrible safety record. The OSHA grain standard helped this industry’s safety record improve from horrible to bad. While the OSHA is rightly contemplating to revisit the old grain standard, it would be unconscionable for NFPA to deliberately expose grain and food workers to significantly greater risks than their counterparts in other industries.
Subject: FW: Input for CAM 61-1 Appeal

From: "Rodgers, Sam (Process Safety)" <samuel.rogers@honeywell.com>
Date: July 27, 2012 5:30:30 PM EDT
To: "Cronin, Amy" <acronin@nfpa.org>
Cc: "Fuller, Linda" <lfuller@NFPA.org>, "Maynard, Mary" <mmaynard@NFPA.org>, "erdem.ural@lpsti.com" <erdem.ural@lpsti.com>

Subject: Input for CAM 61-1 Appeal

To the Standards Council,

I am the current chair of the Technical Committee on Explosion Protection Systems and serve on 654, 484, and most recently 652 committees. I am writing in support of this appeal to incorporate the ROP definition 3.3.1 for Agricultural Dust into the next edition. Historically a particle size provided guidance for users to determine when testing might be needed. As such, a particle size was and is still an appropriate parameter. However, when a surrogate parameter becomes a hard line it becomes inappropriate, if not dangerous.

The distinguishing characteristic of a small particulate material we identify as a “combustible dust” is that it can propagate a deflagration when dispersed in a cloud with oxidant. The test methods globally accepted to determine whether a dust is “combustible” each evaluate the ability of a dust cloud to propagate a deflagration. Numerous published examples highlight that materials with particle sizes larger than the 2008 edition 420 micron size criterion can and sometimes do propagate a deflagration. These particulate materials are typically flattened, elongated, or fibrous. Flattened, elongated and fibrous materials are prevalent in the agricultural products, particularly the brans. In fact the proponent of this appeal has demonstrated with others that oat bran flakes that do not pass through a 420 micron sieve DO propagate a deflagration when dispersed in a cloud with air.

In the case of the oat bran, the particle size criterion of the 2008 edition DEEMS that this agricultural dust does not present the hazards associated with a “combustible dust” when, in fact, it does. The convenience of an easily determinable particle size versus a scientifically established and appropriate test does not justify placing persons in danger. The Technical Committees for 68/69, 654 and 484 have recognized that a particle size criterion is not universal and removed it from their definitions of “combustible dust”.

It was a difficult decision for the EXAA committee to remove the particle size criterion, as it had been in existence for some time. Ease of determination via screening versus explosibility testing was a significant part of the discussion. In the end, the committee determined that retaining the particle size criterion could provide a false sense of security that a combustible dust hazard did not exist when, in fact, it did. To counter the issue of cost to determine whether a dust is exploisible, members of the EXAA committee worked through ASTM to establish an inexpensive screening test for explosibility. With the ASTM E-1226 screening test now widely available, I urge the Standards Council to support this appeal and eliminate the dependence on a demonstrably inadequate surrogate particle size parameter.

I do appreciate the deference given to a committee decision, yet the preponderance of evidence supports the removal of a particle size other than as general guidance. I believe there is a difference between supporting a committee position when the committee must make decisions on preliminary evidence versus supporting a committee decision in the face of significant evidence to the contrary.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE:    July 10, 2012

AMENDMENT (61-6)

Document: NFPA 61, *Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities*

Motion: To Accept Comment 61-9

TC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS NOT** achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 19 [30 (eligible to vote) – 2 (ballots not returned) – 0 (abstentions) = 28 × 0.66 = 18.48]

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<tr>
<td>Not Returned</td>
<td>2</td>
</tr>
<tr>
<td>Agree</td>
<td>10</td>
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<td>Do Not Agree</td>
<td>18</td>
</tr>
<tr>
<td>Abstain</td>
<td>0</td>
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</table>

**TC Action: FAIL**
NFPA 61  
TC BALLOT for Agricultural Dusts  
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree  
If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements. 
See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree*  
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. 
Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*  
*Please give reasons for voting "Do Not Agree" or "Abstain":  

Process hazard Safety analysis is already covered in Section 105.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:
Joanne Goyette, Administrator, Technical Projects  
National Fire Protection Association  
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:  
Name - Please Print: Del Bluhm

Date: 07/02/12
Standards Council Supplemental Agenda August 7-9, 2012

Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements. See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☐ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I do not agree with the action taken by the membership. The TC overwhelmingly rejected adding a new Chapter 4 for the reasons stated in the ROC and no new technical rationale has been provided that would warrant changing that position.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: Edward M. Briesch

Name - Please Print: Edward M. Briesch

Date: 6/22/2012
Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements. See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:
The amendment makes the standard more complicated and does nothing to improve the level of fire protection at a facility.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: Matt Bujewski

Name - Please Print: Matt Bujewski

Date: June 25, 2012
Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

THIS IS NOT THE CHEMICAL INDUSTRY. PSM

REQUIREMENTS DO NOT BELONG IN LEAN.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Brian Exl

Date: 6-28-12
Standards Council Supplemental Agenda August 7-9, 2012

NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I believe the committee properly vetted this during the RO/ROC process.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: Keith Epperson

Name - Please Print: Keith Epperson

Date: June 27 2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment:

Accept Comment 61-9

☐  Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒  Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.

Since this material was not in the previous edition, the proposed new chapter is deleted.

☐  Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

I feel that this issue was discussed and debated over a number of meetings of the Committee and passed by a large majority of experts. That decision should not be reversed.

Please return as soon as possible, but no later than Thursday, Jun 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: John Heilman

Date: 6/20/2012
**Amendment:** Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements. See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I BELIEVE THAT IS SUPPLEMENTAL CONTENT IN THE PROPOSED DOCUMENT EQUALLY

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Coyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: MARK HEGG

Date: 6/26/2012
Amendment: Accept Comment 61-9

☐ Agree
If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.
See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree*
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*
*Please give reasons for voting "Do Not Agree" or "Abstain":
THE PROCESS SAFETY ANALYSIS IS ALREADY ADEQUATELY ADDRESSED.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX:  617-984-7110

Signature: Deane R. Holmes

Name - Please Print: Deane R. Holmes

Date: 6-18-12
Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.

Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

This issue was discussed in committee and I feel that the committee’s action was correct.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX: 617-984-7110

Signature:  

Name - Please Print: William F. Kearns

Date: June 26, 2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.

Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

I agree with the Committee’s original decision to cover this material in 1.5 and the Annex. The proposed text requires procedures and documentation for even the simplest and safest systems, without necessarily improving safety beyond the current standard.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: William E. Kinslow, Jr.

Date: 6/27/2012
Amendment: Accept Comment 61-9

☐ Agree  
If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.  
See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree*  
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.  
Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I do not agree with adding a chapter on performance base design. The chapter is too complex and detailed for the majority of users of the standard. The grain and food industry has been dealing with their products and related dust for centuries and the hazards are well understood. Our dust and products have been tested for combustibility properties for many years dating back to the early 1920’s. When new products are produced the combustibility of the dust portion have similar (for design and operations purposes) properties as the primary ingredients. There is very little to be gained with this requirement and it could cause standards users to ignore much of the information in the standard as too prescriptive and burdensome. The hazards of our industry are well understood. This will not promote greater compliance as it is overly prescriptive and unnecessary for the vast majority of the grain and food industry.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Guyette, Administrator, Technical Projects  
National Fire Protection Association  
1 Batterymarch Park, Quincy, MA 02169  
FAX: 617-984-7110

Signature: __________

Name - Please Print: James E. Maness
Date: 6/27/2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4. General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.

Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain

*Please give reasons for voting "Do Not Agree" or "Abstain":

DID NOT ACCEPT DURING ROC OR AT ASSOCIATION TECHNICAL MEETING

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:

Name - Please Print: JESS McCLUER

Date: 6/25/12
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

☑ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Process hazards analyses, management-of-change procedures, and these other requirements are completely unjustifiable and inappropriate for agricultural facilities. These requirements originated in the chemical industry, which has complex chemical processes and novel and varied chemicals, the behavior of which together can be dynamic and often difficult to predict. That is completely untrue of agricultural facilities. The behavior of agricultural dusts and their handling processes have long been known, have remained essentially unchanged for decades, and are not complex. Requiring process hazards analyses is therefore completely unjustifiable.

As to management of changes, in agricultural facilities, the frequency of subtle changes that can significantly increase fire and explosion hazards is rare, and certainly not great enough to require the multi-factor review process and documentation required of changes to less well understood or more complex processes. So long as the design of, or design change to, an agricultural facility is reviewed by a qualified person, i.e., a person knowledgeable about the cause, propagation and prevention of fires and explosions involving combustible dust, safety can be sufficiently assured. In sum, PHA’s and MOC’s are too elaborate to be justified.

All this is particularly in the many small facilities in the agricultural industry, in which, either by reason of the size of the facility or the small number of managers, all design elements and all changes come to the attention of a qualified person. So long as a qualified person approves the design or change, additional requirements, including documentation requirements, would not add appreciably to safety, and would add enough to the compliance burden for small facilities that it could not be said to be practical under the circumstances.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Lance L. Rick

Date: June 26, 2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

This was voted down by the committee at the ROP and ROC.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Jeff Rogers

Date: 6/21/2012
Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

X Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Section 1.5 already addresses process hazard safety analysis.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Josane Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 Fax: 617-984-7110

Signature: [Signature]
Name - Please Print: [Name]
Date: [Date]
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

I am voting no because I believe that this chapter belongs in the Fundamentals of Dust, and that to add this, at this time, needlessly clutters the standard with information we know will become part of that new standard when it is released. Adding to the chum caused by a new fundamentals standard in the form of an additional rework of NFPA 61 to then remove a chapter we added now seems wasteful and useless. In addition the information contained is well known and does not materially improve NFPA 61 based outcomes.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:

Name - Please Print: P. D. "NICK" Thielen COE (certified safety engineer, CHMM (certified hazardous material manager))

Date: Tuesday June 26, 2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.

Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

See committee statement from ROC.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: __________________________

Name - Please Print: Stephen Wees

Date: 6-25-12
NFP A 61
TC BALLOT for Agricultural Ducts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree
If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.
See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☒ Do Not Agree*
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.
Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:
Previously Voted Down Twice, No New Data Introduced.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:
Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]
Name - Please Print: [Name]
Date: [Date]
Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☐ Do Not Agree*: If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.

*Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Process hazard analysis is a valid mechanism used in determining loss potential. The 61 committee has recognized this fact with the inclusion of Annex item 1.5. Moving PHA to the body of the code instead of the Annex reinforces the committee’s action and eliminates having the user address another code to find the requirements.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: ____________________________

Name - Please Print: William E. Jenz
Date: June 28, 2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.
See the attached Proposal 61-30 that contains the proposed text of new Chapter 4.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.
Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

If this ballot passes, the proposal needs to be rewritten before being placed in the NFPA 61 document to correct the cross references.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: 

Name - Please Print: Jeffrey W Sutton

Date: 6/25/2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9.

\[\text{x} \]

Agree If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

JUSTIFICATION:
I am in favor of this amendment that creates a new chapter called general requirements, similar to other NFPA dust occupancy standards such as 484, 654 and 664. The new chapter gives the users vital information on process and facility design, process hazard analysis, management of change, incident investigation, pneumatic conveying system design, life safety objectives, structural integrity objectives, mission continuity objectives, and objectives for mitigation of fire spread and explosions.

Although certain members took an exception to the portion of the proposal that deals with the process hazard analysis (PHA), the Report on Proposals reads:

_The Committee rejected the submitter’s recommendation because they believe that Section 1.5 already addresses process hazard safety analysis. The Committee previously rejected the dust mass methodology in Proposal 61-19 (Log #54). The Committee formed a Task Group to develop Annex material on process hazard analysis which will be presented at the ROC stage of the revision process._

which gives the impression that the committee is actually in favor of the PHA. When rejecting this proposal, the committee must have been confused, because, Section 1.5 has nothing to do with process hazard safety analysis. Furthermore, the Task Group mentioned in the ROP did not present any Annex material on process hazard analysis as promised.

The amendment is the culmination of close to 20 years of accumulated analysis and work in the combustible dust community to develop a set of enforceable criteria that lead the operator, the owner of the facility to manage the hazard in accordance to the commonly accepted practices largely derived from much of the OSHA PSM standard. This language has a proven track record of working. It works in numerous other industries. While certain committee members argue that agricultural products are somehow very different than other combustible dusts, this is simply not true. Agricultural products are essentially starches. That’s a one/four polymer of glucose. Wood is primarily cellulose, which is a one/five polymer of glucose. Many of the plastics are hydrocarbons. CH20 is their analogous formula. Their combustion characteristics are enormously similar when you get down to the same particle size.

According to NFPA rules and regulations, those voting against the amendment are required to provide valid reasons why. Few members stated PHA/PSM is too complicated for the smaller operations. This is not a valid reason because the amendment has nothing to do with PSM,
instead, it is teaching the users how to do a much simplified process hazard analysis as explained in the annex material. (See section A.4.2.1 of proposal 61-20.

The majority of the members voting against the amendment invoked a justification that they already voted against it at the ROP and ROC ballots. This again is not a valid justification because it obviates the function of the Association Technical Meeting.

Finally, a confused group of naysayers argued that the issue of PHA was adequately addressed in new section A1.5, which merely reads:

\textit{A.1.5 This standard permits the use of performance-based design options. Guidelines on performance-based design options for combustible dust hazards can be found in NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.}

The bottom line is, before the OSHA grain standard was implemented, this industry had a horrible safety record. The OSHA grain standard helped this industry's safety record improve from horrible to bad. While the OSHA is rightly contemplating to revisit the grain standard, it would be unconscionable for NFPA to deliberately expose grain and food workers to significantly greater risks than their counterparts in other industries.

---

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110

Signature: 

Name - Please Print: Dr. Erdem A. Ural

Date: 7/8/12

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 159 of 2025
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-6

Amendment: Accept Comment 61-9

☑ Agree

If you agree with this amendment, the result will be to add a new Chapter 4, General Requirements.

See the attached Proposal 61-20 that contains the proposed text of new Chapter 4.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.

Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

It seems logical to me that the users of NFPA 61 are given a clear definition & direction relative to designing, managing and maintaining a process and/or facility. A reference to another NFPA document or adding a new chapter in NFPA 61 would meet the users needs but adding the chapter certainly makes it readily available for them to reference.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:

Name - Please Print: Clyde Waller

Date: 6/28/2012
Comment 61-9 Accept

61-9 Log #15 CMD-AGR Final Action: Reject
(Chapter 4)


Comment on Proposal No: 61-20

Recommendation: Add new text to read as follows:
Insert New Chapter as originally proposed.

Substantiation: While the Equivalency paragraph (1.5) is certainly a valuable improvement that would allow the user to use Performance Based Design, adding a new chapter addresses the issue much better by providing guidance to the user on how to use Performance Based Design and putting the information at the user’s fingertips instead of going to another document.

Committee Meeting Action: Reject

Committee Statement: The committee reaffirmed the action taken in the Report on Proposals. The Committee rejected the submitter’s recommendation because they believe that Section 1.5 already addresses process hazard safety analysis. The committee added annex material indicating such to section 1.5 in Proposal 61-22.

Number Eligible to Vote: 28

Ballot Results: Affirmative: 23 Negative: 3 Abstain: 1

Ballot Not Returned: 1

Explanation of Negative:
OSBORN, J.: The 61 document is the only one of the group that does not have this chapter included. This is a critical requirement that should be accomplished by those facilities determining the extent of the hazard. This assists, along with Chapter 5, in providing that information. Do agree that something should be done to minimize the level of “PHA” required to a more acceptable degree as a true PHA is not necessarily required for each facility and/or process.

SUTTON, J.: Although the Equivalency paragraph (1.5) may permit the user to use Performance Based Design, the addition of this comment would provide guidance in using Performance Based Design as well as providing provisions addressing Management of Change and Incident Investigation, which are needed.

URAL, E.: I still like the idea of having a separate chapter on performance based design.

Explanation of Abstention:
GUARICCI, D.: See my Explanation of Abstention on Comment 61-1 (Log #12).

Backup Proposal 61-20

61-20 Log #52 Final Action: Reject
(Chapter 4)


Recommendation: Insert New Chapter 4:
Chapter 4 General Requirements

4.1 Process and Facility Design.
4.1.1 The design of processes and facilities that handle combustible particulate solids shall consider the physical and chemical properties that establish the hazardous characteristics of the materials.
4.1.2* The design and its basis shall be documented and maintained for the life of the process.

4.2 Process Hazard Analysis.
4.2.1* The design of the fire and explosion safety provisions shall be based on a process hazard analysis of the facility, the process, and the associated fire or explosion hazards.
4.2.2 The results of the process hazard analysis shall be documented and maintained for the life of the process.
4.2.3* If the process, equipment, or the operation does not permit elimination of dust deposits at a time, then the process hazard analysis shall specify and document maximum allowable layer thickness (for area density), maximum allowable deposit surface area, and minimum PPE requirements.
4.2.4 The process hazard analysis shall be reviewed and updated at least every 5 years.

4.3 Management of Change.
Written procedures to manage change to process materials, technology, equipment, procedures, and facilities shall be established and implemented.

4.3.1 The requirements of 4.3.1.1 through 4.3.1.5 shall be applied retroactively.

4.3.1.1 The management-of-change procedures shall ensure that the following issues are addressed prior to any change:
(1) The technical basis for the change.
(2) The safety and health implications
(3) Whether the change is permanent or temporary
(4) Modifications to operating and maintenance procedures
(5) Employee training requirements
(6) Authorization requirements for the proposed change.

4.3.1.2 Implementation of the management-of-change procedures shall not be required for replacements-in-kind.

4.3.1.3 Design documentation, as required by 4.1.2, shall be updated to incorporate the change.

4.4 Incident Investigation.
4.4.1* Every incident that results in a fire or explosion of a magnitude that causes property damage, production shutdown time, or injury shall be investigated and recorded.

4.4.2* Once the scene has been released by the authority having jurisdiction, incident investigations shall be promptly initiated by management personnel or their designee who has a good working knowledge of the facility and processes.

4.4.3* A written report of the investigation shall be prepared, describing the incident, the learnings from the investigation, and recommendations to prevent recurrence of that or similar incidents.

4.4.4* A summary of the incident investigation report shall be shared with those personnel operating, maintaining, and supervising the facility.

4.5 Pneumatic Conveying System Design.
Systems that handle combustible particulate solids shall be designed by and installed under the supervision of qualified engineers who are knowledgeable about these systems and their associated hazards.

4.6 Objectives.
4.6.1 Life Safety.

4.6.1.1 The facility, combustible particulate processes, and human element programs shall be designed, constructed, equipped, and maintained to protect occupants not in the immediate proximity of the ignition from the effects of fire, deflagration, and explosion for the time needed to evacuate, relocate, or take refuge.

4.6.1.2 The structure shall be located, designed, constructed, and maintained to minimize the propagation of fire or explosion to adjacent properties and to avoid injury to the public.

4.6.2 Structural Integrity. The facility shall be designed, constructed, and equipped to maintain its structural integrity in spite of the effects of fire or explosion for the time necessary to evacuate, relocate, or defend in place occupants not in the immediate proximity of the ignition.

4.6.3* Mission Continuity. The facility, processes, and equipment, and human element program shall be designed, constructed, equipped, and maintained to limit damage to levels that ensure the ongoing mission, production, or operating capability of the facility to a degree acceptable to the owner/operator.

4.6.4 Mitigation of Fire Spread and Explosions. The facility and processes shall be designed to prevent fires and explosions that can cause failure of adjacent compartments, emergency life safety systems, adjacent properties, adjacent storage, or the facility’s structural elements.

4.6.4.1* The structure shall be designed, constructed, and maintained to prevent fire or explosions from causing failure of load-bearing structural members, propagating into adjacent interior compartments, and incapacitating fire protective and emergency life safety systems in adjacent compartments.

4.6.4.2 The structure shall be located, designed, constructed, equipped, and maintained to prevent the propagation of fire or explosion to or from adjacent storage or structures.

4.7* Compliance Options.
The goal in Section 1.3 and the objectives in Section 4.56 shall be achieved by either of the following means:
(1) The prescriptive provisions in accordance with Chapters 6 through 12 of this standard.
(2) The performance-based provisions in accordance with Chapters 5, 8, 9, 11, and 12 of this standard.

4.7.1* The design basis generally includes, but is not limited to, the general scope of work, design criteria, process description, material flow diagrams, basis for deflagration protection, basis for fire and explosion protection systems, and the physical and chemical properties of the process materials. The design generally includes, but is not limited to, equipment layouts, detailed mechanical drawings, specifications, supporting engineering calculations, and process and instrumentation diagrams.

4.7.2* One method by which this requirement can be satisfied is with a process hazard analysis conducted in accordance with the methods outlined by the AIChE Center for Chemical Process Safety in Guidelines for Hazard Evaluation Procedures. To determine if a dust deflagration explosion hazard exists, consider the following:
1. Is the dust explosible? Determine using either ASTM E 1226 or equivalent.
2. Determine where in the process a dust cloud sufficient to support a deflagration could occur. Use loss records and knowledge of process conditions to make this assessment.
3. Identify likely ignition sources. Recognize that ignition sources are complex and not always predictable. It is best to assume ignition is possible in all cases.
4. Assess the likelihood of an event. For example, a material with a low MIE has a greater likelihood of ignition, all else being equal. Determine MIE, if appropriate, using ASTM E 2019.
5. In terms of a worst case scenario, consider what are the predictable consequences? Start with predictable primary events and then secondary events.
6. If the consequences are intolerable to either the owner/operator or the AHJ, ask:
   a. Can the risk be eliminated?
   b. Can controls be applied to minimize the likelihood?
   c. Can the risk be tolerated utilizing mitigation techniques to reduce or control the consequences?
A.4.2.3 See Chapter 6 for some methods to evaluate the dust layer thickness.
A.4.4.1 The size and extent of the incident that triggers this requirement should be proportional to the consequence hazard. For example, a spark in a protected duct with a spark detection system would likely not require an investigation unless a significant increase in sparks per unit time was noted or the spark fails to be extinguished. This incident is considered “recorded” with the spark detection system. For every hazard area, there is a de minimis level below which recording cannot be justified. It is up to the owner/operator to determine that level.
A.4.4.2 Incident reports should include the following information:
   (1) Date of the incident
   (2) Location of the incident and equipment/process involved
   (3) Description of the incident, contributing factors, and the suspected cause
   (4) Operation of automatic/manual fire protection systems and emergency response
   (5) Recommendations and corrective actions taken or to be taken to prevent a recurrence
The incident report should be reviewed with appropriate management personnel and retained on file for future reference. The recommendations should be addressed and resolved.
A.4.4.3 Incident reports are useful in support of the periodic process hazard analysis required by 4.2.4. Owner/operator should consider retaining the incident investigation reports for at least 5 years to be consistent with the PHA review schedule.
A.4.4.4 The owner/operator should consider sharing relevant learnings with other facilities within the company.
A.4.5 The design of the pneumatic conveying system should be coordinated with the architectural and structural design. The plans and specifications should include a list of all equipment, specifying the manufacturer and type, number, and the information as shown in A.4.5(1). The plans should be drawn to an indicated scale and show all essential details as to location, construction, ventilation ductwork, volume of outside air at standard temperature and pressure that is introduced for safety ventilation, and control wiring diagrams.
   (1) Name of owner and occupant
   (2) Location, including street address
   (3) Point of compass
   (4) Ceiling construction
   (5) Full height cross section
   (6) Location of fire walls
   (7) Location of partitions
   (8) Materials of construction
A.4.6.3 Other stakeholders could also have mission continuity goals that will necessitate more stringent objectives as well as more specific and demanding performance criteria. The protection of property beyond maintaining structural integrity long enough to escape is actually a mission continuity objective. The mission continuity objective encompasses the survival of both real property, such as the building, and the production equipment and inventory beyond the extinguishment of the fire. Traditionally, property protection objectives have addressed the impact of the fire on structural elements of a building as well as equipment and contents inside a building. Mission continuity is concerned with the ability of a structure to perform its intended functions and with how that affects the structure’s tenants. It often addresses post-fire smoke contamination, cleanup, replacement of damaged equipment or raw materials, and so forth.
A.4.6.4 Adjoining compartments are those sharing a common enclosure surface (wall, ceiling, floor) with the compartment of fire or explosion origin. The intent is to prevent the collapse of the structure during the fire or explosion.
A.4.7 Usually a facility or process system is designed using the prescriptive criteria until a prescribed solution is found to be uneconomical or impractical. Then the designer can use the performance-based option to develop a design, addressing the full range of fire and explosion scenarios and the impact on other prescribed design features. Consequently, facilities are usually designed not by using performance-based design methods for all facets of the facility but rather by using a mixture of both design approaches as needed.
Substantiation: Current version lacks key steps needed for fire and explosion safety, including process hazard analysis and management of change.
Committee Meeting Action: Reject
Committee Statement: The Committee rejected the submitter’s recommendation because they believe that Section 1.5 already addresses process hazard safety analysis. The Committee previously rejected the dust mass methodology in Proposal 61-19 (Log #54).
The Committee formed a Task Group to develop Annex material on process hazard analysis which will be presented at the ROC stage of the revision process.
Number Eligible to Vote: 28
Ballot Results: Affirmative: 26 Negative: 1
Ballot Not Returned: 1 Schoeff, R.
Explanation of Negative: SUTTON, J.: While I agree that the Equivalency paragraph (1.5) should permit the user to use Performance Based Design, adding a new chapter invests the issue much better by providing guidance to the user on how to use Performance Based Design and puts the information at the user’s finger tips instead of going to another document.

Related Proposal 61-22 to Comment 61-9

61-22 Log #44 Final Action: Accept in Principle (Chapter 5)

Submitter: Jack E. Osborn, Airdusco, Inc.
Recommendation: Total “new” Chapter 5. The existing Chapter 5 would be renamed Chapter 6, etc. Intent is to incorporate all of Chapter 5 from NFPA 654 (2006). The existing Chapter 5 and subsequent chapters after would require renumbering.
Substantiation: (1) There is no provision for a Performance Based Design Option in the current NFPA 61 document. Such an option is a most important option to provide for the users of the NFPA 61 document. If offers a valid alternative that may be the only viable option for some situations.
Substantiation: The added items are included as major portions of NFPA 654 and NFPA 664 (although stated somewhat differently). Not having this important option in NFPA 61 is a major deficiency that must be corrected.
A common complaint by users of the current NFPA 61 document is the lack of information and explanations of the referenced devices in the text of the document. The user is required to go to other publications to obtain information that should be contained in the NFPA 61 document.
Committee Meeting Action: Accept in Principle
Add an asterisk and Annex text for Section 1.5.* Equivalency to read:
A.1.5 This standard permits the use of performance-based design options. Guidelines on performance-based design options for combustible dust hazards can be found in NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.
Committee Statement: The Committee agreed with the submitter’s substantiation and added Annex material for Section 1.5 that clarifies that performance-based design options are achieved through the use of the equivalency clause and to make it clear that NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.
Committee Meeting Action: Accept in Principle
Add an asterisk and Annex text for Section 1.5.* Equivalency to read:
A.1.5 This standard permits the use of performance-based design options. Guidelines on performance-based design options for combustible dust hazards can be found in NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.
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Committee Meeting Action: Accept in Principle
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Committee Statement: The Committee agreed with the submitter’s substantiation and added Annex material for Section 1.5 that clarifies that performance-based design options are achieved through the use of the equivalency clause and to make it clear that NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.
Committee Meeting Action: Accept in Principle
Add an asterisk and Annex text for Section 1.5.* Equivalency to read:
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Committee Statement: The Committee agreed with the submitter’s substantiation and added Annex material for Section 1.5 that clarifies that performance-based design options are achieved through the use of the equivalency clause and to make it clear that NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.
Committee Meeting Action: Accept in Principle
Add an asterisk and Annex text for Section 1.5.* Equivalency to read:
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Committee Statement: The Committee agreed with the submitter’s substantiation and added Annex material for Section 1.5 that clarifies that performance-based design options are achieved through the use of the equivalency clause and to make it clear that NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.

Comment on Affirmative:
YOUNT, J.: Agree with Committee Meeting Action and/or Committee Statement.

Comment on Affirmative:
YOUNT, J.: Agree with Committee Meeting Action and/or Committee Statement.
PRESIDING OFFICER McDANIEL: The motion on the floor is to accept Comment 61-9. Is there a second?
We have a second.
Please proceed.
ERDEM URAL: This motion is trying to bring to NFPA 61 what most other dust standards have.
Mainly --
PRESIDING OFFICER McDANIEL: Please identify yourself.
ERDEM URAL: I'm sorry. It's Erdem Ural speaking for the motion.
It creates a new chapter called general requirements. So that chapter is in 654. It's in 664 and other standards as well.
So the general requirements you can see if you look at the ROP 61-20 the new chapter is reproduced there. It has guidance for requirements for process and facility design requirements for processing hazard analysis, requirements for management of change, requirements for incident investigation, requirements for pneumatic conveying system design, requirements for objectives for life safety, structural integrity and mission continuity. And lastly, it has section for compliance options.
So I did not write this. I just copied it from the other standard. So by adopting in here, they are accepting this motion here will give the users the tool to have that information available to them in front of them.
The committee actually agreed with this in principal. They put some of it in sort of -- one minute left -- roundabout way saying that.
PRESIDING OFFICER McDANIEL: One minute.
ERDEM URAL: Saying that you can go look at the NFPA 654, that's the annex material. So I'll stop here. I urge you to support this motion and thank you for your attention.
PRESIDING OFFICER McDANIEL: Thank you.
Mr. Bujewski, would you like to present the committee's position on this?
COMMITTEE CHAIR BUJEWSKI: During the ROP stages it was all new material for the agricultural dust committee. The proposal was rejected 26 to 1 by the committee.

But a task force was formed at that time to write material to possibly put in the annex of the ROC stage. The annex material was added to equivalency clause to state it would be acceptable to do process hazard analysis type of analysis under the equivalency clause.

Then in the ROC stage the committee reaffirmed its position by a vote of 23 to 3 and the consensus was this process is better served in the new fundamental of dust committee rather than adding something to the agricultural dust committee standard at this time.

PRESIDING OFFICER McDANIEL: Thank you, Mr. Bujewski.

With that, we'll open the debate on the motion. Please provide your name, affiliation and whether you're speaking in support of or against the motion.

Microphone 1, please.

JOHN CHOLIN: Mr. Chair, my name is John Cholin from JM Cholin Consultants and I'm speaking in favor of the motion.

The information and proposal that Dr. Ural has provided to this committee is the product of close to 20 years of accumulated analysis and work in the combustible dust community to develop a set of enforceable criteria that lead the operator, the owner of the facility to manage the hazard in accordance to the commonly accepted practices largely derived from much of the OSHA PSM standard.

This language has a proven track record of working. It works in numerous other industries. And while you have heard that agricultural products are somehow very, very unique, quite frankly, if you believe that, I've got a bridge across the east river I can sell you shares in.
Ag products are essentially starches. That's a one/four polymer of glucose. Wood is primarily cellulosic. That's a one/five polymer of glucose. Many of your plastics are hydrocarbons. CH20 is their analogous formula. Their combustion characteristics are enormously similar when you get down to the same particle size.

So I urge the membership to embrace the proposal made by Dr. Ural.

PRESIDING OFFICER McDANIEL: Thank you.

MARK FLEISHAKER: My name is Mark Fleishaker behalf of Renewable Fuels Association and Natural Grain & Feed association. This is another --

PRESIDING OFFICER McDANIEL: Speaking for or against?

MARK FLEISHAKER: Speaking against the motion.

PRESIDING OFFICER McDANIEL: Thank you.

MARK FLEISHAKER: I'm speaking against the motion. This is simply an attempt to cram down 654 onto NFPA 61 while avoiding the consensus nature of the process.

As the chairman of the committee has already reported, the committee is looking carefully at it and there is a separate committee that's been created to evaluate this. The whole purpose of consensus, of a consensus policy making organization or a consensus standard organization is to have an agreement, a broad agreement among the participants.

Cramming something like this down the throats of a committee that voted against it 26 to 1, I believe, and 23 to 3 the second time is going to create a negative ability to drive consensus throughout the whole organization and I would encourage the group to reject it at this point.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 2.

MARCELO HIRSCHLER: Marcelo Hirschler, GHB International, in support of the motion.
I want to read one more time like I read before the text of the two standards. 654 standard provision applies after manufacturing, processing and handling of combustible particulate solid. 61 standard prevention of fires and dust explosion and agricultural food processing facilities. The only difference is that 61 represents a subcategory of what is covered in 654. Agricultural dusts are combustible dusts are dust made with mostly cellulosic materials, organic materials and very similar.

Mr. Cholin explained to you some of the chemical terms. They are very similar. They are just one subcategory of what -- of what the type of dust that are covered by 654. They should have similar requirements.

This committee is trying to prevent something that is a life safety issue. Please support the proposal. Thank you.

PRESIDING OFFICER McDaniel: Thank you.

Microphone 8, please.

NICK THIELEN: Thank you. Nick Thielen, General Mills. I'm against the motion. I'm also an NFPA 61 committee member.

Adding complexity to a problem does not make it safer. A simple grain standard that's set by OSHA clearly made many of our grain facilities much safer, a simple straightforward and clearly defined requirement.

What this does is makes an extremely complex process be required and an ongoing process be required based on an NFPA document.

OSHA would dictate a number of these requirements, such as incident investigation. Adding this to the NFPA documents does nothing for improving safety at all.

PHA a very complicated process. I've run a number of them. It has a great deal of value when you have a complex system that you're trying to find what the risks are.
But when you look at a grain facility or a food facility, you've got very clear known issues. You don't need to run through a meeting with five or six people to talk about the fact that you're conveying grain from one point to another. It doesn't need to be discussed. It doesn't add anything to make this safer. And I ask everybody to reject this. It's just adding complexity. And in fact, because people will avoid using this, it will mean that some people will actually leave their facilities less safe, not more safe. Thank you.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 9, please.

UNIDENTIFIED SPEAKER: My name is (inaudible). I represent Northwest Insurance Company.

I'd like to make a statement.

PRESIDING OFFICER McDANIEL: For or against?

UNIDENTIFIED SPEAKER: For the motion.

PRESIDING OFFICER McDANIEL: Thank you.

UNIDENTIFIED SPEAKER: I'd like to make a brief observation. The consensus does not stop at the committee level. And this is the action members in this room is part consensus method. Thank you.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 5, please.

BILL STEVENSON: My name is Bill Stevenson. My company is CV Technology. I'm speaking in favor of the motion.

I made a statement early in this afternoon session. I'd like to repeat that statement. That is this. This industry, food and grain, food processing and agricultural products industry, in aggregate has the worst safety record with regard to dust explosion in American industry. You don't have to take my word for that. I invite you to visit the CSB website CSB.gov and see for yourself. The data is there. I'm stating a fact.

So when I hear that the vote was 26 to 1 or whatever it was, it just means that the committee in general has convinced themselves that everything is
Okay.

Everything is not okay, folks. There are problems in this industry. This standard is part of the problem. You need to make this standard stronger. This is too weak. It is too vague. And this particular discussion right now is a case study in that problem.

The equivalency clause is going to be substituted for a requirement for things like management of change and PHA and so forth. How is anybody going to make that bridge? I couldn't make that bridge and I'm in this business. It's too vague. You need to be more specific.

Think about the people that need to use this information to provide safety for their facilities and for their people. Put yourself in their shoes. What are they supposed to do? They don't know. They are looking to you for help. They are looking for NFPA for help. How is OSHA supposed to enforce this document? It's too vague. You need to fix it. Thank you very much.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 8.

JESS McCLUER: My name is Jess McCluer, National Grain & Feed Association. I also serve on the NFPA 61 committee.

I'm obviously opposed to this motion. One of the reasons is for the PHA, the process hazard analysis, I don't think everyone takes into account the fact that a majority of the companies, majority of the members of our association and the majority of those companies within the grain handling, the grain feeding processing industry are small businesses, all right? These are small businesses. Many have fewer ten employees and they do not have the resources. They do not have the staff. They do not have the technical capability to be able to implement much of what has been put in here.

I think it's been -- what has been discussed this came directly from 654 here into 61 and I think that it explains why the committee whom the trade groups
that have the representatives on the committee were
opposed to it.
I think that's something that needs to be
taken into account on the size of the industry and the
capabilities they would have to implement this. Thank
you.

PRESIDING OFFICER Mc DANIEL: Thank you.
Microphone 1.
MR. CHOLIN: Mr. Chair, my name is John
Cholan from JM Cholin Consultants. I'm speaking in
favor of the motion.
It's been alleged that this addition would
somehow make facilities less safe. How is a
requirement, an enforceable requirement that the person
responsible for the facility, tour the facility,
evaluate whether or not there's a hazard and document
the results, how does that make the facility less safe?
How does a requirement that you manage
change, not just let it happen, how does that make the
facility less safe?
How does a requirement that you investigate
incidents to find out what their causes were and how
they can be prevented, how does that make the facility
less safe?
Everything in this section that Dr. Ural has
proposed has been hammered out for 20 years. Almost a
quarter of my clients are Ag dust handling facilities.
They refuse to let me use 61 because 61 is so weak. I
wind up having to use the requirements in 664 and 654 in
order to achieve their loss protection objectives and
life safety objectives.
I urge the membership to do what is right,
not what is expedient, and support the proposal.
PRESIDING OFFICER Mc DANIEL: Thank you.
COMMITTEE CHAIR BUJEWSKI: Mr. Chair.
Again, speaking against the motion, a process hazard
analysis is certainly a good tool to use for chemical
process industries. 654 was primarily developed for the
chemical processing industries and as such they have
adopted process hazard analysis.
The hazards associated with agricultural dust industry are well known, the processes are well known. To add another layer of unnecessary management or review only complicates the process from the agricultural dust standpoint. So the committee, again, does not feel that a process hazard analysis is necessary in the agricultural dust standard. However, the new fundamentals dust standard it would be appropriate to have process hazard analysis so that you could evaluate dust and combustible dust that aren't well known, processes that aren't familiar, process hazard analysis would be very good to use for that type of a situation.

PRESIDING OFFICER McDANIEL: Is there any further discussion on motion 61-6 to accept Comment 61-9?

Seeing none, before we vote, let me restate the motion. The motion on the floor is to accept Comment 61-9.

Please record your vote, one in favor of the motion accept or two opposed to the motion reject. Five seconds. Balloting is closed. Motion passes.
FW: intent to appeal committee action on ATM amendments CAM 61-6, CAM 61-9 and CAM 61-10

-----Original Message-----
From: Erdem A. Ural [mailto:erdem.ural@lpsti.com]
Sent: Tuesday, July 10, 2012 3:14 PM
To: Fuller, Linda; Cronin, Amy
Subject: intent to appeal committee action on ATM amendments CAM 61-6, CAM 61-9 and CAM 61-10

Linda/Amy:

Please accept this note as formal declaration of my intent to appeal committee actions on ATM amendments CAM 61-6, CAM 61-9 and CAM 61-10.

Please advise how much time I have to file the appeal.

Sincerely Yours,

Erdem
781-818-4114
NFPA CAM 61-6 Appeal
NITMAM Log #1033
NFPA 61: STANDARD FOR THE PREVENTION OF FIRES AND DUST EXPLOSIONS IN AGRICULTURAL AND FOOD PROCESSING FACILITIES

(1) Name, affiliation, and address of the appellant
   Dr. Erdem A. Ural
   659 Pearl Street
   Stoughton, MA 02072
   (781) 818-4114
   Erdem.ural@lpsti.com

(2) Statement identifying the particular action to which the appeal relates
   the floor action on CAM 61-6

(3) Argument setting forth the grounds for the appeal
   Please see below.

(4) Statement of the precise relief requested
   Uphold floor action, Accept Comment 61-9. (Passed on Floor 164 to 76, Failed Committee Ballot.)

GROUNDs FOR THIS APPEAL

This appeal is seeking to create a new chapter called general requirements. Similar chapters already in other NFPA dust occupancy standards such as 484, 654 and 664, but is sorely missing in 61. The new chapter gives the users vital information on process and facility design, process hazard analysis, management of change, incident investigation, pneumatic conveying system design, life safety objectives, structural integrity objectives, mission continuity objectives, and objectives for mitigation of fire spread and explosions.

Although certain pack of committee members took an exception to the portion of the proposal that deals with the process hazard analysis (PHA), the Report on Proposals reads:
   The Committee rejected the submitter’s recommendation because they believe that Section 1.5 already addresses process hazard safety analysis. The Committee previously rejected the dust mass methodology in Proposal 61-19 (Log #54). The Committee formed a Task Group to develop Annex material on process hazard analysis which will be presented at the ROC stage of the revision process.

Interestingly, the above-captioned statement gives the impression that the committee is actually in favor of the PHA. When rejecting this proposal, the committee must have been confused,
because, Section 1.5 has nothing to do with the process hazard safety analysis. Furthermore, the Task Group did not present any Annex material on process hazard analysis, as was promised in the ROP.

The amendment is the culmination of close to 20 years of accumulated analysis and work in the combustible dust community to develop a set of enforceable criteria that lead the owners and operators to manage the hazard in accordance to the commonly accepted practices. This chapter served numerous other industries well. Certain committee members argue that agricultural products somehow burn or explode very differently from other combustible dusts. This is simply not true. Agricultural products are essentially hydrocarbons containing CH2O. They are mostly made up of starches. Starch is a polymer of glucose.

The new chapter is also included in NFPA 664, the wood dust standard. Wood is also a hydrocarbon containing CH2O. Wood is mostly made up of cellulose. Cellulose is a polymer of glucose.

The combustion characteristics of wood, agricultural dust and most other hydrocarbons are enormously similar when you get down to the same particle size.

According to NFPA rules and regulations, those voting against the amendment are required to provide valid reasons why. Few members stated PHA/PSM is too complicated for the smaller operations. This is not a valid reason because the amendment has nothing to do with PSM, instead, it is teaching the users how to do a much simplified process hazard analysis as explained in the annex material. (See section A.4.2.1 of proposal 61-20.

The majority of the members voting against the amendment invoked a justification that they already voted against it at the ROP and ROC ballots. This again is not a valid justification because it obviates the function of the Association Technical Meeting.

Finally, a confused group of naysayers argued that the issue of PHA was adequately addressed in new section A1.5, which merely reads:

\[ A.1.5 \] This standard permits the use of performance-based design options. Guidelines on performance-based design options for combustible dust hazards can be found in NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.

The bottom line is, before the OSHA grain standard was implemented, this industry had a horrible safety record. The OSHA grain standard helped this industry’s safety record improve significantly, from horrible to bad. While the OSHA is rightly contemplating to revisit the grain standard, it would be unconscionable for NFPA to deliberately expose grain and food workers to significantly greater risks than their counterparts in other industries.

In Chapter 1, NFPA 61 states: “The provisions of this standard reflect a consensus of what is necessary to provide an acceptable degree of protection from the hazards addressed in this standard at the time the standard was issued.” How can this be true while NFPA 61 denies even the most basic requirements of other NFPA combustible dust standards?
Cellulose Polymer:

Starch Polymer:
Engineering Department Memo

TO: NFPA Standard Council
FROM: William F. Kearns, P.E., Vice President, Engineering
Member NFPA 61 Technical Committee
wkearns@pfening.com
DATE: July 19, 2012

RE: Silo safety – In reference to appeals 61-6, -9, and -10

The Fred D. Pfening Company has been supplying bulk silo systems to the baking industry since the 1950’s. Early projects were largely screw conveyor systems. Beginning about 1955, pneumatic conveying systems supplanted mechanical conveying and have been the baking industry standard ever since. These systems include both flour and sugar systems and a few other ingredients handled in bulk, such as corn flour, dextrose, etc.

The silos are commonly welded carbon steel, typically cylinders twelve feet in diameter and 35-60 feet tall storing 80,000 to 200,000 pounds of material. A small percentage of the silos are horizontal bins of rectangular welded construction. A few of the silos are aluminum or stainless steel construction. Only a handful have been equipped with explosion vents or other protection.

We believe that these systems have an exemplary safety record and this paper presents some historical data to support this claim.

An informal review of Pfening’s larger projects 1955-2005 suggests that we can account for about 14,000 silo-years of service. Silo-years was calculated in the following manner:

- Project A, installed 1959, 10 silos, still in operation in 2012:
  - 52 years x 10 silos = 520 silo-years
- Project B, installed 1971, 2 silos, closed in 1999:
  - 28 years x 2 silos = 56 silo-years
We are aware of two dust explosion incidents involving silos. Both of these were flour silos and both incidents were due to gross negligence. Here is a brief description of both:

- A customer had two flour silos located outdoors. One was empty, being cleaned by a contractor. The top and bottom hatches were both open. A standard trouble light was being used and the bulb broke, causing an ignition. The resulting deflagration vented out the two hatches. A worker partially in the top hatch was burned. We have no information on the extent of his injuries, but believe he survived. There was no significant damage to the tank or any other equipment.

- A customer had two flour silos in a concrete block building with a wood truss roof. The customer added onto the building and extended the silo fill lines using plastic pipe. The truck drivers complained for months that the plastic pipe generated sparks and made snapping and crackling noises. One day one silo was being filled and the truck driver reported hearing a “whoomp” sound and looked up to see the building roof lift up a few feet, fire and smoke come out, and the roof fall back down. A fire was started in the silo. No one was injured, but the silo building had to be replaced. The only damage to the tank was to the interior paint.

So we have two incidents and no fatalities in 14,000 years of service. And neither of the incidents occurred in “normal” operation.

Pfening’s position is that a mandate that all silos be equipped with explosion venting is completely unwarranted and unsupported by historical data.
NFPA Standards Council
NFPA 61 Appeals
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

RE: Silo Safety in Reference to Appeals 61-6, 61-9 and 61-10

Hostess Brands Corporation has been in the bakery industry for over 100 years. During those years it has made several acquisitions of other baking companies. Continental Baking, JJ Nissen and Purity Baking to name a few.

In processing our baked goods we have utilized bulk silos to pneumatically convey ingredients. These systems primarily convey flour, sugar and a few other ingredients.

The silos are commonly made of welded carbon steel. Typically these cylinders are 12 feet in diameter and 35 to 60 feet tall, storing 80,000 to 200,000 pounds of material.

We also have a smaller percentage of horizontal bins of rectangular welded construction.

We believe these systems have an exemplary safety record and listed below are some facts to support this.

Our company currently has over 150 silos and horizontal bins in operation. The average age of these silos and bins are in the 30 year plus range.

In our company’s history we are not aware of any occurrences of a dust explosion incident that involved the silos or horizontal bins.

Since we have had no dust explosions related to silos in our history, our company’s position is that a mandate that all silos be equipped with explosion venting is completely unwarranted and unsupported by historical data.

Sincerely,

John Grauel

John Grauel
VP Engineering
John.Grauel@hostessbrands.com

klb
July 16, 2012

Secretary
Codes and Standards Administration
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02169-7471

RE: Certified Amending Motions to NFPA 61 - Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities

To Whom It May Concern:

The undersigned individuals and the American Feed Industry Association (AFIA), the Grain Elevator and Processing Society (GEAPS), the National Grain and Feed Association (NGFA) and the U.S. Beet Sugar Association (USBSA) submit these comments in response to amendment motions concerning NFPA 61 and the discussions relating to them that took place during the June 13, 2012 NFPA Association Technical Meeting in Las Vegas, NV.

Representatives from several of these agriculturally-based trade and professional associations, as well as representatives from the association member companies serve on the NFPA 61 Technical Committee, Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities. Many of the representatives from these organizations attended the Association Technical Meeting and spoke during the discussion regarding the proposed amending motions. This document supplements the remarks recorded in the transcript.

AFIA is the national trade association for the feed industry representing nearly 500 member companies. AFIA members manufacture 75 percent of the feed and pet food sold annually in the United States, and membership includes manufacturers, ingredient suppliers, animal health companies, equipment manufacturers, large integrated livestock and poultry producers, and firms providing other goods and services to the animal food industry.

GEAPS is a not-for-profit professional association dedicated to advancing leadership, innovation and excellence in grain handling and processing industry operations. There are currently some 2,400 GEAPS members in 17 countries. The majority of members is employed in North America and is responsible for the operation of more than 10,000 grain handling facilities worldwide. The GEAPS organization comprises 30 local chapters in North America – including the United States and Canada.
The NGFA is comprised of 1,050 member companies that operate more than 7,000 facilities and handle more than 70 percent of the U.S. grain and oilseed crop. NGFA membership encompasses all sectors of the industry, including country, terminal and export grain elevators; commercial feed operations; biofuel producers; cash grain and feed merchants; end-users of grain and grain products, including processors, flour millers, and livestock and poultry integrators; commodity futures brokers and commission merchants; and allied industries.

The USBSA represents eight beet sugar companies, which operate twenty-one processing factories in nine states. These firms produce refined sugar from sugar beets grown by about 10,000 family farmers on about 1.2 million acres in eleven states. All of the member firms are farmer cooperatives.

Virtually all of the associations’ facilities are subject, in whole or in part, to the Occupational Safety and Health Administration’s (OSHA) grain handling standard, 29 C.F.R. 1910.272, as well as NFPA 61.

Taken together, the associations represent an important segment of the U.S. agricultural grain, feed and processing industry. Our members are critical in handling and producing the domestic food and feed supply, promoting U.S. agricultural exports, and promoting energy independence in the United States. Representatives from individual member companies, including, Ag Processing Inc., and ConAgra Foods, Inc. either serve as principal members or alternates on the NFPA 61 committee.

During the 1980s, NGFA, and the other trade groups, worked with OSHA to develop the grain handling standard, 29 C.F.R. 1910.272, which was promulgated in 1988, to address fires and explosions. Since that standard was implemented, NGFA has worked with OSHA officials to clarify compliance requirements and convey this information to industry. In addition, OSHA has published compliance information, including a booklet explaining the standard's requirements and enforcement guidance for compliance officers, clarifying regulatory obligations under the standard.

NGFA, as the principal representative of the grain handling industry, has been at the forefront of research and development designed to enhance safety. The industry is dedicated to pursuing and promoting technological innovations, new practices, and safety training and education programs that contribute to safe and efficient grain handling operations. All of these efforts are vital, first and foremost, to safeguard human resources. Clearly, the industry has demonstrated its commitment to safety, both prior to and after the promulgation of the grain handling standard.

More broadly, the grain, feed and processing industry has demonstrated a successful commitment to safety that is reflected in its excellent safety record for the past 25 years. Each of our associations has an experienced and active committee that aggressively promotes safety within the industry. The industry has spent hundreds of millions of dollars towards this success.
Therefore, when OSHA completed a regulatory review of the grain handling standard in 2003 they determined that there have been fewer fire and explosion related fatalities since the rule was promulgated. **OSHA further concluded that the standard should, “continue without major change.”**

In addition, Bill Wright, interim chair of the U.S. Chemical Safety and Hazard Investigation Board (CSB), testified during the House Education and Labor committee's March 12, 2008 hearing on H.R. 5522 -- the “Combustible Dust Explosion and Fire Prevention Act of 2008”-- that the frequency of grain facility explosions declined by 60 percent following implementation of the grain-handling standard. This is a testament to the combination of industry research, education, training and government involvement.

The current NFPA 61 standard, which has been carefully developed over the past 87 years, reflects the unique operational needs of the grain handling industry and the agricultural sector in general. The standard’s effectiveness is evident in the significant reduction of grain dust explosions over the years, including a large reduction since 1980 following several significant explosions that occurred in the late 1970s.

Over the years, many representatives from virtually every sector of the grain handling industry (grain elevators, feed mills, soy processing, starch manufacturing, flour milling, and other types of mills) have fine-tuned the recommendations of the NFPA 61 standard to fit our operations. Basic facility design elements, such as placing legs outside of facilities and using safety monitoring devices have also been shared through committee participation and NFPA 61 development. Any abrupt or confusing changes to NFPA design and management recommendations would threaten to undermine this safety record by forcing companies to amend their currently successful housekeeping and safety programs.

As a result, during the 2012 revision cycle, many of the changes either accepted or rejected by the committee were made by a large consensus of the group, not just solely industry representatives. Furthermore, we believe the proposed NFPA 61 standard clearly represents a workable consensus for the affected industries and should not be modified because a few persons not familiar with the industry believe they have better solutions. The NFPA 61 committee has continuously strengthened the standard over the past 35 years by adopting requirements reflecting technologies that are proven and feasible.

Therefore, many on the committee were quite disappointed by the proposed Notices of Intent to Make a Motion (NITMAMs) that were submitted and approved by the Motion Committee and discussed at the Association Technical Meeting for the following reasons:

- Almost all of the NITMAMs were based on topics that were previously proposed, discussed and voted upon many times during the NFPA 61 committee’s 2012 Revision Cycle.

- As explained further below, some of the NITMAMs would cause industry to meet theoretical requirements that will not work, are unproven, are not cost-effective, or
will divert attention from currently successful housekeeping and safety programs and facility designs. Several of the proposed changes offered through the NITMAMs appear to come directly from the current version of NFPA 654, the language of which is more generic, is unnecessarily complicated in comparison to NFPA 61 and, for small companies, so difficult to apply that they would likely have to go to the expense of hiring special consultants. The special circumstances facing those in agriculture are specifically addressed in NFPA 61, which was written to specially reflect the circumstances of the agricultural sector, is more straightforward and easier for its users to understand.

Based on the NITMAM’s, many of the agricultural representatives attended the Association Technical Meeting to offer countering views to the proposed changes. There were 15 motions seeking changes to NFPA 61. Fourteen of these motions were from one of the committee members, Mr. Erdem Ural, and one motion was made by Mr. Marcelo Hirschler, regarding pneumatic conveying. The 14 motions made by Mr. Ural were essentially combined into 7 motions, which made for a total of 8, including Mr. Hirschler’s. The NFPA membership in attendance defeated five of the motions, but accepted three. The NFPA 61 committee’s previous votes on the matters are as follows:

- **Silo Venting (Amendment 61-9)** – Rejected 24 to 3 in the ROP ballot and rejected 21 to 5 in the ROC ballot.
- **Process Hazard Analysis (Amendment 61-6)** – Rejected 26 to 1 in the ROP ballot and rejected 23 to 3 in the ROC ballot.
- **Performance Based Design (Amendment 61-10)** – Accepted in principal and added Annex material at the ROP with vote of 26 to 1 and re-affirmed our position with a vote of 23 to 3 on the ROC ballot.

Some of the reasons why these amendments were and should continue to be rejected are as follows:

**With respect to Amendment 61-6:**

Process hazards analyses (PHA), management-of-change procedures (MOC), and these other requirements are completely unjustifiable and inappropriate for agricultural facilities. These requirements originated in the chemical industry, which has complex chemical processes and novel and varied chemicals, the behavior of which together can be dynamic and often difficult to predict. That is completely untrue of agricultural facilities. The behavior of agricultural dusts and their handling processes have long been known, have remained essentially unchanged for decades, and are not complex. Requiring process hazards analyses is therefore completely unjustifiable.

As to management of changes, in agricultural facilities, the frequency of subtle changes that can significantly increase fire and explosion hazards is rare, and certainly not great enough to require the multi-factor review process and documentation required of changes to less-well understood or more complex processes. So long as the design of, or design change to, an
agricultural facility is reviewed by a qualified person, i.e., a person knowledgeable about the cause, propagation and prevention of fires and explosions involving combustible dust, safety can be sufficiently assured. In sum, PHA’s and MOC’s are too elaborate to be justified.

All this is particularly in the many small facilities in the agricultural industry, in which, either by reason of the size of the facility or the small number of managers, all design elements and all changes come to the attention of a qualified person. So long as a qualified person approves the design or change, additional requirements, including documentation requirements, would not add appreciably to safety, and would add enough to the compliance burden for small facilities that it could not be said to be practical under the circumstances.

With respect to Amendment 61-9:

A rule requiring venting in all silos as a rule is infeasible and unproven. Not only is it very difficult except on an individual basis to determine which silos would be able to be vented and which ones would not, but the length and diameter ratio of large modern silos makes it physically impossible to design explosion vents in accordance with NFPA 68. The motion is based on speculation that the limited data available would justify a requirement for venting on the very much larger silos in use today. The test data submitted by the proponent represents a very small range of silo size, does not reflect the silo sizes used today, and cannot justify an across-the-board rule. The right action is what the committee voted for – an NFPA project to study explosion venting on the very large silos in use today.

In addition, as mentioned at the Association Technical Meeting, the National Grain and Feed Foundation is considering funding a study related to explosion silo venting. The project is intended to provide venting ratio data for silos in the range that are common in the agricultural industry. The study would be designed to follow-up on one conducted by the NGFA’s Fire and Explosion Research Council in 1983 and often referred to by Mr. Ural in his NITMAMs. The research will also evaluate the economic impact of applying NFPA venting standards within grain storage bins and silos.

With respect to Amendment 61-10:

Whether to have this material in the text of the standard or in the Annex is a judgment call that must take into account the nature of the industry that uses NFPA 61. The agricultural industry is comprised of a few large companies and untold numbers of small companies, almost none of whom will have the technical expertise to make any use of this material and nearly all of whom will find it confusing. And its placement in the middle of the standard will strike them as more confusing yet. That confusion is, however, entirely unnecessary. The Committee made a judgment call to place this material in the Annex and that judgment should be respected by those with less knowledge of the agricultural sector.
A Different Matter

We also wish to bring a different matter to the attention of the Standards Council. During the meeting, our representatives were appalled by the vicious personal attacks on our committee and its members by the maker of the motions and the three persons supporting them, all of whom serve on the NFPA 654 committee. Rather than relying on facts, they resorted to personal attacks and appeals to emotions, as documented in the transcript, especially during the silo venting debate.

For example, one person spoke as follows:

“…It’s a reality that addresses the fact that a bunch of gray-haired old guys sitting in the committee room wondering if they are going to finish their work before their plane leaves can’t conceive of all the problems and all the circumstances that exist out there in the real world.”

The proponent of the motions also made a personal remark about an NFPA 61 committee member: “Also this committee [NFPA 61] is the only committee that I serve on [that has a] lobbyist as a member.”

What occurred during the meeting was a sorry display of disrespect for fellow NFPA members and committee members, all of whom serve as volunteers. NFPA leadership during the meeting should not have allowed it to occur.

It bears observation that almost all of the volunteers who serve on the committee took several days from their busy, everyday schedules to personally attend and participate in the ROP and ROC meetings where the aforementioned issues were discussed. One of the few committee members who did not take the time to appear in person was the same one who took the time to draft and propose fifteen NITMAMs.

We also point out that one participant falsely asserted that data on the Chemical Safety Board’s website shows that our industry has the worst safety record of all:

“If any of you would like to do so, I direct your attention, go to the CSB website, CSB.gov, and look up the statistics and you will find that the agricultural and food products has the worst safety record with respect to explosive dust any industry segment in the United States or Canada.”

The only document we were able to find on the CSB Web page was the 2006 CSB Investigative Report: Combustible Dust Hazard Study. On page 4 under the “Key Findings”, CSB notes:

- OSHA’s Grain Handling Facilities Standard has successfully reduced the risk of dust explosions in the grain industry.
Secondary dust explosions, due to inadequate housekeeping and excessive dust accumulations, caused much of the damage and casualties in recent catastrophic incidents.

On page 60 of the report we found the following quote,

“NGFA stated that its industry had experienced ‘an unprecedented decline in explosions, injuries and fatalities at grain handling facilities’ since 1980. Further, the NGFA credited the standard [OSHA grain handling standard] with stimulating technological advances in the design, layout and construction of grain handling facilities.”

Moreover, silo venting, process hazard analysis and performance-based design have nothing to do with housekeeping and dust accumulation.

Further, CV Technologies President, Martin Cvetas did not support such comments. He stated in a July 3, 2012 letter to Bunge North America (see attached):

“In response to some concerns expressed by Bill Stevenson…CV Technology has issued the following statement:

There is considerable merit to having industry specific standards because the operations are quite different for the industry segments addressed in NFPA 61…There are very useful and practical features to NFPA 61 that make it unique among the Occupancy Standards.

**Our involvement in NFPA document development should be limited to documents in which we actively hold a committee seat. Any comments made regarding other documents are those of individuals and do not represent the views of CV Technology.”**

Rather than continue to accept behavior that damages the NFPA, we as industry representatives respectfully request that the NFPA staff provide the membership with a set of instructions based on NFPA code of conduct (*i.e.*, participants should conduct themselves at all times in a professional and respectful manner, and shall respect all rulings of the chair. They should express their views through the making of appropriate motions and through participation in the formal debate on motions) and that the moderator enforce decorum during the discussion of NITNAM’s. Those who resort to personal attack or who appeal to emotion should be first admonished and then after future such behavior should be removed from the proceedings.

The authors of this letter strongly support the concept set forth in the statement of General Principles, “promote the development of consensus through the broad and balanced participation of a variety of interests and through the full airing and discussion of all points of view.”
As previously mentioned, the committee’s actions on the ROP and ROC of the certified amending motions addressing silo venting, process hazard analysis and performance-based design show that all had an opportunity to participate and that every member’s view was heard. It is unfortunate that one committee member was not happy with the nearly-unanimous result and is doing everything procedurally possible to create an outcome congenial to himself. To ignore the consensus of the NFPA 61 Committee on these matters would violate the General Principle of consensus and damage the consensus process.

In closing, we strongly urge the NFPA Standards Council to consider and give weight to the consensus of the committee as a whole.

Thank you for your consideration of our views. We would be pleased to respond to any questions you may have.

Sincerely,

NFPA 61 Committee Principals

Keith Epperson, On behalf of the American Feed Industry Association

James Maness, On behalf of the Grain Elevator and Processing Society

Jess McCluer, On behalf of the National Grain and Feed Association

Lance Rick, On behalf of US Beet Sugar Association
Jeff Rogers  
Ag Processing Inc.

J. Anthony Yount  
ConAgra Foods, Inc.
July 6, 2012

Ms Amy Cronin
Secretary, Standard Council
National Fire Protection Association
1 Batterymarch Park,
Quincy, MA 02169-7471

Subject: NFPA 61 Tech Session Motions and Committee Position

Dear Amy and Standards Council:

As Chairman of the Agricultural Dust Committee, I have the following comments regarding the NFPA 61 motions that passed at the annual Technical Session in Las Vegas and would like these comments to be considered as the Standards Council discusses the issues.

Amendment 61-6 (Comment 61-9)

This is a proposal to add a new chapter to the standard that would require process hazard analysis and management of change procedures. The proposal was copied from the NFPA 654 standard and there was no attempt to tailor it to the grain and food industries. It is essentially a chemical industry guideline. In general, the committee feels that process hazard analysis should not be required because the grain and food industries are very familiar with the process hazards and equipment and have a long history of this knowledge. These hazards are well covered in the NFPA 61 standard. The NFPA 61 standard is essentially the process hazard analysis.

However, in an attempt to satisfy the submitter of the proposal, a task force was formed at the ROP meeting to modify the proposal and write material to be placed in the Annex at the ROC meeting. At the ROC meeting, the submitter of the proposal was not willing to compromise and no one felt strongly enough about the topic to propose any new language for the Annex. There was also the feeling that process hazard analysis would be better served in the new Fundamentals of Dust standard that is currently under development. This is intended to be a generic standard and process hazard analysis (as well as performance based design) would be better placed there.

The votes on this issue are as follows:
ROP Ballot – Rejected 26 to 1 (even the submitter of the proposal voted with the committee)
ROC Ballot – Rejected 23 to 3  
Amendment Ballot – Rejected 17 to 11

The submitter of the proposals and the motion, Mr. Ural, initially withdrew this motion at the Technical Session. Several other motions were voted on and when he was successful in the vote on silo venting (Motion 61-9) he asked if he could resubmit motion 61-6. There was a discussion by NFPA personnel on the stage and he was allowed to make the motion. It seemed very unusual to allow the motion after it had been formally withdrawn.

The fact that the submitter voted to reject his own proposal at the ROP stage and withdrew the proposal at the NFPA Tech Session shows that even the submitter is not fully invested in this amendment.

**Conclusion**

All three of the proposals were thoroughly discussed during the ROP and ROC meetings. The committee is well balanced and has full membership with a waiting list. Attempts were made to compromise on two of the issues by adding Annex material. The submitter of the proposals did not attend either meeting in person, but participated by conference call. These three proposals would make significant changes to the standard, but the submitter did not feel it was important enough to attend the meeting in person and explain his proposals. Now he is trying to use procedural maneuvers and a small minority opinion to bend the committee to his will. I request that the Standards Council uphold the committee’s intent and issue the new Agricultural Dust standard without delay.

Sincerely,

**Matt Bujewski**

Matthew J. Bujewski, PE, ARM  
Agricultural Dust Committee Chairman

cc: Martha Curtis, NFPA  
Guy Colonna, NFPA
July 14, 2012

Ms Amy Cronin
Secretary, Standard Council
National Fire Protection Association
1 Batterymarch Park,
Quincy, MA  02169-7471

Subject:  NFPA 61 Tech Session Appeals and Committee Position

Dear Amy and Standards Council:

As Chairman of the Agricultural Dust Committee, I have the following addition to my July 6, 2012 letter regarding the motions from the Technical Session in Las Vegas and new comments on the appeals that have just been made.

 Addition to July 6 Letter Regarding Motions

My letter dated July 6 was based upon the tentative vote from the Agricultural Dust Committee. With the final vote, the count for rejecting increased by one. The final vote count for all three amendments is now:

Amendment 61-6 (Comment 61-9) – Rejected 18 to 10.
Amendment 61-9 (Comment 61-13) – Rejected 22 to 6.
Amendment 61-10 (Proposal 61-23) – Rejected 20 to 8.

All three motions have been overwhelmingly rejected three times by the committee.

Appeal on Motion 61-1 (Comment 61-4)

This is an appeal to remove the size qualification in the definition of Agricultural Dust in 3.3.1 of the 2008 edition of NFPA 61. The committee is strongly against the removal of the size qualification and the position is well documented in the substantiation in the ROP and ROC. The minutes of the Technical Session also provide the details on the positions.
Appeal on Motion 61-1 (Comment 61-4) (continued)

The votes on this issue are as follows:

ROP Ballot – Accepted in Part in Principal 25 to 2
(The committee agreed to modify the annex material to better support the existing definition but did not agree to remove the particle size criteria in the definition.)
ROC Ballot – Rejected comment 21 to 5
NFPA Tech Session – Failed 200 to 76

The submitter of the appeal is only thinking of the generic use of the term and does not take into account how it is specifically used in the standard. It is only used once in section 10.2 where housekeeping is discussed. Changing the standard without giving the user any information on general particle size would require the user to test all dust and all dust combinations at a facility to determine if they are explosive and subject to cleaning. This is impractical and unnecessary. The definition of 420 microns has been used for decades in the agricultural industry and is consistent with the OSHA definition in the regulation that governs that industry. The submitter did not provide any evidence that there have been explosions or fires due to misuse or misunderstanding of this definition.

Appeal on Motion 61-12 (Proposal 61-26)

This proposal would require isolation of equipment to mitigate the effects of an explosion. The submitter of the proposal wants to require the agricultural industry to use techniques that are used in other industries, such as woodworking, to isolate explosions. The agricultural and food industries, however, do not use the same type of equipment as other combustible dust industries and this proposal would have to be dissected on an equipment by equipment basis. Furthermore, many of the users of this document are subject to Food and Drug Administration requirements that have to be considered when modifying equipment. The submitter provided only generic requirements and did not provide any specific language for the various equipment and processes used in the agricultural and food industries. The committee felt there was some merit for specific processes, but further study is required. No one made a proposal for a specific process. For these reasons, the committee agreed at the ROC meeting that it should be put on hold until the next revision cycle.

ROP Ballot – Rejected 25 to 2
ROC Ballot – Committee agreed to hold for further consideration in the next cycle by 25 to 1
NFPA Tech Session – Failed 119 to 116

Again, the submitter did not provide any evidence of a recent loss or injury that could have been prevented by changing the standard. The committee cannot make such a substantial change without any relevant justification other than the submitters own opinion.

Conclusion

The submitter of these motions and subsequent appeals is strong in his opinions, but without adequate supporting evidence the committee cannot adopt such significant changes. There is simply no justification for it. These were not close votes and there are no significant divisions in the committee. The committee overwhelming rejected all of the proposals and comments that he is now appealing. If the will of the committee is not upheld, then I do not know the purpose of
having a committee. I urge the Standards Council uphold the committee’s intent and issue the new Agricultural Dust standard without delay.

Sincerely,

Matt Bujewski

Matthew J. Bujewski, PE, ARM
Agricultural Dust Committee Chairman

cc: Martha Curtis, NFPA
    Guy Colonna, NFPA
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (61-9)

Document: NFPA 61, Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities

Motion: To Accept Comment 61-13

TC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS NOT achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 19 \[30 \text{ (eligible to vote)} - 2 \text{ (ballots not returned)} - 0 \text{ (abstentions)} = 28 \times 0.66 = 18.48\]

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<thead>
<tr>
<th>Eligible to Vote</th>
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<tbody>
<tr>
<td>30</td>
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<tr>
<td>2 Not Returned</td>
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<tr>
<td>(Nitsch, Schoeff)</td>
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<tr>
<td>6 Agree</td>
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<tr>
<td>(Janz, Ural w/comment)</td>
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<tr>
<td>22 Do Not Agree</td>
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<tr>
<td>(Bluhm, Briesch, Bujewski, Eklow, Epperson, Guaricci, Heilman, Herrick, Holmes, Kearns, Kinslow, Maness, McCluer, Osborn, Rick, Rogers, Sargent, Sutton, Thielen, Waller, Wees, Yount)</td>
</tr>
<tr>
<td>0 Abstain</td>
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TC Action: FAIL
Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree *

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain *

*Please give reasons for voting “Do Not Agree” or “Abstain”:

It is not practical to require explosion venting in many grain silos as NFPA 68 physical limitations make venting of feed mill bins not possible.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Des Bluhm

Date: 07/02/12
Standards Council Supplemental Agenda August 7-9, 2012

NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:
I do not agree with the action of the membership. The TC overwhelmingly rejected requiring vents to comply with NFPA68 for the reasons stated in the ROC. No additional technical rationale has been provided to warrant changing that position. There is nothing in the text preventing compliance with NFPA68 if one deems it necessary to do so.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: Edward M. Briesch

Name - Please Print: Edward M. Briesch

Date: 6/22/2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

X Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:
The amendment requires something that is not physically practical and relies on extrapolated data that may, or may not, be accurate. Additional testing needs to be done.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:
Joanne Govette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: Matt Bujewski

Name - Please Print: Matt Bujewski

Date: June 25, 2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The proposed text is too severe and would not be feasible for this industry.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:

Name - Please Print: Bernard EKLOF

Date: 6-28-12
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

☐ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain": I believe the committee properly vetted this during the ROC/ROP process.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Keith Epperson

Date: June 27, 2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree
If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*
If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain".

The submitters reasoning for the need of protection does not consider the full ramifications of the statement. Practical items such as the practical application of L/D factors in many cases make the detection impractical. A section is needed that addresses all concerns.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: Dan Guaricci

Name - Please Print: Dan Guaricci

Date: 6/28/12

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts 
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment:

Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I feel that this issue was discussed and debated over a number of meetings of the Committee and passed by a large majority of experts. That decision should not be reversed.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617- 984-7110

Signature:

Name - Please Print: John Heilman

Date: 6/20/2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

[Signature]
Name - Please Print: [Signature Name]
Date: 6/24/2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

June 2011 (Ballot Form)
Amendment: Accept Comment 61-13

☐ Agree If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

[Signature]

Signature: [Signature]

Name - Please Print: [Name]

Date: 6-18-12

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

I do not believe that a blanket requirement such as this is warranted.

__________________________________________
Signature: William F. Keams

Name - Please Print: William F. Keams

Date: June 26, 2012

June 2011 (Ballot Form)

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX: 617-984-7110

Signature: William F. Keams

Name - Please Print: William F. Keams

Date: June 26, 2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

As worded, amendment requires explosion relief vents in all cases, regardless of size or hazard. While much of the discussion has been around large silos, explosion vents would be required on very small tanks as well – even small tanks that don’t have the volume to produce a dust cloud of sufficient volume to be hazardous. It also does not allow alternate forms of mitigation, such as suppression, containment, inerting, prevention methods, etc.

________________________________________

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: William P. Kinslow, Jr.

Date: 6/27/2012

June 2011 (Ballot Form)
Accept Comment 61-13

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

*Please give reasons for voting “Do Not Agree” or “Abstain”:

There was no specific data submitted to substantiate that grain bins can be explosion vented safely. The submitter only submitted a chart indicating that the existing data shows that explosion vents work in grain bins. Very few explosions begin in grain bins but rather in grain handling equipment which have feasible alternatives to prevent grain dust explosions or the propagation of the explosion. The submitter uses data from very small vessels 20 m³ and 60 m³ and a limited amount of data from a tested grain bin of 500 m³ (six tests for starch and seven tests for wheat and soybeans previously studied) and a specially constructed bin of 236 m³ and then combines the data from others not documented of provided to the committee for evaluation. The two larger structure testing was from research sponsored by the grain industry (NGFA) through the Christian Michelsen Institute and Rolf Eckhoff. In both series of large tests unexpected high pressures developed and destroyed the bin. Utilization of this data is suspect since total destruction occurred during these tests. To use this data and that of others requires assumptions of quiescent dust clouds and limiting the ignition point to not occur in the bottom 1/3 of the bin. Real world events demonstrate that flame jets from other equipment can ignite the entire volume at once in a bin causing pressures so high that almost any structure would fail. We remain unconvinced that there is sufficient data to opemandate bin venting in our industry. Dr. Eckhoff says in his conclusions that “subjective judgement can never be a fully adequate substitute for objective knowledge.” Further the submitter and others using data from 20 m³ to 500 m³ and extrapolates it to volumes up to 10,000 m³ with no data at the upper end. Further both moderate and large scale testing has shown that bins with an length to diameter ration greater than 5 do not follow the establish vent criteria. Large grain bins can exceed 100,000 m³ with no assurance that bin venting would be successful. While we have supported the science of bin venting, it is clear that there is not sufficient data to mandate bin venting.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
June 2011 (Ballot Form)
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:

Name - Please Print: James E. Maness

Date: 6/27/2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree
If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*
If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

DID NOT ACCEPT DURING ROC OR AT ASSOCIATION TECHNICAL MEETING

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 PAX: 617-984-7110

Signature: [Signature]
Name - Please Print: [Name]
Date: [Date]

June 2011 (Ballot Form)
 Amendment: Accept Comment 61-13

☐ Agree  
If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 58 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*  
If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

There are storage bins used in the Ag industry that are really (fill in) impossible to vent off. Agree most silos should be vented as far as the but something needs to be done to consider full range in size and type.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX: 617-984-7110

Signature: ____________________________

Name - Please Print: Jack Osborn

Date: 6-21-12

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

A rule requiring venting in all silos as a rule is infeasible and unproven. Not only is it very difficult except on an individual basis to determine which silos would be able to be vented and which ones would not, but the length and diameter ratio of large modern silos makes it physically impossible to design explosion vents in accordance with NFPA 68. The motion is based on speculation that the limited data available would justify a requirement for venting on the very much larger silos in use today. The test data submitted by the proponent represents a very small range of silo size, does not reflect the silo sizes used today, and cannot justify an across the board rule. The right action is what the committee voted for – an NFPA project to study explosion venting on the very large silos in use today.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX: 617-984-7110

Signature: ________________

Name - Please Print: Lance L. Rick

Date: June 26, 2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

This was voted down by the committee in the ROP and ROC.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Jeff Rogers

Date: 6/21/12

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

Expiration Venting in many grain silos for NFPA 68 is not reasonably practical. Venting of Feed Mill Bins is not possible due to geometry.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: Lee Sargent
Name - Please Print: Lee Sargent
Date: 7/30/12

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment:  Accept Comment 61-13

☐ Agree  
If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*  
If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*  
*Please give reasons for voting “Do Not Agree” or “Abstain”:

I believe some form of protection should be provided for most silos. However, this proposal as submitted does not allow the option of other protection measures such as damage limiting construction, explosion suppression, containment, remote locations, etc. It also does not account for the fact that test data for really large silos is not available that I am aware of to substantiate a venting design. Until this issue can be investigated further, it should not be put into the document as written at this time.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Coyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX: 617-784-7110

Signature:  

Name - Please Print:  Jeffery W. Sutton

Date:  6/25/2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☐ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The reason we have voted against this as a full committee in the past is that application of NFPA 68 to flour silos and other similar structures is both impractical and in fact creates a new food safety risk. If one runs the design requirements on a typical flour silo one finds tens of feet are added to the silo structure.

Any NFPA standard that applies to a food plant must in fact be law conform to good manufacturing practices as laid out by federal and state law. As proposed by the committee, NFPA 61 does this and does not create human food safety risks. If the standard is applied to a bin of the type commonly installed for the safe handling of food materials the result will be a huge dead space on the top of the bin which presumes a potential bug horribilis. Humidity problem and oddly enough by applying NFPA 68 to this structure we in fact create the most hazardous dust concentration area and thus increase the size of a potential event.

The sponsor of this amendment went so far as to state that maybe then bins of this type should be outlawed. This shows a complete lack of common sense and a clear lack of understanding of food safety. Food safety issues cannot take the back seat to fire safety. There are many ways we can protect against a deflagration event we need not sacrifice innocent populations to tainted food in order to accomplish our goal.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: P. D. "NICK" Thielen COE (certified safety engineer), CHMM (certified hazardous materials manager)

Date: Tuesday June 26, 2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I believe there are many silo/bin/tank installations that require a proper Hazard Analysis but may not necessarily require explosion venting or may be better fitted with an active suppression system if so required. To me, the proposed 4.5.2 reads as if deflagration venting is the only solution to proper protection and safety.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Clyde Waller

Date: 6/28/2012

June 2011 (Ballot Form)
Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

See committee statement from ROC.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Jeanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Stephen Wees

Date: 6-25-12

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Duffs
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2 Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2 Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Previously Voted Down Twice, No New Data Introduced

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:

Name - Please print: J. Anthony Yantz

Date: 6/28/2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9

Amendment: Accept Comment 61-13

☐ Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

4.5.2* Where explosion relief vents are provided on silos, bins, and tanks, they shall operate due to overpressure before the container walls fail.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Requiring venting on all bins tanks and silos will certainly not solve a problem however it will start a dialog and will lead to changes that improves the code. Excluding venting due to bin or silo geometry or building constraints removes the need for the designer to address the problem and will never move an industry toward better protection. Requiring venting will push the designer to acknowledge the potential for a loss and develop mechanisms to mitigate the potential.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: __________________________

Name - Please Print: William E. Jenz

Date: June 28, 2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-9


X Agree

If you agree with this amendment, the result will be to modify Section 4.5.2 to read as follows:

4.5.2* Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

JUSTIFICATION:
Most of the deaths and injuries in agricultural dust deflagrations are caused by improper or no provision for explosion venting and explosion isolation. This amendment deals with the venting issue. Most committee members recognize the problem, but will not admit it openly. In fact, in the 2012 ROC, the committee inserted the following text into the annex:

“A 4.5.2 [...] Situations can occur in which it is not possible to provide calculated deflagration venting as described in NFPA 68, Standard on Explosion Protection by Deflagration Venting. Such situations do not justify the exclusion of all venting. The maximum practical amount of venting should be provided, since some venting should reduce the damage potential. In addition, consideration should be given to other protection and prevention methods.”

Yet, the mandatory portion of NFPA 61 still exempts “Bins and silos where explosion venting is not practical due to bin or silo geometry, building constraints, or both.” Amazingly, this exception applies to both existing facilities, as well as new facilities that will be designed in the future. In my view, not protecting existing enclosures that can present a flash fire or explosion hazard is negligent. Allowing new facilities to be designed and built in a way they cannot be protected is criminally negligent. Sadly, NFPA 61 allows both.

I am in favor of this amendment because it forces the protection issue. If an owner/operator does not believe venting is necessary, then she can do a process hazard analysis to see if explosion protection is needed indeed, and resort to performance based design or other protection means.

According to NFPA rules and regulations, those voting against the amendment are required to provide valid reasons why. In this ballot, the majority of the members voting against the amendment invoked a justification that they already voted against it at the ROP and ROC ballots. This is not a valid justification because it obviates the function of the Association Technical Meeting.

Some members pointed out that NFPA 68 methodology for vent sizing is valid for silo volumes of up to 10,000 m3 and L/D of up to 8, and argued venting should not be required until tests are done in silo volumes exceeding 100,000 m3. This too is not a valid reason to vote against the amendment because, the logic dictates, if they truly believe in what they are saying, then the new
designs should not go beyond the region of applicability specified in NFPA 68. (Incidentally, 
industry trade association, National Grain and Feed Association chose to use a 500 m3 cylinder 
to perform the silo venting tests.) Yet, because of the exemption in NFPA 61, the new silos, and 
their L/D ratios are getting larger and larger, while they are getting more and more difficult to 
protect.

The bottom line is, before the OSHA grain standard was implemented, agricultural and food 
processing industry had a horrible safety record. The OSHA grain standard helped this industry’s 
safety record improve from horrible to bad. While the OSHA is rightly contemplating to revisit 
the old grain standard, it would be unconscionable for NFPA to deliberately expose grain and 
food workers to significantly greater risks than their counterparts in other industries.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects 
National Fire Protection Association 
1 Batterymarch Park 
Quincy, MA 02169 
FAX: 617-984-7110

Signature: 

Name - Please Print: Dr. Erdem A. Ural 

Date: 7/8/12
Committee Meeting Action: Reject

Proposed text clarifies the requirements and makes the document result in safer applications.

Purported Committee belief "that it is physically impossible to design explosion vents for most silos in accordance with NFPA 68, Standard on Explosion Protection by Deflagration Venting" defies logic, common sense and science.

Proposal 61-21 (Log #58) should be accepted as it represents proper safe practice of over-pressure from deflagration. Bins, tanks and many silo’s are and can be protected by NFPA 68 Venting. NFPA 68 is very appropriate for designing explosion vents for silos, bins and tanks and should be used.

It is hard to understand the rationale behind the committee statement in regard to application of NFPA68 to silos. This is particularly so since 110 directly applicable test data points (L/D greater than or equal to 6) are included in the 350+ data points supporting the current NFPA68 dust equation. The large L/D data extends to as large as 236 m3 silos. The committee should understand that the silo tests were not destructive tests and the test vessels survived. Therefore it can not be said that it is physically impossible to design vents to protect a silo. The committee might say that desired silo construction techniques make it impractical to protect them against deflagration by explosion venting.

If it so desires, the Committee can grant special grandfather privileges to older unconfined facilities. Current text is irresponsible because it perpetuates bad design habits, which are known to be unsafe, into new buildings.

Committee Meeting Action: Reject

Committee Statement: The data presented in the Committee meeting by the submitter represents a small number of applications covered by the scope of NFPA61. NFPA 61 does not prohibit the use of explosion venting, and where it is used, it is required to be in accordance with NFPA 68. The data presented did not support the requirement for all silos to be provided with explosion venting in accordance with NFPA 68. Additional data would be required to show applications on a larger scale that are more common in the industries using NFPA 61.

(See 61-13_Log#19_Chart for Silo_below)

Number Eligible to Vote: 28
Ballot Results: Affirmative: 21 Negative: 5 Abstain: 1
Ballot Not Returned: 1 Nitsch, K.
Recommendation: Revise text to read as follows:

4.5.2 Explosion relief vents designed in accordance with NFPA 68 shall be provided on silos, bins, and tanks.

Substantiation: Proposed text clarifies the requirements and makes the document result in safer applications.

Committee Meeting Action: Reject

Committee Statement: The Committee rejected the submitter’s recommendation because they believe that it is physically impossible to design explosion vents for most silos in accordance with NFPA 68, Standard on Explosion Protection by Deflagration Venting.

Number Eligible to Vote: 28
Ballot Results: Affirmative: 24 Negative: 3
Ballot Not Returned: 1 Schoeff, R.

Explanation of Negative:
MCLELLAND, B.: Proposal 61-21 (Log #58) should be accepted as it represents proper safe practice of over-pressure from deflagration. Bins, tanks and many silo’s are and can be protected by NFPA 68 Venting.
SUTTON, J.: NFPA 68 is very appropriate for designing explosion vents for silos, bins and tanks and should be used.
URAL, E.: It is hard to understand the rationale behind the committee statement in regard to application of NFPA68 to silos. This is particularly so since 110 directly applicable test data points (L/D greater than or equal to 6) are included in the 350+ data points supporting the current NFPA68 dust equation. The large L/D data extends to as large as 236 m3 silos. The committee should understand that the silo tests were not destructive tests and the test vessels survived. Therefore it can not be said that it is physically impossible to design vents to protect a silo. The committee might say that desired silo construction techniques make it impractical to protect them against deflagration by explosion venting.

Comment on Affirmative:
GUARICCI, D.: The submitters request is logical. The rejection is based on an improbability of providing vents. We have provided suppression and venting on Silos. NFPA 68 discusses the needs of silo protection so that document does not accept the committees reasoning. In point the Performance Based section of 68 would allow an analysis the acceptability of a given vent area based on mountable area. It also would allow consideration of the explosion hazard for new installations. Eliminating any reference eliminates the need of protection review.
YOUNT, J.: Agree with Committee Meeting Action and/or Committee Statement.
ERDEM URAL: I'm doing 61 -- oh, move to
make a motion to accept proposal 61-20 -- is it 61-20?

PRESIDING OFFICER McDANIEL: Okay. All
right. Is there a second? We have a motion on the
floor to accept Comment amending motion 61-9. Second?
We have a second.

Please proceed.

ERDEM URAL: Most of the deaths and injuries
in agricultural dust explosions are caused by improper
or no provision for explosion venting and explosion
isolation.

This motion deals with the venting issue.
And NFPA 61 does not require any venting in existing
facilities. That may be understandable, may be a risk
management kind of argument.

Surprisingly, and this is really upsetting,
it also does not require venting in any new facility.
Therefore, it encourages new facilities to be built in
an unsafe fashion. So it propagates a bad habit, a
proven bad habit into newer designs.

Venting is a method proven time after time.
The majority of the committee denied this fact for the
comments. In reality, the committee acknowledged that
fact in the annex material.

If you go to comment 61-26 the committee put
in the annex. Situations can occur in which it is not
possible to provide calculated document venting as
described in NFPA 68, standard of explosion protection
venting.

Such situations do not justify the exclusion
of all venting. The maximum practical amount of venting
should be provided since some venting should reduce the
damage potential.

In addition, consideration should be given
to other protection and prevention methods.

PRESIDING OFFICER McDANIEL: One minute.

ERDEM URAL: This is all very useful
information, but why bury it in the annex while the main
body says you don't have to do venting if you can't?
I really hope that you will support this motion and make it pass because it will be irresponsible not to.

PRESIDING OFFICER McDANIEL: Thank you.

Mr. Bujewski, would you like to present the committee's position?

COMMITTEE CHAIR BUJEWSKI: Yes. This is a very old issue with the agricultural dust committee.

Historically the length and diameter ratio of large modern silos that are used to hold grain makes it physically impossible to design explosion vents in accordance with NFPA 68. That's historically why the industry has not been able to do it.

The NFPA 61, however, does state if you do install explosion venting, it shall be installed in accordance with 68. There are certain silos, certain bins that you would be able to install venting. It's just it's not required by 61 because it's very difficult except on an individual basis to determine what would be able to have venting and which ones would not.

So during the ROP stage, the committee rejected the proposal 24 to 3.

In the ROC stage, Mr. Ural submitted experimental test data for venting of silos. The test data represented a very small range of silo size covered by the scope of NFPA 61.

As a result of that, the committee again rejected the proposal 21 to 5, but we did submit a code fund project to the NFPA to study explosion venting on the very large grain silos that are in existence today.

Hopefully the study can be complete in time for our next revision cycle.

So the committee recognizes the question, but there's not enough data to really include it in the standard at this time.

PRESIDING OFFICER McDANIEL: Thank you.

With that, we'll open debate on the motion. Please provide your name and affiliation, whether you're speaking in support of or against the motion.

Microphone 8, please.
JESS McCLUER: I'm Jess McCluer with the National Grain & Feed Association and I'm against the motion.

I'd like to follow up on what Mr. Bujewski said about the experimental test data that was in the report on comments.

Some of the material that was in the test data submitted by Mr. Ural was from a study that the National Grain & Feed Association Fire and Research Council did over 30 years ago. It was well known within the industry.

And as the chairman said, the data does not account for the newer types, larger types of storage units that are currently used within the industry. As a result, the National Grain & Feed Association, the National Grain & Feed Foundation we're currently in the process of conducting a research study on the feasibility of meeting the current NFPA standards to the numerous types of grain storage units that are out there.

And we'll also be doing a cost/benefit analysis to see what the costs would be if it would be possible to implement the current NFPA standard. Thank you.

PRESIDING OFFICER McDANIEL: Thank you.

ERDEM URAL: Erdem Ural speaking for the motion. Just a couple of points. Mr. Bujewski pointed out that the difficulty with the silos with a large lower ratios and Mr. McClure said the data -- also Mr. Bujewski also said the data goes up to 500 cubic meters.

That's exactly the point. That's no excuse not to design new facilities with huge silos with long LORD. You can still do, if you want to design it to data, you can have the silos or the facilities up to 500 cubic meters. 500 cubic meters is huge.

National Grain & Feed Association they have found their project on the facility that's 500 cubic meters. If they found it was inappropriate, why did they waste their money?
What you can do is go to NFPA 68 and NFPA 68 took this data going up 500 cubic meters and used the consensus process and NFPA 61 committees values so much to extend it up to 10,000 cubic meters. That's an extrapolation which lets you go a factor of 1.7 or 2.7, it's in the documents in linear dimension that lets you extrapolate up to 10,000 cubic meters.

That's a consensus process adopted by the explosion protection systems committee. So you can design smaller vessels. You can design stronger vessels if you increase the strength of your enclosure, NFPA 68 --

PRESIDING OFFICER McDANIEL: One minute.

ERDEM URAL: -- will let you -- if you increase the strength of your enclosure, NFPA 68 will allow you to put smaller vents because a vent area goes in the other direction of strength of your enclosure.

So I think it's very inappropriate to say there is no data, so we can't do anything. Let's get NFPA to an original project. NFPA is never going to get a million dollars to do it. In the meantime, we'll be exposing our workers to death, injury, burning and also hurting the owners by losing their investment.

Microphone 1, please.

JOHN CHOLIN: Yes, Mr. Chairman. My name is John Cholin from JM Cholin Consultants. I'm speaking in favor of the motion.

If you know you need to vent a vessel, you design the vessel so it can be vented. The problem only comes in when someone is working under the delusion they don't have to vent the vessel.

So that by placing this requirement in the standard, it puts designers of facilities on notice they have got to design the vessels so that they can be vented. And you can vent virtually any vessel, including this room.

I urge the membership to vote for the proposal.

PRESIDING OFFICER McDANIEL: Thank you.
Microphone 5, please.

MARCELO HIRSCHLER: Marcelo Hirschler, GBH International in support of the motion.

I want to read a couple of the negatives that were put. One negative by Mr. McClellan says the statement by the committee excludes all enclosures leaving the statement in places both life and property at risk when it could be protected.

Mr. Meyers says if the committee's reason for rejecting there's not sufficient evidence that explosion venting is needed for large silos, the committee could have prevented -- required venting for other protection on smaller vessels.

But what the committee did is just kick the ball down. This is what it's been doing in all of these proposals that Dr. Ural has been putting forward. The committee is attempting to not address the fire safety issue.

I urge this body to support the motion and approve and get some change. If the silos cannot all be vented in accordance with NFPA 68, and Mr. Cholin said they can, then we will work in the future to get some change in some way. But we need the protection because this is a fire safety issue. Please support the motion.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 5, please.

BILL STEVENSON: My name is Bill Stevenson, my company is CV Technology. I'm speaking in favor of the motion.

Here is an area where the technical committee for 61 really has I think a valid point. And I'm speaking against him on this. I know there's going to be confusion. But it really is true that there are existing facilities, older facilities, large concrete silos not strong enough to protect, can't be reinforced or indoor silos can't get the venting to the outside because of structural problems or interferences.

And so the existing language in the existing structure I think has merit and has a place in the document. The problem is that this is not a universal.
There are times, particularly in new construction, where stronger language requiring venting would be appropriate. And I think the overlying consideration which my predecessor at the microphone stated quite well and eloquently, we really do have a risk and we really do need to add it and we can't just keep kicking the can down the street. Thank you very much.

PRESIDING OFFICER McDANIEL: Thank you. Microphone 8, please.

JIM MANESS: My name is Jim Maness. I'm speaking against the motion. I'm with the National Grain & Feed Association and Grain Elevator and Processing Society regarding this issue. The data that was referenced for 500 cubic meters was stated it was collected and done under NFPA research. In fact, I was present during the testing of 500 cubic meter silos that was tested and I think there were six data points that one 500 cubic meter silo and the seventh one the silo blew apart. So I doubt that that's an overwhelming amount of data or convincing information that it's a valid use of it. Not only that, they were taking data from 20- and 60-cubic meter vessels, using that and the 500 cubic meter vessel and the 236 that we also sponsored that research for. The only reason 236 worked is we built it three or four times stronger than any we had ever done before. And even when you saw that 50, it was a jet type event. If anything was near it, it would have been a major problem with the jet venting out of a 236-meter silo. So there is overwhelming information that says we should be doing these smaller silos, like 236 or 500 cubic meters. There's a lot of questions that still need to be answered and we're still investigating the silo venting issue. I know that 68 has been rewritten, reformulated. They took data. They got together with I
believe the European group and compared data and formulas. And yet those formulas --

PRESIDING OFFICER McDANIEL: One minute.

JIM MANESS: -- when they were applied to operations have not proven them to work. Thank you, sir.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 5, please.

ERDEM URAL: Erdem Ural speaking for the motion. What Mr. Maness said is actually supporting my statement. So I think there is hope that he and I will start working together soon.

There are a couple of things he said. There was one test where there was a flame jet ignition where the very large pressures were produced and the enclosure was damaged. That's true. That's a well known fact.

And in fact, that's why we have the explosion isolation requirements in the other standards. That's why we have it in 654. That's why it's required in NFPA 69 and that's why I have a NITMAN on this committee that we'll discuss later on.

If you let the flame come in as a flame jet into an enclosure, nothing works. Explosion suppression doesn't work. Explosion venting doesn't work. So you don't let it happen. You put explosion isolation systems.

He also mentioned that the methodology in NFPA 68 have been calibrated using data from smaller enclosures, too. That is true. The fact is I was partly responsible for that or maybe I take credit for developing that methodology.

The committee has taken scientific method, came up postulated sort of a way to calculate pressure in a vented explosion and come up with simple correlations and then tested that. And one of the parameters in the correlation is the size of the enclosure and the strength of the enclosure.

And then we took all the available data going from I forgot what's the smaller size all the way up to 500 cubic meters and we have a lot of predicted
versus actual in the experiment and that has been
reproduced in your -- in your ROC reports for this.

PRESIDING OFFICER McDANIEL: One minute.

ERDEM URAL: It shows that we're in
agreement. The methodology captures all the salient
features for small vessels as well as large vessels.
Tests have been up to 500 cubic meters and that's why
the committee feels comfortable enough to extrapolate it
to 10,000 cubic meters.

So let's not -- let's give up the double
talk, a consensus that methodology is good for one
standard and not good for the other standards. NFPA
explosion protection systems committee specialize on
explosion venting. They are specialists in that area
and let's rely on their judgment and on the
recommendation.

So I strongly urge you to support this
motion.

PRESIDING OFFICER McDANIEL: Microphone 8,
please.

JIM MANESS: Jim Maness, National Grain &
Feed Association and Grain Elevator and Processing
Society speaking against the motion.

I want to point out to everyone that in our
industry, these kinds of silos that we talked about,
500, 236, they are very small silos. We have silos that
are 60,000 to a hundred 20,000 cubic meters.

So extrapolating data from a 20 cubic meter
vessel to even if the 500 were 500 cubic meter vessel
was valid, is highly suspect if you can extrapolate that
data and that we have any confidence we can really do
that sort of thing.

So in practice, the size and scope of our
silos in our structures are much greater than what Mr.
Ural and others have indicated.

COMMITTEE CHAIR BUJEWSKI: Mr. Chair? Okay.
speaks to my point. It's not quite true that we are using 20 meter data to do venting for. We have do venting for large silos.

We are saying that we have data up to 500 cubic meters and the smallest size used here is 20 cubic meters. And then the methodology works for all the things in between and we don't see any differentiation based on the size.

So if Mr. Maness wants or the committee wants to be super careful and not to believe this methodology about 500 cubic meters, than we are saying don't design any facilities larger than 500 cubic meters unless you have data or until you have data.

But we're also saying the specialists committee on this through the consensus process said you can use it up to 10,000 cubic meters, use it. And then the committee statement says any venting is beneficial.

So use it.

So in their conclusion you can design your vessel with smaller silos or vents. You can design it with a smaller LORD and you can design them to resist higher pressures.

I just investigated a grain elevator explosion and also another grain elevator explosion you always see these things rupture and they rupture, they let the flame go away from it. Where do the flames go? Toward to where the workers are. They burn the workers. They kill them and they destroy the silo. If the workers don't get burned, they have some things fall on them and they die because of that. Thank you.

PRESIDING OFFICER McDaniel: Thank you. Microphone 2.

UNIDENTIFIED SPEAKER: Thank you, Mr. Chairman. Point of order. We would appreciate it if the last speaker would identify himself and his position on the motion.

ERDEM URAL: Thank you for the reminder.

It's Erdem Ural speaking for the motion.

PRESIDING OFFICER McDaniel: Thank you.
Microphone 1.

UNIDENTIFIED SPEAKER: I call the question.

UNIDENTIFIED SPEAKER: Second.

PRESIDING OFFICER McDaniel: We have a motion and second on the floor to call the question to close the debate.

Please record your votes, one in favor of the motion or two opposed to the motion.

Five seconds. Balloting is closed. Motion passes.

We'll proceed to the vote. The motion on the floor is to accept Comment 61-13.

Please record your votes, one in favor of the motion accept or two opposed to the motion reject.

Five seconds. Balloting is closed. Motion passes.
Linda/Amy:

Please accept this note as formal declaration of my intent to appeal committee actions on ATM amendments CAM 61-6, CAM 61-9 and CAM 61-10.

Please advise how much time I have to file the appeal.

Sincerely Yours,

Erdem

781-818-4114
NFPA CAM 61-9 Appeal
NITMAM Log #1034

NFPA 61: STANDARD FOR THE PREVENTION OF FIRES AND DUST EXPLOSIONS IN AGRICULTURAL AND FOOD PROCESSING FACILITIES

(1) Name, affiliation, and address of the appellant
Dr. Erdem A. Ural
659 Pearl Street
Stoughton, MA 02072
(781) 818-4114
Erdem.ural@lpsti.com

(2) Statement identifying the particular action to which the appeal relates
the floor action on CAM 61-9

(3) Argument setting forth the grounds for the appeal
Please see below.

(4) Statement of the precise relief requested
Uphold floor action, Accept Comment 61-13. (Passed on Floor 131 to 118, Failed Committee Ballot.)

GROUND FOR THIS APPEAL

This appeal is seeking to fix a deadly flaw in NFPA 61 so that it requires protection for silos and bins. Most other NFPA dust standards spell out such requirements, particularly for new facilities. NFPA 61 is the only one that gives the carte blanche to agricultural and food industries not to protect dangerous enclosures at the expense of workers’ lives.

Most of the deaths and injuries in agricultural dust deflagrations are caused by improper or no provision for explosion venting and explosion isolation. This amendment deals with the venting issue. Most committee members recognize the problem, but will not admit it openly. In fact, in the 2012 ROC, the committee inserted the following text into the annex:

“A.4.5.2 [...] Situations can occur in which it is not possible to provide calculated deflagration venting as described in NFPA 68, Standard on Explosion Protection by Deflagration Venting. Such situations do not justify the exclusion of all venting. The maximum practical amount of venting should be provided, since some venting should reduce the damage potential. In addition, consideration should be given to other protection and prevention methods.”

Yet, the mandatory portion of NFPA 61 still exempts “Bins and silos where explosion venting is not practical due to bin or silo geometry, building constraints, or both.” Amazingly, this exception applies to both existing facilities, as well as new facilities that will be designed in the
future. In my view, not protecting existing enclosures that can present a flash fire or explosion hazard is negligent. Allowing new facilities to be designed and built in a way they cannot be protected is criminally negligent. Sadly, NFPA 61 allows both.

I am in favor of this amendment because it forces the protection issue. If an owner/operator does not believe venting is necessary, then she can do a process hazard analysis to see if explosion protection is needed indeed, and resort to performance based design or other protection means.

According to NFPA rules and regulations, those voting against the amendment are required to provide valid reasons why. In this ballot, the majority of the members voting against the amendment invoked a justification that they already voted against it at the ROP and ROC ballots. This is not a valid justification because it obviates the function of the Association Technical Meeting.

Some members pointed out that NFPA 68 methodology for vent sizing is valid for silo volumes of up to 10,000 m³ and L/D of up to 8, and argued venting should not be required until tests are done in silo volumes exceeding 100,000 m³. This too is not a valid reason to vote against the amendment because, the logic dictates, if they truly believe in what they are saying, then the new designs should not go beyond the region of applicability specified in NFPA 68. (Incidentally, industry trade association, National Grain and Feed Association chose to use a 500 m³ cylinder to perform the silo venting tests.) Yet, because of the exemption in NFPA 61, the new silos, and their L/D ratios are getting larger and larger, while they are getting more and more difficult to protect.

The bottom line is, before the OSHA grain standard was implemented, this industry had a horrible safety record. The OSHA grain standard helped this industry’s safety record improve significantly, from horrible to bad. While the OSHA is rightly contemplating to revisit the grain standard, it would be unconscionable for NFPA to deliberately expose grain and food workers to significantly greater risks than their counterparts in other industries.

In Chapter 1, NFPA 61 states: “The provisions of this standard reflect a consensus of what is necessary to provide an acceptable degree of protection from the hazards addressed in this standard at the time the standard was issued.” How can this be true while NFPA 61 denies even the most basic requirements of other NFPA combustible dust standards?
Engineering Department Memo

TO: NFPA Standard Council
FROM: William F. Kearns, P.E., Vice President, Engineering
Member NFPA 61 Technical Committee
wkearns@pfening.com
DATE: July 19, 2012

RE: Silo safety – In reference to appeals 61-6, -9, and -10

The Fred D. Pfening Company has been supplying bulk silo systems to the baking industry since the 1950’s. Early projects were largely screw conveyor systems. Beginning about 1955, pneumatic conveying systems supplanted mechanical conveying and have been the baking industry standard ever since. These systems include both flour and sugar systems and a few other ingredients handled in bulk, such as corn flour, dextrose, etc.

The silos are commonly welded carbon steel, typically cylinders twelve feet in diameter and 35-60 feet tall storing 80,000 to 200, 000 pounds of material. A small percentage of the silos are horizontal bins of rectangular welded construction. A few of the silos are aluminum or stainless steel construction. Only a handful have been equipped with explosion vents or other protection.

We believe that these systems have an exemplary safety record and this paper presents some historical data to support this claim.

An informal review of Pfening’s larger projects 1955-2005 suggests that we can account for about 14,000 silo-years of service. Silo-years was calculated in the following manner:

- Project A, installed 1959, 10 silos, still in operation in 2012:
  - 52 years x 10 silos = 520 silo-years
- Project B, installed 1971, 2 silos, closed in 1999:
  - 28 years x 2 silos = 56 silo-years
We are aware of two dust explosion incidents involving silos. Both of these were flour silos and both incidents were due to gross negligence. Here is a brief description of both:

- A customer had two flour silos located outdoors. One was empty, being cleaned by a contractor. The top and bottom hatches were both open. A standard trouble light was being used and the bulb broke, causing an ignition. The resulting deflagration vented out the two hatches. A worker partially in the top hatch was burned. We have no information on the extent of his injuries, but believe he survived. There was no significant damage to the tank or any other equipment.

- A customer had two flour silos in a concrete block building with a wood truss roof. The customer added onto the building and extended the silo fill lines using plastic pipe. The truck drivers complained for months that the plastic pipe generated sparks and made snapping and crackling noises. One day one silo was being filled and the truck driver reported hearing a “whoomp” sound and looked up to see the building roof lift up a few feet, fire and smoke come out, and the roof fall back down. A fire was started in the silo. No one was injured, but the silo building had to be replaced. The only damage to the tank was to the interior paint.

So we have two incidents and no fatalities in 14,000 years of service. And neither of the incidents occurred in “normal” operation.

Pfening’s position is that a mandate that all silos be equipped with explosion venting is completely unwarranted and unsupported by historical data.
NFPA Standards Council  
NFPA 61 Appeals  
National Fire Protection Association  
1 Batterymarch Park  
Quincy, MA 02169-7471

RE: Silo Safety in Reference to Appeals 61-6, 61-9 and 61-10

Hostess Brands Corporation has been in the bakery industry for over 100 years. During those years it has made several acquisitions of other baking companies. Continental Baking, JJ Nissen and Purity Baking to name a few.

In processing our baked goods we have utilized bulk silos to pneumatically convey ingredients. These systems primarily convey flour, sugar and a few other ingredients.

The silos are commonly made of welded carbon steel. Typically these cylinders are 12 feet in diameter and 35 to 60 feet tall, storing 80,000 to 200,000 pounds of material.

We also have a smaller percentage of horizontal bins of rectangular welded construction.

We believe these systems have an exemplary safety record and listed below are some facts to support this.

Our company currently has over 150 silos and horizontal bins in operation. The average age of these silos and bins are in the 30 year plus range.

In our company’s history we are not aware of any occurrences of a dust explosion incident that involved the silos or horizontal bins.

Since we have had no dust explosions related to silos in our history, our company’s position is that a mandate that all silos be equipped with explosion venting is completely unwarranted and unsupported by historical data.

Sincerely,

John Grauel

John Grauel  
VP Engineering  
John.Grauel@hostessbrands.com

klb
Subject: FW: NFPA 61 Appeals

From: David Kirby [mailto:Dkirby@BakerRisk.com]
Sent: Thursday, July 26, 2012 8:30 PM
To: Cronin, Amy
Cc: Fuller, Linda; Maynard, Mary; erdem.ural@lpsti.com; walt frank (wlf@frankrisk.com); Rodgers, Sam (Process Safety); Quentin Baker; Kelly Thomas; Bob Gombar
Subject: NFPA 61 Appeals

Amy, and Members of the Standards Council,

As former Chairman, and current member of NFPA 68 & 69, and member of NFPA 654, and with many years of experience with explosion/fire protection, I am writing to support two of Dr. Ural’s appeals to the Standards Council, 61-9, Log#1034 and 61-10, Log#1041. My support of 61-9, Log#1034 is contingent on the assumption that they would apply to new construction only. Appeal 61-9, Log#1034 addresses the need for deflagration venting of grain silos. Either providing weak roof-to-shell venting of the entire top of the silo, or providing perimeter venting around the sides of the silo near the top are feasible and acceptable methods of deflagration venting, per NFPA 68. At Union Carbide, where I worked for many years, we developed a standard design for deflagration venting of granular polyethylene storage silos, with perimeter venting around the top of the shell, and at no significant increase in cost.

I support performance-based design language in NFPA 61 (61-10, Log #1041) that allows a risk-based approach to determine the protection to be provided (similar to language in NFPA 654). A process hazard risk assessment (PHRA) would likely determine that the risk of silo explosion without deflagration venting would meet generally accepted “acceptable risk guidelines” (see CCPS “Guidelines for Developing Quantitative Safety Risk Criteria (Risk Tolerance Criteria or RTC Guidelines, 2009)) for silos that are filled infrequently, such as family farms. These cases clearly have low risk, because of lack of enabling factor that explosion hazard typically only exists while the silo is being filled. Other examples of low risk because of low frequency include storage of high minimum ignition energy materials (MIE) where recognized ignition mechanisms are below (with appropriate safety factors) credible ignition energies. I support an exception for the low risk events. Note that CCPS gives no specific risk acceptance criteria, but that is up to the owner/operator to make a risk acceptance decision (presumably based on CCPS Guidelines or equivalent risk criteria). I support adding appropriate language in NFPA 61 Appendix that covers these situations, with a generic risk acceptance criteria, so that each location would not be required to do a documented risk assessment for each storage silo.

Some additional comments:

- Cost of explosion venting silos spread over the entire job is insignificant.
- Perimeter venting is much preferable to frangible roof or weak roof-to-shell seam from a safety standpoint. Also, because of the (approximately 25 degree) angle of repose for most grains, the design to accommodate perimeter venting does not reduce storage capacity of large diameter silos if the silo is center filled.
- Using concrete construction for the roof of weak roof to shell design does not meet the intent of NFPA 68. A metal roof must be used, but can exceed the 2 ½ lbs/ft2 limitation found elsewhere in NFPA 68.

Thank you very much.

Kirby
To the Standards Council,

I am the current chair of the Technical Committee on Explosion Protection Systems and serve on 654, 484, and most recently 652 committees. I am writing in support of this appeal to include language that explosion protection be provided according to NFPA 68/69 with venting according to NFPA 68. I have read the supporting input provided by Dave Kirby and second that completely.

Except - Bins and silos where explosion venting is not practical due to bin or silo geometry, building constraints, or both….

By permitting that explosion protection can be eliminated in a general case based on practicality of installation, instead of on the basis of a risk evaluation or performance-based design, appears on the face to ignore the hazard presented by the explosion. No alternative mitigation is required in the case where it is not practical – rather the hazard is accepted.

Further, the position being taken by the 61 committee permits new silos and bins to be constructed without regard to protection against explosion while silo and bin explosions continue at a significant rate. In fact, it permits the situation to continue to worsen since the desired physical construction trumps the ability to be able to protect new equipment. New construction can be even larger L/D ratio, making it more difficult to protect and more likely to fail catastrophically in the event of an ignition.

I cannot imagine a similar argument with a dust collector….I would like to build this collector from 24 gauge steel and install it inside the building close to the operation. Since I have chosen to use 24 gauge metal, NFPA 68 requires more vent area than I can practically install. Therefore I accept the hazard.

I urge the Standards Council to support these appeals and recognize that uncontrolled rupture of bins and silos can be prevented using the methodologies in NFPA 68 and 69.

Regards,
Samuel Rodgers
July 16, 2012

Secretary
Codes and Standards Administration
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02169-7471

RE: Certified Amending Motions to NFPA 61 - Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities

To Whom It May Concern:

The undersigned individuals and the American Feed Industry Association (AFIA), the Grain Elevator and Processing Society (GEAPS), the National Grain and Feed Association (NGFA) and the U.S. Beet Sugar Association (USBSA) submit these comments in response to amendment motions concerning NFPA 61 and the discussions relating to them that took place during the June 13, 2012 NFPA Association Technical Meeting in Las Vegas, NV.

Representatives from several of these agriculturally-based trade and professional associations, as well as representatives from the association member companies serve on the NFPA 61 Technical Committee, Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities. Many of the representatives from these organizations attended the Association Technical Meeting and spoke during the discussion regarding the proposed amending motions. This document supplements the remarks recorded in the transcript.

AFIA is the national trade association for the feed industry representing nearly 500 member companies. AFIA members manufacture 75 percent of the feed and pet food sold annually in the United States, and membership includes manufacturers, ingredient suppliers, animal health companies, equipment manufacturers, large integrated livestock and poultry producers, and firms providing other goods and services to the animal food industry.

GEAPS is a not-for-profit professional association dedicated to advancing leadership, innovation and excellence in grain handling and processing industry operations. There are currently some 2,400 GEAPS members in 17 countries. The majority of members is employed in North America and is responsible for the operation of more than 10,000 grain handling facilities worldwide. The GEAPS organization comprises 30 local chapters in North America – including the United States and Canada.
The NGFA is comprised of 1,050 member companies that operate more than 7,000 facilities and handle more than 70 percent of the U.S. grain and oilseed crop. NGFA membership encompasses all sectors of the industry, including country, terminal and export grain elevators; commercial feed operations; biofuel producers; cash grain and feed merchants; end-users of grain and grain products, including processors, flour millers, and livestock and poultry integrators; commodity futures brokers and commission merchants; and allied industries.

The USBSA represents eight beet sugar companies, which operate twenty-one processing factories in nine states. These firms produce refined sugar from sugar beets grown by about 10,000 family farmers on about 1.2 million acres in eleven states. All of the member firms are farmer cooperatives.

Virtually all of the associations’ facilities are subject, in whole or in part, to the Occupational Safety and Health Administration’s (OSHA) grain handling standard, 29 C.F.R. 1910.272, as well as NFPA 61.

Taken together, the associations represent an important segment of the U.S. agricultural grain, feed and processing industry. Our members are critical in handling and producing the domestic food and feed supply, promoting U.S. agricultural exports, and promoting energy independence in the United States. Representatives from individual member companies, including, Ag Processing Inc., and ConAgra Foods, Inc. either serve as principal members or alternates on the NFPA 61 committee.

During the 1980s, NGFA, and the other trade groups, worked with OSHA to develop the grain handling standard, 29 C.F.R. 1910.272, which was promulgated in 1988, to address fires and explosions. Since that standard was implemented, NGFA has worked with OSHA officials to clarify compliance requirements and convey this information to industry. In addition, OSHA has published compliance information, including a booklet explaining the standard's requirements and enforcement guidance for compliance officers, clarifying regulatory obligations under the standard.

NGFA, as the principal representative of the grain handling industry, has been at the forefront of research and development designed to enhance safety. The industry is dedicated to pursuing and promoting technological innovations, new practices, and safety training and education programs that contribute to safe and efficient grain handling operations. All of these efforts are vital, first and foremost, to safeguard human resources. Clearly, the industry has demonstrated its commitment to safety, both prior to and after the promulgation of the grain handling standard.

More broadly, the grain, feed and processing industry has demonstrated a successful commitment to safety that is reflected in its excellent safety record for the past 25 years. Each of our associations has an experienced and active committee that aggressively promotes safety within the industry. The industry has spent hundreds of millions of dollars towards this success.
Therefore, when OSHA completed a regulatory review of the grain handling standard in 2003 they determined that there have been fewer fire and explosion related fatalities since the rule was promulgated. **OSHA further concluded that the standard should, “continue without major change.”**

In addition, Bill Wright, interim chair of the U.S. Chemical Safety and Hazard Investigation Board (CSB), testified during the House Education and Labor committee’s March 12, 2008 hearing on H.R. 5522 -- the “Combustible Dust Explosion and Fire Prevention Act of 2008”-- that the frequency of grain facility explosions declined by 60 percent following implementation of the grain-handling standard. This is a testament to the combination of industry research, education, training and government involvement.

The current NFPA 61 standard, which has been carefully developed over the past 87 years, reflects the unique operational needs of the grain handling industry and the agricultural sector in general. The standard’s effectiveness is evident in the significant reduction of grain dust explosions over the years, including a large reduction since 1980 following several significant explosions that occurred in the late 1970s.

Over the years, many representatives from virtually every sector of the grain handling industry (grain elevators, feed mills, soy processing, starch manufacturing, flour milling, and other types of mills) have fine-tuned the recommendations of the NFPA 61 standard to fit our operations. Basic facility design elements, such as placing legs outside of facilities and using safety monitoring devices have also been shared through committee participation and NFPA 61 development. Any abrupt or confusing changes to NFPA design and management recommendations would threaten to undermine this safety record by forcing companies to amend their currently successful housekeeping and safety programs.

As a result, during the 2012 revision cycle, many of the changes either accepted or rejected by the committee were made by a large consensus of the group, not just solely industry representatives. Furthermore, we believe the proposed NFPA 61 standard clearly represents a workable consensus for the affected industries and should not be modified because a few persons not familiar with the industry believe they have better solutions. The NFPA 61 committee has continuously strengthened the standard over the past 35 years by adopting requirements reflecting technologies that are proven and feasible.

Therefore, many on the committee were quite disappointed by the proposed Notices of Intent to Make a Motion (NITMAMs) that were submitted and approved by the Motion Committee and discussed at the Association Technical Meeting for the following reasons:

- Almost all of the NITMAMs were based on topics that were previously proposed, discussed and voted upon many times during the NFPA 61 committee’s 2012 Revision Cycle.

- As explained further below, some of the NITMAMs would cause industry to meet theoretical requirements that will not work, are unproven, are not cost-effective, or
will divert attention from currently successful housekeeping and safety programs and facility designs. Several of the proposed changes offered through the NITMAMs appear to come directly from the current version of NFPA 654, the language of which is more generic, is unnecessarily complicated in comparison to NFPA 61 and, and for small companies, so difficult to apply that they would likely have to go to the expense of hiring special consultants. The special circumstances facing those in agriculture are specifically addressed in NFPA 61, which was written to specially reflect the circumstances of the agricultural sector, is more straightforward and easier for its users to understand.

Based on the NITMAM’s, many of the agricultural representatives attended the Association Technical Meeting to offer countering views to the proposed changes. There were 15 motions seeking changes to NFPA 61. Fourteen of these motions were from one of the committee members, Mr. Erdem Ural, and one motion was made by Mr. Marcelo Hirschler, regarding pneumatic conveying. The 14 motions made by Mr. Ural were essentially combined into 7 motions, which made for a total of 8, including Mr. Hirschler’s. The NFPA membership in attendance defeated five of the motions, but accepted three. The NFPA 61 committee’s previous votes on the matters are as follows:

- **Silo Venting (Amendment 61-9)** – Rejected 24 to 3 in the ROP ballot and rejected 21 to 5 in the ROC ballot.
- **Process Hazard Analysis (Amendment 61-6)** – Rejected 26 to 1 in the ROP ballot and rejected 23 to 3 in the ROC ballot.
- **Performance Based Design (Amendment 61-10)** – Accepted in principal and added Annex material at the ROP with vote of 26 to 1 and re-affirmed our position with a vote of 23 to 3 on the ROC ballot.

Some of the reasons why these amendments were and should continue to be rejected are as follows:

**With respect to Amendment 61-6:**

Process hazards analyses (PHA), management-of-change procedures (MOC), and these other requirements are completely unjustifiable and inappropriate for agricultural facilities. These requirements originated in the chemical industry, which has complex chemical processes and novel and varied chemicals, the behavior of which together can be dynamic and often difficult to predict. That is completely untrue of agricultural facilities. The behavior of agricultural dusts and their handling processes have long been known, have remained essentially unchanged for decades, and are not complex. Requiring process hazards analyses is therefore completely unjustifiable.

As to management of changes, in agricultural facilities, the frequency of subtle changes that can significantly increase fire and explosion hazards is rare, and certainly not great enough to require the multi-factor review process and documentation required of changes to less-well understood or more complex processes. So long as the design of, or design change to, an
agricultural facility is reviewed by a qualified person, i.e., a person knowledgeable about the cause, propagation and prevention of fires and explosions involving combustible dust, safety can be sufficiently assured. In sum, PHA’s and MOC’s are too elaborate to be justified.

All this is particularly in the many small facilities in the agricultural industry, in which, either by reason of the size of the facility or the small number of managers, all design elements and all changes come to the attention of a qualified person. So long as a qualified person approves the design or change, additional requirements, including documentation requirements, would not add appreciably to safety, and would add enough to the compliance burden for small facilities that it could not be said to be practical under the circumstances.

With respect to Amendment 61-9:

A rule requiring venting in all silos as a rule is infeasible and unproven. Not only is it very difficult except on an individual basis to determine which silos would be able to be vented and which ones would not, but the length and diameter ratio of large modern silos makes it physically impossible to design explosion vents in accordance with NFPA 68. The motion is based on speculation that the limited data available would justify a requirement for venting on the very much larger silos in use today. The test data submitted by the proponent represents a very small range of silo size, does not reflect the silo sizes used today, and cannot justify an across-the-board rule. The right action is what the committee voted for – an NFPA project to study explosion venting on the very large silos in use today.

In addition, as mentioned at the Association Technical Meeting, the National Grain and Feed Foundation is considering funding a study related to explosion silo venting. The project is intended to provide venting ratio data for silos in the range that are common in the agricultural industry. The study would be designed to follow-up on one conducted by the NGFA’s Fire and Explosion Research Council in 1983 and often referred to by Mr. Ural in his NITMAMs. The research will also evaluate the economic impact of applying NFPA venting standards within grain storage bins and silos.

With respect to Amendment 61-10:

Whether to have this material in the text of the standard or in the Annex is a judgment call that must take into account the nature of the industry that uses NFPA 61. The agricultural industry is comprised of a few large companies and untold numbers of small companies, almost none of whom will have the technical expertise to make any use of this material and nearly all of whom will find it confusing. And its placement in the middle of the standard will strike them as more confusing yet. That confusion is, however, entirely unnecessary. The Committee made a judgment call to place this material in the Annex and that judgment should be respected by those with less knowledge of the agricultural sector.
A Different Matter

We also wish to bring a different matter to the attention of the Standards Council. During the meeting, our representatives were appalled by the vicious personal attacks on our committee and its members by the maker of the motions and the three persons supporting them, all of whom serve on the NFPA 654 committee. Rather than relying on facts, they resorted to personal attacks and appeals to emotions, as documented in the transcript, especially during the silo venting debate.

For example, one person spoke as follows:

“…It’s a reality that addresses the fact that a bunch of gray-haired old guys sitting in the committee room wondering if they are going to finish their work before their plane leaves can’t conceive of all the problems and all the circumstances that exist out there in the real world.”

The proponent of the motions also made a personal remark about an NFPA 61 committee member: “Also this committee [NFPA 61] is the only committee that I serve on [that h]as a lobbyist as a member.”

What occurred during the meeting was a sorry display of disrespect for fellow NFPA members and committee members, all of whom serve as volunteers. NFPA leadership during the meeting should not have allowed it to occur.

It bears observation that almost all of the volunteers who serve on the committee took several days from their busy, everyday schedules to personally attend and participate in the ROP and ROC meetings where the aforementioned issues were discussed. One of the few committee members who did not take the time to appear in person was the same one who took the time to draft and propose fifteen NITMAMs.

We also point out that one participant falsely asserted that data on the Chemical Safety Board’s website shows that our industry has the worst safety record of all:

“If any of you would like to do so, I direct your attention, go to the CSB website, CSB.gov, and look up the statistics and you will find that the agricultural and food products has the worst safety record with respect to explosive dust any industry segment in the United States or Canada.”

The only document we were able to find on the CSB Web page was the 2006 CSB Investigative Report: Combustible Dust Hazard Study. On page 4 under the “Key Findings”, CSB notes:

- OSHA’s Grain Handling Facilities Standard has successfully reduced the risk of dust explosions in the grain industry.
Secondary dust explosions, due to inadequate housekeeping and excessive dust accumulations, caused much of the damage and casualties in recent catastrophic incidents.

On page 60 of the report we found the following quote,

“NGFA stated that its industry had experienced ‘an unprecedented decline in explosions, injuries and fatalities at grain handling facilities’ since 1980. Further, the NGFA credited the standard [OSHA grain handling standard] with stimulating technological advances in the design, layout and construction of grain handling facilities.”

Moreover, silo venting, process hazard analysis and performance-based design have nothing to do with housekeeping and dust accumulation.

Further, CV Technologies President, Martin Cvetas did not support such comments. He stated in a July 3, 2012 letter to Bunge North America (see attached):

“In response to some concerns expressed by Bill Stevenson…CV Technology has issued the following statement:

There is considerable merit to having industry specific standards because the operations are quite different for the industry segments addressed in NFPA 61…There are very useful and practical features to NFPA 61 that make it unique among the Occupancy Standards.

Our involvement in NFPA document development should be limited to documents in which we actively hold a committee seat. Any comments made regarding other documents are those of individuals and do not represent the views of CV Technology.”

Rather than continue to accept behavior that damages the NFPA, we as industry representatives respectfully request that the NFPA staff provide the membership with a set of instructions based on NFPA code of conduct (i.e., participants should conduct themselves at all times in a professional and respectful manner, and shall respect all rulings of the chair. They should express their views through the making of appropriate motions and through participation in the formal debate on motions) and that the moderator enforce decorum during the discussion of NITNAM’s. Those who resort to personal attack or who appeal to emotion should be first admonished and then after future such behavior should be removed from the proceedings.

The authors of this letter strongly support the concept set forth in the statement of General Principles, “promote the development of consensus through the broad and balanced participation of a variety of interests and through the full airing and discussion of all points of view.”
As previously mentioned, the committee’s actions on the ROP and ROC of the certified amending motions addressing silo venting, process hazard analysis and performance-based design show that all had an opportunity to participate and that every member’s view was heard. It is unfortunate that one committee member was not happy with the nearly-unanimous result and is doing everything procedurally possible to create an outcome congenial to himself. To ignore the consensus of the NFPA 61 Committee on these matters would violate the General Principle of consensus and damage the consensus process.

In closing, we strongly urge the NFPA Standards Council to consider and give weight to the consensus of the committee as a whole.

Thank you for your consideration of our views. We would be pleased to respond to any questions you may have.

Sincerely,

NFPA 61 Committee Principals

Keith Epperson, On behalf of the American Feed Industry Association

James Maness, On behalf of the Grain Elevator and Processing Society

Jess McCluer, On behalf of the National Grain and Feed Association

Lance Rick, On behalf of US Beet Sugar Association
Jeff Rogers  
Ag Processing Inc.

J. Anthony Yount  
ConAgra Foods, Inc.
July 6, 2012

Ms Amy Cronin
Secretary, Standard Council
National Fire Protection Association
1 Batterymarch Park,
Quincy, MA 02169-7471

Subject: NFPA 61 Tech Session Motions and Committee Position

Dear Amy and Standards Council:

As Chairman of the Agricultural Dust Committee, I have the following comments regarding the NFPA 61 motions that passed at the annual Technical Session in Las Vegas and would like these comments to be considered as the Standards Council discusses the issues.

**Amendment 61-9 (Comment 61-13)**

This is a proposal to require explosion venting on all silos, bins and tanks. Please refer to my letter dated June 25, 2012 to the Standards Council Secretary and to the Standards Council in which I protested the way this vote was handled at the Technical Session. I was not allowed to rebut the comments that were being made on the floor and state the committee position before someone from the floor “called the question”. This is a very technical issue and may not have been entirely understood by the NFPA membership in attendance. Had I been given the floor, I believe this close vote would have been in favor of the committee position.

At the ROP meeting, this proposal was rejected almost immediately. The configuration of a typical silo does not provide enough surface area to vent in accordance with NFPA 68. The submitter was proposing a new requirement that was physically impractical and was well beyond industry practice or insurance requirements. No technical data or risk mitigation data was presented to support the proposal. The committee could not make such a significant change without any supporting data.

At the ROC meeting, some technical data was presented for silo volumes up to 500 m³, with this data then extrapolated out to 10,000 m³. Modern silos are much larger than 500 m³. Again, the data was not sufficient to warrant such a significant change in requirements for the industry. It is
difficult to rely upon extrapolated data considering the size of modern concrete silos. However, the committee submitted a code funding proposal to the NFPA to start a research project on venting for silos larger than 500 m$^3$. Hopefully this can be completed before the next revision cycle.

The committee upheld its position three times by over a 2/3 majority. The vote was as follows:

ROP Ballot – Rejected 24 to 3  
ROC Ballot – Rejected 21 to 5  
Amendment Ballot – Rejected 21 to 7

**Conclusion**

All three of the proposals were thoroughly discussed during the ROP and ROC meetings. The committee is well balanced and has full membership with a waiting list. Attempts were made to compromise on two of the issues by adding Annex material. The submitter of the proposals did not attend either meeting in person, but participated by conference call. These three proposals would make significant changes to the standard, but the submitter did not feel it was important enough to attend the meeting in person and explain his proposals. Now he is trying to use procedural maneuvers and a small minority opinion to bend the committee to his will. I request that the Standards Council uphold the committee’s intent and issue the new Agricultural Dust standard without delay.

Sincerely,

Matt Bujewski

Matthew J. Bujewski, PE, ARM  
Agricultural Dust Committee Chairman

cc: Martha Curtis, NFPA  
Guy Colonna, NFPA
July 14, 2012

Ms Amy Cronin
Secretary, Standard Council
National Fire Protection Association
1 Batterymarch Park,
Quincy, MA 02169-7471

Subject: NFPA 61 Tech Session Appeals and Committee Position

Dear Amy and Standards Council:

As Chairman of the Agricultural Dust Committee, I have the following addition to my July 6, 2012 letter regarding the motions from the Technical Session in Las Vegas and new comments on the appeals that have just been made.

Addition to July 6 Letter Regarding Motions
My letter dated July 6 was based upon the tentative vote from the Agricultural Dust Committee. With the final vote, the count for rejecting increased by one. The final vote count for all three amendments is now:

Amendment 61-6 (Comment 61-9) – Rejected 18 to 10.
Amendment 61-9 (Comment 61-13) – Rejected 22 to 6.
Amendment 61-10 (Proposal 61-23) – Rejected 20 to 8.

All three motions have been overwhelmingly rejected three times by the committee.

Appeal on Motion 61-1 (Comment 61-4)
This is an appeal to remove the size qualification in the definition of Agricultural Dust in 3.3.1 of the 2008 edition of NFPA 61. The committee is strongly against the removal of the size qualification and the position is well documented in the substantiation in the ROP and ROC. The minutes of the Technical Session also provide the details on the positions.
**Appeal on Motion 61-1 (Comment 61-4) (continued)**

The votes on this issue are as follows:

ROP Ballot – Accepted in Part in Principal 25 to 2  
(The committee agreed to modify the annex material to better support the existing definition but did not agree to remove the particle size criteria in the definition.)  
ROC Ballot – Rejected comment 21 to 5  
NFPA Tech Session – Failed 200 to 76

The submitter of the appeal is only thinking of the generic use of the term and does not take into account how it is specifically used in the standard. It is only used once in section 10.2 where housekeeping is discussed. Changing the standard without giving the user any information on general particle size would require the user to test all dust and all dust combinations at a facility to determine if they are explosive and subject to cleaning. This is impractical and unnecessary. The definition of 420 microns has been used for decades in the agricultural industry and is consistent with the OSHA definition in the regulation that governs that industry. The submitter did not provide any evidence that there have been explosions or fires due to misuse or misunderstanding of this definition.

**Appeal on Motion 61-12 (Proposal 61-26)**

This proposal would require isolation of equipment to mitigate the effects of an explosion. The submitter of the proposal wants to require the agricultural industry to use techniques that are used in other industries, such as woodworking, to isolate explosions. The agricultural and food industries, however, do not use the same type of equipment as other combustible dust industries and this proposal would have to be dissected on an equipment by equipment basis. Furthermore, many of the users of this document are subject to Food and Drug Administration requirements that have to be considered when modifying equipment. The submitter provided only generic requirements and did not provide any specific language for the various equipment and processes used in the agricultural and food industries. The committee felt there was some merit for specific processes, but further study is required. No one made a proposal for a specific process. For these reasons, the committee agreed at the ROC meeting that it should be put on hold until the next revision cycle.

ROP Ballot – Rejected 25 to 2  
ROC Ballot – Committee agreed to hold for further consideration in the next cycle by 25 to 1  
NFPA Tech Session – Failed 119 to 116

Again, the submitter did not provide any evidence of a recent loss or injury that could have been prevented by changing the standard. The committee cannot make such a substantial change without any relevant justification other than the submitters own opinion.

**Conclusion**

The submitter of these motions and subsequent appeals is strong in his opinions, but without adequate supporting evidence the committee cannot adopt such significant changes. There is simply no justification for it. These were not close votes and there are no significant divisions in the committee. The committee overwhelming rejected all of the proposals and comments that he is now appealing. If the will of the committee is not upheld, then I do not know the purpose of
having a committee. I urge the Standards Council uphold the committee’s intent and issue the new Agricultural Dust standard without delay.

Sincerely,

Matt Bujewski

Matthew J. Bujewski, PE, ARM
Agricultural Dust Committee Chairman

cc: Martha Curtis, NFPA
    Guy Colonna, NFPA
June 25, 2012

Ms Amy Cronin
Secretary, Standard Council
National Fire Protection Association
1 Batterymarch Park,
Quincy, MA 02169-7471

Subject: NFPA 61 Tech Session Voting

Dear Amy and Standards Council:

I would like to make a formal protest regarding the vote for amending motions 61-8 and 61-9 at the annual Tech Session in Las Vegas. The motion requires venting of agricultural silos, bins, and tanks. Despite repeated attempts, I was not given the floor by the NFPA Chair. He continued to allow the same speakers from the floor to argue back and forth on the issue. Finally the “question was called” without allowing me to defend the position of the NFPA 61 Committee. This was a close vote and had I been allowed to speak I believe the outcome would have been different. I had intended to say:

“This motion would require all silos, bins, and tanks that handle grain to have explosion venting. The original proposal was defeated by the committee at the ROP stage by 24 to 3 and at the ROC stage by 21 to 5 because it is not technically feasible. The length to diameter ratio that is required to accomplish this would require concrete silos to be 1/3 higher in order to accommodate enough surface area to install the vents. The research done in the 1980s only applies to silos up to 500 m³. Mr. Ural says that NFPA 68 allows venting up to 10,000 m³ by extrapolating the data from 500 m³, but there is no supporting data. The committee believes that more research is warranted. I am a professional engineer and there is no way that I would sign off on a project with data that is extrapolated that far from the actual data. Not even FM Global requires or recommends explosion venting on concrete silos. I urge you to defeat this motion.”

I believe that statement would have swayed enough of the NFPA members to overcome the 18 vote deficit had I been allowed to speak.
There is also the question of Mr. Ural withdrawing motion 61-6 and then after one of the other motions passed, Mr. Ural changed his mind and asked that it be reconsidered. There was a discussion by NFPA personnel on the stage and he was allowed to make the motion. The 61-6 motion passed. It seemed very unusual to me to allow the request after it had formally been withdrawn.

Hopefully the Standards Council will uphold the wishes of the committee and none of this will matter. I was very unhappy, however, that I was not allowed to fully defend the committee’s position.

Sincerely,

Matt Bujewski

Matthew J. Bujewski, PE, ARM
Agricultural Dust Committee Chairman

cc: Martha Curtis, NFPA
    Guy Colonna, NFPA
PRESIDING OFFICER McDANIEL: As I understand it, we're moving to 61-8 or 61-9; is that correct? They are related motions. Okay. Please proceed.

ERDEM URAL: Most of the death and injuries --

PRESIDING OFFICER McDANIEL: Which motion are you --

ERDEM URAL: I'm doing 61 -- oh, move to make a motion to accept proposal 61-20 -- is it 61-20?


PRESIDING OFFICER McDANIEL: Okay. All right. Is there a second? We have a motion on the floor to accept Comment amending motion 61-9. Second?

We have a second.

Please proceed.

ERDEM URAL: Most of the deaths and injuries in agricultural dust explosions are caused by improper or no provision for explosion venting and explosion isolation.

This motion deals with the venting issue. And NFPA 61 does not require any venting in existing facilities. That may be understandable, may be a risk management kind of argument.

Surprisingly, and this is really upsetting, it also does not require venting in any new facility. Therefore, it encourages new facilities to be built in an unsafe fashion. So it propagates a bad habit, a proven bad habit into newer designs.

Venting is a method proven time after time. The majority of the committee denied this fact for the comments. In reality, the committee acknowledged that fact in the annex material.

If you go to comment 61-26 the committee put in the annex. Situations can occur in which it is not possible to provide calculated document venting as described in NFPA 68, standard of explosion protection venting.

Such situations do not justify the exclusion of all venting. The maximum practical amount of venting should be provided since some venting should reduce the
damage potential.
In addition, consideration should be given
to other protection and prevention methods.
PRESIDING OFFICER McDANIEL: One minute.
ERDEM URAL: This is all very useful
information, but why bury it in the annex while the main
body says you don't have to do venting if you can't?
I really hope that you will support this
motion and make it pass because it will be irresponsible
not to.
PRESIDING OFFICER McDANIEL: Thank you.
Mr. Bujewski, would you like to present the
committee's position?
COMMITTEE CHAIR BUJEWSKI: Yes. This is a
very old issue with the agricultural dust committee.
Historically the length and diameter ratio of large
modern silos that are used to hold grain makes it
physically impossible to design explosion vents in
accordance with NFPA 68. That's historically why the
industry has not been able to do it.
The NFPA 61, however, does state if you do
install explosion venting, it shall be installed in
accordance with 68. There are certain silos, certain
bins that you would be able to install venting. It's
just it's not required by 61 because it's very difficult
except on an individual basis to determine what would be
able to have venting and which ones would not.
So during the ROP stage, the committee
rejected the proposal 24 to 3.
In the ROC stage, Mr. Ural submitted
experimental test data for venting of silos. The test
data represented a very small range of silo size covered
by the scope of NFPA 61.
As a result of that, the committee again
rejected the proposal 21 to 5, but we did submit a code
fund project to the NFPA to study explosion venting on
the very large grain silos that are in existence today.
Hopefully the study can be complete in time for our next
revision cycle.
So the committee recognizes the question,
but there's not enough data to really include it in the standard at this time.

PRESIDING OFFICER McDANIEL: Thank you.

With that, we'll open debate on the motion.

Please provide your name and affiliation, whether you're speaking in support of or against the motion.

Microphone 8, please.

JESS McCLUER: I'm Jess McCluer with the National Grain & Feed Association and I'm against the motion.

I'd like to follow up on what Mr. Bujewski said about the experimental test data that was in the report on comments.

Some of the material that was in the test data submitted by Mr. Ural was from a study that the National Grain & Feed Association Fire and Research Council did over 30 years ago. It was well known within the industry.

And as the chairman said, the data does not account for the newer types, larger types of storage units that are currently used within the industry.

As a result, the National Grain & Feed Association, the National Grain & Feed Foundation we're currently in the process of conducting a research study on the feasibility of meeting the current NFPA standards to the numerous types of grain storage units that are out there.

And we'll also be doing a cost/benefit analysis to see what the costs would be if it would be possible to implement the current NFPA standard. Thank you.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 5, please.

ERDEM URAL: Erdem Ural speaking for the motion. Just a couple of points. Mr. Bujewski pointed out that the difficulty with the silos with a large lower ratios and Mr. McClure said the data -- also Mr. Bujewski also said the data goes up to 500 cubic meters. That's exactly the point. That's no excuse not to design new facilities with huge silos with long
LORD. You can still do, if you want to design it to
data, you can have the silos or the facilities up to 500
cubic meters. 500 cubic meters is huge.

National Grain & Feed Association they have
found their project on the facility that's 500 cubic
meters. If they found it was inappropriate, why did
they waste their money?

What you can do is go to NFPA 68 and NFPA 68
took this data going up 500 cubic meters and used the
consensus process and NFPA 61 committees values so much
to extend it up to 10,000 cubic meters. That's an
extrapolation which lets you go a factor of 1.7 or 2.7,
it's in the documents in linear dimension that lets you
extrapolate up to 10,000 cubic meters.

That's a consensus process adopted by the
explosion protection systems committee. So you can
design smaller vessels. You can design stronger vessels
if you increase the strength of your enclosure, NFPA
68 --

PRESIDING OFFICER McDANIEL: One minute.

ERDEM URAL: -- will let you -- if you
increase the strength of your enclosure, NFPA 68 will
allow you to put smaller vents because a vent area goes
in the other direction of strength of your enclosure.

So I think it's very inappropriate to say
there is no data, so we can't do anything. Let's get
NFPA to an original project. NFPA is never going to get
a million dollars to do it. In the meantime, we'll be
exposing our workers to death, injury, burning and also
hurting the owners by losing their investment.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 1, please.

JOHN CHOLIN: Yes, Mr. Chairman. My name is
John Cholin from JM Cholin Consultants. I'm speaking in
favor of the motion.

If you know you need to vent a vessel, you
design the vessel so it can be vented. The problem only
comes in when someone is working under the delusion they
don't have to vent the vessel.

So that by placing this requirement in the
standard, it puts designers of facilities on notice they
have got to design the vessels so that they can be
vented. And you can vent virtually any vessel,
including this room.

I urge the membership to vote for the
proposal.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 5, please.

MARCELO HIRSCHLER: Marcelo Hirschler, GBH
International in support of the motion.

I want to read a couple of the negatives
that were put. One negative by Mr. McClellan says the
statement by the committee excludes all enclosures
leaving the statement in places both life and property
at risk when it could be protected.

Mr. Meyers says if the committee's reason
for rejecting there's not sufficient evidence that
explosion venting is needed for large silos, the
committee could have prevented -- required venting for
other protection on smaller vessels.

But what the committee did is just kick the
ball down. This is what it's been doing in all of these
proposals that Dr. Ural has been putting forward. The
committee is attempting to not address the fire safety
issue.

I urge this body to support the motion and
approve and get some change. If the silos cannot all be
vented in accordance with NFPA 68, and Mr. Cholin said
they can, then we will work in the future to get some
change in some way. But we need the protection because
this is a fire safety issue. Please support the motion.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 5, please.

BILL STEVENSON: My name is Bill Stevenson,
my company is CV Technology. I'm speaking in favor of
the motion.

Here is an area where the technical
committee for 61 really has I think a valid point. And
I'm speaking against him on this. I know there's going
to be confusion. But it really is true that there are
existing facilities, older facilities, large concrete silos not strong enough to protect, can't be reinforced or indoor silos can't get the venting to the outside because of structural problems or interferences.

And so the existing language in the existing structure I think has merit and has a place in the document. The problem is that this is not a universal. There are times, particularly in new construction, where stronger language requiring venting would be appropriate.

And I think the overlying consideration which my predecessor at the microphone stated quite well and eloquently, we really do have a risk and we really do need to add it and we can't just keep kicking the can down the street. Thank you very much.

PRESIDING OFFICER McDIANIEL: Thank you.

JIM MANESS: My name is Jim Maness. I'm speaking against the motion. I'm with the National Grain & Feed Association and Grain Elevator and Processing Society regarding this issue.

The data that was referenced for 500 cubic meters was stated it was collected and done under NFPA research. In fact, I was present during the testing of 500 cubic meter silos that was tested and I think there were six data points that one 500 cubic meter silo and the seventh one the silo blew apart.

So I doubt that that's an overwhelming amount of data or convincing information that it's a valid use of it. Not only that, they were taking data from 20- and 60-cubic meter vessels, using that and the 500 cubic meter vessel and the 236 that we also sponsored that research for.

The only reason 236 worked is we built it three or four times stronger than any we had ever done before. And even when you saw that 50, it was a jet type event. If anything was near it, it would have been a major problem with the jet venting out of a 236-meter silo.
So there is overwhelming information that says we should be doing these smaller silos, like 236 or 500 cubic meters. There's a lot of questions that still need to be answered and we're still investigating the silo venting issue.

I know that 68 has been rewritten, reformulated. They took data. They got together with I believe the European group and compared data and formulas. And yet those formulas --

PRESIDING OFFICER McDANIEL: One minute.

JIM MANESS: -- when they were applied to operations have not proven them to work. Thank you, sir.

PRESIDING OFFICER McDANIEL: Thank you. Microphone 5, please.

ERDEM URAL: Erdem Ural speaking for the motion. What Mr. Maness said is actually supporting my statement. So I think there is hope that he and I will start working together soon.

There are a couple of things he said. There was one test where there was a flame jet ignition where the very large pressures were produced and the enclosure was damaged. That's true. That's a well known fact.

And in fact, that's why we have the explosion isolation requirements in the other standards. That's why we have it in 654. That's why it's required in NFPA 69 and that's why I have a NITMAN on this committee that we'll discuss later on.

If you let the flame come in as a flame jet into an enclosure, nothing works. Explosion suppression doesn't work. Explosion venting doesn't work. So you don't let it happen. You put explosion isolation systems.

He also mentioned that the methodology in NFPA 68 have been calibrated using data from smaller enclosures, too. That is true. The fact is I was partly responsible for that or maybe I take credit for developing that methodology.

The committee has taken scientific method, came up postulated sort of a way to calculate pressure
in a vented explosion and come up with simple
correlations and then tested that. And one of the
parameters in the correlation is the size of the
enclosure and the strength of the enclosure.
And then we took all the available data
going from I forgot what's the smaller size all way up
to 500 cubic meters and we have a lot of predicted
versus actual in the experiment and that has been
reproduced in your -- in your ROC reports for this.

PRESIDING OFFICER McDANIEL: One minute.
ERDEM URAL: It shows that we're in
agreement. The methodology captures all the salient
features for small vessels as well as large vessels.
Tests have been up to 500 cubic meters and that's why
the committee feels comfortable enough to extrapolate it
to 10,000 cubic meters.
So let's not -- let's give up the double
talk, a consensus that methodology is good for one
standard and not good for the other standards. NFPA
explosion protection systems committee specialize on
explosion venting. They are specialists in that area
and let's rely on their judgment and on the
recommendation.
So I strongly urge you to support this
motion.

PRESIDING OFFICER McDANIEL: Microphone 8,
please.

JIM MANESS: Jim Maness, National Grain &
Feed Association and Grain Elevator and Processing
Society speaking against the motion.
I want to point out to everyone that in our
industry, these kinds of silos that we talked about,
500, 236, they are very small silos. We have silos that
are 60,000 to a hundred 20,000 cubic meters.
So extrapolating data from a 20 cubic meter
vessel to even if the 500 were 500 cubic meter vessel
was valid, is highly suspect if you can extrapolate that
data and that we have any confidence we can really do
that sort of thing.
So in practice, the size and scope of our
silos in our structures are much greater than what Mr. Ural and others have indicated.

COMMITTEE CHAIR BUJEWSKI: Mr. Chair? Okay.

PRESIDING OFFICER McDANIEL: Microphone 5, please.

ERDEM URAL: Again, Mr. Maness in a way speaks to my point. It's not quite true that we are using 20 meter data to do venting for. We have done venting for large silos.

We are saying that we have data up to 500 cubic meters and the smallest size used here is 20 cubic meters. And then the methodology works for all the things in between and we don't see any differentiation based on the size.

So if Mr. Maness wants or the committee wants to be super careful and not to believe this methodology about 500 cubic meters, than we are saying don't design any facilities larger than 500 cubic meters unless you have data or until you have data.

But we're also saying the specialists committee on this through the consensus process said you can use it up to 10,000 cubic meters, use it. And then the committee statement says any venting is beneficial. So use it.

So in their conclusion you can design your vessel with smaller silos or vents. You can design it with a smaller LORD and you can design them to resist higher pressures.

I just investigated a grain elevator explosion and also another grain elevator explosion you always see these things rupture and they rupture, they let the flame go away from it. Where do the flames go? Toward to where the workers are. They burn the workers. They kill them and they destroy the silo. If the workers don't get burned, they have some things fall on them and they die because of that. Thank you.

PRESIDING OFFICER McDANIEL: Thank you. Microphone 2.
UNIDENTIFIED SPEAKER: Thank you, Mr. Chairman. Point of order. We would appreciate it if the last speaker would identify himself and his position on the motion.

ERDEM URAL: Thank you for the reminder. It's Erdem Ural speaking for the motion.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 1.

UNIDENTIFIED SPEAKER: I call the question.

UNIDENTIFIED SPEAKER: Second.

PRESIDING OFFICER McDANIEL: We have a motion and second on the floor to call the question to close the debate.

Please record your votes, one in favor of the motion or two opposed to the motion.

Five seconds. Balloting is closed. Motion passes.
Mary,

I support fully Mr. Bujewski’s letter of protest and agree that he was not allowed to speak to this in a way that allowed to proper points to be conveyed to those in attendance.

Thank You

P. D. “Nick” Thielenc CQE CHMM
9000 Plymouth Ave. N.
JFBTC E-350
Golden Valley, MN 55427
Work: (763) 764-2196

"It sure seems to me that what innovation really is, is taking two or more unrelated ideas and fitting them together to make one new thing. Pretty simple concept, pretty hard to do. Key is being exposed to a number of different things you can then pull from and fit together."
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (61-10)

**Document:** NFPA 61, *Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities*

**Motion:** To Accept Proposal 61-23

**TC FINAL Ballot Results**

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS NOT** achieved the necessary $\frac{2}{3}$ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is \(19\) \([30 \text{ (eligible to vote)} - 2 \text{ (ballots not returned)} - 0 \text{ (abstentions)} = 28 \times 0.66 = 18.48]\)

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</tr>
</tbody>
</table>

| Abstain          | 0  |

**TC Action:** FAIL
Amendment: Accept Proposal 61-23

☐ Agree
If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree*
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:
This belongs in the Appendix, not in the main body as Chapter 5.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]
Name - Please Print: Del Bluhm
Date: 07/02/12
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I do not agree with the action taken by the membership. The TC overwhelmingly rejected adding a new Chapter 5 for the reasons stated in the ROC and no new technical rationale has been provided that would warrant changing that position.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: Edward M. Briesch

Name - Please Print: Edward M. Briesch

Date: 6/22/2012

June 2011 (Ballot Form)
Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

X Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The amendment makes the standard more complicated and does nothing to improve the level of fire protection at a facility.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:      Matt Bujewski

Name - Please Print:      Matt Bujewski

Date:       June 25, 2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment:  Accept Proposal 61-23

☐ Agree
If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain

*Please give reasons for voting "Do Not Agree" or "Abstain":

The Performance Based Option is adequately covered in the Annex. No need for a new chapter.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:

Name - Please Print: Brian Ellow

Date: 6-19-12

June 2011 (Ballot Form)
Standards Council Supplemental Agenda August 7-9, 2012

NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

□ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

□ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I believe the committee properly vetted this during the ROC/ROP process:

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Keith Epperson

Date: June 27, 2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Considering the committee open debate on the size and shape of particles and the back and forth narrative I question the ability of a user acceptable qualified person to make decisions the committee has problems making. We need to indicate what determines a person is qualified because his opinion can alter the prescriptive section. I am considering the small company and who they will believe is qualified.

________________________________________

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:  ______________________________________

Dan Guaricci

Name - Please Print: __________________________________________

Guaricci Dan

Date: 6/28/12

June 2011 (Ballot Form)
Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I feel that this issue was discussed and debated over a number of meetings of the Committee and passed by a large majority of experts. That decision should not be reversed.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: John Heilman

Date: 6/20/2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree
If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☐ Do Not Agree*
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I DO NOT BELIEVE THERE IS ENOUGH INFORMATION AVAILABLE FOR THE
AMENDMENT "PERFORMANCE BASED DESIGN" TO BE SUPPORTED.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: ________________________________

Name - Please Print: Mark W. Hendrick

Date: 6/28/2012

June 2011 (Ballot Form)
Standards Council Supplemental Agenda August 7-9, 2012

Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The standard with annex text adequately addresses performance-based design options.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: __________________________________________

Date: 6-18-12

Name - Please Print: DEAN E. HOLMES

June 2011 (Ballot Form)
Amendment: Accept Proposal 61-23

[ ] Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

[ ] Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

[ ] Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

I believe that the issue of performance-based design is adequately and properly handled in the original TC action of adding clarifying language to the annex.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: William F. Kearns

Name - Please Print: William F. Kearns

Date: June 26, 2012

June 2011 (Ballot Form)
Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I believe the Committee’s original decision to mention this material in the Annex is more appropriate.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169, FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: William F. Kinslow, Jr.

Date: 6/27/2012
Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I do not agree with this being added to the NFPA 61 document as the performance based design is too complex for the industry users of this standard. Such information can be included as an appendix for those who may desire to do performance based design. The design of grain facilities has changed dramatically over the last 30 years as a result of studying past events and taking lessons learned into practice. That is truly performance base design not the complex system proposed in this proposal. I believe the information in the proposed performance based designed needs to be simplified to be usable. We believe our occupancy standard should be based on more practical knowledge and not mandated in the NFPA 61 standard.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:
Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: _______________________

Name - Please Print: James E. Maness

Date: June 27, 2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

DID NOT ACCEPT DURING RDP OR AT ASSOCIATION TECHNICAL MEETING

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: JESS McCLUER

Date: 6/25/12

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

X Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

Whether to have this material in the text of the standard or in the Annex is a judgment call that must take into account the nature of the industry that uses NFPA 61. The agricultural industry is comprised of a few large companies and untold numbers of small companies, almost none of whom will have the technical expertise to make any use of this material and nearly all of whom will find it confusing. And its placement in the middle of the standard will strike them as more confusing yet. That confusion is, however, entirely unnecessary. The Committee made a judgment call to place this material in the Annex and that judgment should be respected by those with less knowledge of the agricultural sector.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX: 617-984-7110

Signature ________________________________

Name - Please Print: Lance L. Rick

Date: June 26, 2012 __________________________

June 2011 (Ballot Form)
Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

x Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any.
Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain";
The committee voted against this proposal twice and therefore should not be included in the new standard.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Gayette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: _______________________

Name - Please Print: Jeff Rogers

Date: 6/21/2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I don't agree this should be placed in the main body but in the appendix instead.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Lee Sargent

Date: 6/20/12

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

X Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

This text was considered and it was decided that it had merit but belonged in the annex, not in the main body of the code. It has been repeatedly stated through committee votes that we view this material as extra that although potentially useful to a small group of consultants, is not useful to the average end user of the code and would if included tend to confuse.

It has been the committee’s belief that NFPA 61 should be a focused document defined for our specific industry, thus more specific and tailored to our industry and not just a mirror image of NFPA 654. The NFPA 654 committee has a different vision and conceptually the NFPA membership meeting intended so that they could offer this and other amendments. Comments made at the end of the meeting clearly captured that many in attendance felt that the tactic was one that damaged the process and our reputation as members of the NFPA 61 committee was at least in part the goal of the many amendments offered.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:

Name - Please Print: P. D. "NICK" Thielen COE, Certified Safety Engineer CHMM (Certified Hazardous Materials Manager)

Date: Tuesday June 26, 2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

☐ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:
The Committee's proposal to accept in principal and add Annex material referring to NFPA 654 was completely acceptable to me.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:
Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX: 617-984-7110

Signature: ________________________________

Name - Please Print: Clyde Waller ________________________________

Date: 6/28/2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☐ Do Not Agree

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain

*Please give reasons for voting “Do Not Agree” or “Abstain”:

See committee statement from ROC.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joan Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature: 

Name - Please Print: Stephen Wees

Date: 6-25-12

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☑ Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

PREVIOUSLY VOTED DOWN TWICE, NO NEW DATA
INTRODUCED.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169 FAX: 617-984-7110

Signature:

Name - Please Print: J. Anthony Yount

Date: 6/26/2012

June 2011 (Ballot Form)
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23

☐ Agree
If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

☐ Do Not Agree*
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. Since this material was not in the previous edition, the proposed new chapter is deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

The committee has previously agreed that performance based design is a viable alternative to prescriptive requirements when they amended Annex item 1.5. Moving performance based design to the body of the code instead of the Annex reinforces the committee's action and eliminates having the user address another code to find the requirements.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169  FAX: 617-984-7110

Signature: __________________________

Name - Please Print: William E. Junt

Date: June 28, 2012
NFPA 61
TC BALLOT for Agricultural Dusts
June 2012 ASSOCIATION AMENDMENT 61-10

Amendment: Accept Proposal 61-23.

X Agree

If you agree with this amendment, the result will be to add a new Chapter 5, Performance-Based Design Option.

See the attached Proposal 61-23 that contains the proposed text of new Chapter 5.

JUSTIFICATION:
I am in favor of this amendment because it gives the users creative ways to achieve same or better safety objectives in a cost effective fashion. While saving money is good for everyone, committee’s attitude to defeat this amendment is mind-boggling. In this ballot, the reasons given to vote against the amendment are not justified.

For example, some members expressed concern that new chapter on performance based design will make the standard more complicated. These members clearly do not understand that performance based design would generally be invoked when meeting the requirements of the prescriptive chapters would be too costly, or when a specific application is not covered in the prescriptive chapters. Nobody is required to use the performance based design chapter unless she wants to.

The majority of the members who voted against the amendment did not object to the concept of the performance based design. Instead, they felt that it was already covered by the newly added annex statement:

"A.1.5 This standard permits the use of performance-based design options. Guidelines on performance-based design options for combustible dust hazards can be found in NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids."

In my view, leaving such a vague statement in the annex alone could produce dangerous outcomes because, without a formal and mandatory framework, performance based design option maybe abused or misused by a person who may not be sufficiently expert in the combustible dust hazards.

In this ballot, a number of committee members voting against the amendment invoked a justification that they already voted against it at the ROP and ROC ballots. This is not a valid justification because it obviates the function of the Association Technical Meeting.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110

Signature: Erdem Ural

Name - Please Print: Dr. Erdem A. Ural

Date: 7/8/12
5.3.1 Fire Scenarios.

5.3.1.1 Each fuel object in the compartment shall be considered for inclusion as a fire scenario.

5.3.1.2 The fuel object that produces the most rapidly developing fire during startup, normal operating conditions, or shutdown shall be included as a fire scenario.

5.3.1.3 The fuel object that produces the most rapidly developing fire under conditions of a production upset or single equipment failure shall be included as a fire scenario.

5.3.1.4 The fuel object that produces the greatest total heat release during startup, normal operating conditions, or shutdown shall be included as a fire scenario.

5.3.1.5 The fuel object that produces the greatest total heat release under conditions of production upset or single equipment failure shall be included as a fire scenario.

5.3.1.6 The fuel object that can produce a deep-seated fire during startup, normal operating conditions, or shutdown shall be included as a fire scenario.

5.3.1.7 The fuel object that can produce a deep-seated fire under conditions of a production upset or single equipment failure shall be included as a fire scenario.

5.3.2 Explosion Scenarios.

5.3.2.1 Each duct, enclosed conveyor, silo, bunker, air-material separator, cyclone, dust collector, or other vessel containing a combustible dust in sufficient quantity or conditions to support the propagation of a flame front during startup, normal operating conditions, or shutdown shall be included as an explosion scenario.

5.3.2.2 Each duct, enclosed conveyor, silo, bunker, air-material separator, cyclone, dust collector, or other vessel containing a combustible dust in sufficient quantity or conditions to support the propagation of a flame front under conditions of production upset or single equipment failure shall be included as an explosion scenario.

5.3.2.3 Each building or building compartment containing a combustible dust in sufficient quantity or conditions to support the propagation of a flame front during startup, normal operating conditions, or shutdown shall be included as an explosion scenario.

5.3.2.4 Each building or building compartment containing a combustible dust in sufficient quantity or conditions to support the propagation of a flame front under conditions of production upset or single equipment failure shall be included as an explosion scenario.

5.4 Evaluation of Proposed Design.

5.4.1* General. A proposed design’s performance shall be assessed relative to each performance objective in Section 4.5 and each applicable scenario in Section 5.3, with the assessment conducted through the use of appropriate calculation methods acceptable to the authority having jurisdiction.

5.4.2 The design professional shall establish numerical performance criteria for each of the objectives in Section 4.5.

5.4.3 The design professional shall use the assessment methods to demonstrate that the proposed design will achieve the goals and objectives, as measured by the performance criteria in light of the safety margins and uncertainty analysis, for each scenario, given the assumptions.


A.5.1.4 Relevant aspects that could require a re-evaluation include, but are not limited to, changes to the following:

(1) Information about the hazardous characteristics of the materials

(2) Information about the performance capabilities of protective systems

(3) Hereafter unrecognized hazards

Intentional changes to process materials, technology, equipment, procedures, and facilities are controlled by Section 5.3.

A.5.2.5(3) Deflagration vent operation does not constitute rupture of the equipment.

A.5.3 The process hazard analysis conducted according to the requirement in Section 4.5.2 might be useful in identifying the scenarios for Section 5.3.

The fire and explosion scenarios defined in Section 5.3 assume the presence of an ignition source, even though those scenarios limited by administrative controls (such as a hot work permit program). It is the responsibility of the design professional to document any scenario that has been excluded on the basis of the absence of an ignition source.

A.5.4.1 The SFPE Engineering Guide to Performance-Based Fire Protection Analysis and Design of Buildings outlines a process for evaluating whether trial designs meet the performance criteria.

Substantiation: The current version of the document is too prescriptive and does not encourage utilization of the state of fire/explosion protection knowledge to develop cost effective applications.

Committee Meeting Action: Accept in Principle

See Committee Action and Statement on Proposal 61-22 (Log #44).

Committee Statement: The Committee believes that the proposed Annex material for Section 1.5 in Proposal 61-22 (Log #44) makes it clear that the performance-based design options can be achieved through the use of NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.
Related Proposal 61-22 to Proposal 61-23

61-22 Log #44
(Chapter 5)

Final Action: Accept in Principle

Submitter: Jack E. Osborn, Airdusco, Inc.

Recommendation: Total “new” Chapter 5. The existing Chapter 5 would become Chapter 6, etc. Intent is to incorporate all of Chapter 5 from NFPA 654 (2006). The existing Chapter 5 and subsequent chapters after would require renumbering.

Substantiation: (1) There is no provision for a Performance Based Design Option in the current NFPA 61 document. Such an option is a most important option to provide for the users of the NFPA 61 document. It offers a valid alternative that may be the only viable option for some situations.

Substantiation: The added items are included as major portions of NFPA 654 and NFPA 664 (although stated somewhat differently). Not having this important option in NFPA 61 is a major deficiency that must be corrected.

A common complaint by users of the current NFPA 61 document is the lack of information and explanations of the referenced devices in the text of the document. The user is required to go to other publications to obtain information that should be contained in the NFPA 61 document.

Committee Meeting Action: Accept in Principle

Add an asterisk and Annex text for Section 1.5* Equivalency to read:

A.1.5 This standard permits the use of performance-based design options. Guidelines on performance-based design options for combustible dust hazards can be found in NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.

Committee Statement: The Committee agreed with the submitter’s substantiation and added Annex material for Section 1.5 that clarifies that performance-based design options are achieved through the use of the equivalency clause and to make it clear that NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, can be used to develop performance-based design options for this standard.

Number Eligible to Vote: 28
Ballot Results: Affirmative: 26 Negative: 1
Ballot Not Returned: 1 Schoeff, R.

Explanation of Negative:
SUTTON, J.: See my Explanation of Negative on Proposal 61-22 (Log #44).

Comment on Affirmative:
YOUNT, J.: Agree with Committee Meeting Action and/or Committee Statement.
ERDEM URAL: Erdem Ural. I make a motion to accept proposal number 61-23.

PRESIDING OFFICER McDANIEL: Is there a second? I hear a second. There's motion on the floor to accept 61-23.

Mr. Bujewski, do you have committee comment?

Sorry. Proceed to make your motion.

ERDEM URAL: Mr. Bujewski or me?

PRESIDING OFFICER McDANIEL: You.

ERDEM URAL: Okay. This motion is seeking to create a new chapter on exercising performance based design option. NFPA standards for the last 10, 20 years started still includes the performance portion. But for those who think this portion is more like the clown shoes, try to come up with their own option of performance based design. So this chapter discusses, just tells you how to implement that.

Again, I did not write this chapter. I copied it from one of the NFPA standards and including is not going to hurt anybody either one way or another.

And the committee opinion was although they rejected, the committee rejected this proposal, they sort of agreed in principal because they tried to include it, sneak it through the annex saying that well, you can go use the chapter in 654.

So doing it that way, first of all, most people won't see it in the annex because a lot of people don't read the annex material. And secondly, then they will have to go out and buy a copy of 654 which is good for NFPA, but not always good for people.

So I don't envision anybody will be objecting including this chapter. So I urge you to support this proposal.

PRESIDING OFFICER McDANIEL: Thank you.

Mr. Bujewski, would you like to state the committee's position?

COMMITTEE CHAIR BUJEWSKI: Again, just because NFPA 654 committee believes performance based design should be in their standard does not necessarily mean that agricultural dust standard should adopt it,
nor does any other NFPA standard have to adopt
performance based design if it's not appropriate for
that standard.

The committee did review it and the
committee did accept the proposal in principal by a vote
26 to 1 and as such added annex material to the
equivalency clause that says if you want to do
performance based design, you can. But we're not going
to make the standard significantly longer by adding a
lot of information of how you do a performance based
design.

The committee reaffirmed its position by a
vote of 23 to 3 at the ROC stage and also said it would
again be more appropriate to have this language in the
fundamentals of dust committees and not in the
agricultural dust standard.

PRESIDING OFFICER McDaniel: That will open
up the debate on the motion. Please provide your name
and affiliation and whether you're speaking in support
of or against the motion.

John Cholin: Mr. Chair, my name is John
Cholin, JM Cholin Consultants and I'm speaking in favor
of the motion.

Performance based designed is a reality.
It's a reality that addresses the fact that a bunch of
grey-haired old guys sitting in the committee room
wondering if they are going to finish their work before
their plane leaves can't conceive of all the problems
and all the circumstances that exist out there in the
real world.

The reality is is that we found in other
documents 654 and 664 that it's necessary to provide the
design of the facility with the latitude to invent and
to come up with designs that were not necessarily
anticipated by the technical committee.

But if you're going to give someone the
license to invent, then you've got to establish
enforceable rules about what you consider to be
responsible design versus irresponsible use of a very
vague equivalency clause that is subject to the whim of
a code enforcement official who may not be sufficiently
expert in the hazard that you're dealing with to make an
informed decision.

This chapter has served the wood working
community and the combustible dust community very well
for over 12 years. It's time that we expand its utility
to other occupancy standards. I urge the membership to
support the motion.

PRESIDING OFFICER McDANIEL: Thank you.
Microphone 5, please.
BILL STEVENSON: My name is Bill Stevenson,
my company is CV Technology and I'm speaking in favor of
the motion.

We spoke a short while ago, debated a short
while ago the difficulties involved in venting large
silos and the limitations of the data that we have
available for vent size.

Dr. Ural explained the 68 committee's work
on expanding it to 10,000 cubic meters. Mr. Maness
explained that some of the silos are well over a hundred
thousand cubic meters. I can't think of a better place
to use performance based design in a situation such as
that.

I would urge the committee to consider.
They have already accepted the idea in principal by
putting in the annex, all you need to do in my opinion
is move it up to the front and you can even still say,
it shall be permitted to use performance based design
approach, see NFPA 654 for details. It doesn't need to
expand the documents as was alluded to.

PRESIDING OFFICER McDANIEL: Thank you.
Microphone 8.
ANTHONY YOUNG: My name is Anthony Young and
I'm against the motion. And I just wanted to point out
to Mr. Cholin that the reason I'll never attend another
seminar where he's speaking is because of his attitude
specifically toward members of 61.
The information is in the annex. That's
where it needs to be. It's as simple as that.

PRESIDING OFFICER McDANIEL: Thank you.
Any other discussion? Microphone 8.

NICK THIELAN: Yeah. Nick Thielan, General Mills, NFPA 61. I'd like to talk against this. Again, the purpose of 61 is to have a simple, straightforward document to help people in the food business protect their risk. All of this other stuff that keeps adding does nothing to improve that. All it does is add extra information, makes it harder for a person who is not technically competent, like many of the people in this room, to find the information they need to apply the information they need to protect their facilities.

I'm not necessarily against the idea of performance based design criteria, but I don't believe it belongs in the middle of the standard. I believe it's better to have it in the annex or in a place where somebody can go find it if they want later. And again, I have to say this is an extraneous information that makes it harder for somebody to implement this. Thank you.

PRESIDING OFFICER McDaniel: Thank you.

Microphone 8.

JIM MANESS: Jim Maness, National Grain & Feed Association and Grain Elevator Processing Society. And I'm speaking against the motion. Well, I want to point out that I agree with the gentleman that just spoke that members in this industry are not Ph.D's. They don't design explosion suppression and venting systems and so forth. They do handle grain. They understand their material pretty well and they understand the hazards. And Mr. Stevenson keeps beating on the industry saying they are the worst industry in the business. That's not true. You can look at the OSHA review of our standard when it came up for review. OSHA overwhelming said we think there's been tremendous improvement in this industry and in reducing dust explosions. The union, who was also part of that review process also agreed that our industry has made
tremendous improvements in safety in our facilities.

If you look at the incident rate for our facility, it's way down. You look at the dust explosion fatalities and injuries, they are tremendously down over the last 25 to 30 years.

So these guys who are saying these things have not looked at the proper data. They are looking at the Chemical Safety Board information that we're not even -- I believe it was mostly compiled from internet reviews, not from compiled incident rates that go on and harm the industry.

PRESIDING OFFICER McDANIEL: One minute.
JIM MANESS: The data is clearly available from the Kansas State University compiled incident rate and it shows that we have made tremendous improvements in this industry.

What we're seeing going on here is a 654 committee who's wanting to take over all the standards. They are wanting to inject their will on all the committees and they want to make a standard process extremely complex.

We're going to see users out there scratching their heads and maybe some 654 people getting some additional work. I think that's what's really going on here.

And what you really need to do is look at this and make us -- let us have a standard that people in the field can understand, people can implement without having to hire all these people from 654 to do complex things. Thank you.

PRESIDING OFFICER McDANIEL: Thank you.
COMMITTEE CHAIR BUJEWSKI: Mr. Chair?
PRESIDING OFFICER McDANIEL: Microphone 5, please.

ERDEM URAL: I just wanted to point out -- Erdem Ural speaking for the motion. I wanted to point out I think our discussions sort of deviated here. This chapter is not taking anything away from the prescriptive chapters. So anybody who wants to use the prescriptive chapters, the proposed chapter
doesn't affect that.
The proposed chapter only provides
information and requirements if you choose to pursue
other avenues. For example, General Mills maybe do
to better, be more cost effective doing the performance
based design. And in that case, they would use this
chapter and they would design equivalent or even better
protection.

And Mr. Maness is right. There has been a
significant improvement in the history of the explosions
and deaths in the grain industry. In the seventies
there has been a huge, lots of losses. It was totally
irresponsible designs.

And wit doesn't really pertain to the
discussion here. The discussion here is giving the
users another tool, another option and make your
businesses more competitive, more cost effective.

PRESIDING OFFICER McDaniel: Thank you.

Microphone 1.

John Chelin from JM Cholin Consultants speaking in favor of the motion.

I would take issue with the representation
that the people that are working in the agricultural
products business are somehow intellectually incapable
or intellectually inferior to their counterparts in
other industries.

I've had the privilege of working for a lot
of agricultural products firms and their people are just
as sharp as anybody else.

But Dr. Ural made an extremely important
point. Performance based design and this particular
chapter gives the owner/operator a framework in which
they can address unique or challenging circumstances in
a manner that is enforceable that a statutory code
enforcement official can't by under whim just decide not
to accept the design.

It's a proven framework that is literally
derived from NFPA 101. It works. It has been working
for the past 12 years.

And the reality is is that the overwhelming
majority of my clients who take advantage of performance
based design wind up saving oftentimes hundreds of
thousands of dollars by developing approaches that are
more cost effective and yet achieve the life safety
objectives and mission continuity objectives of the
standard.

I urge the membership to vote in favor of
the proposal.

PRESIDING OFFICER McDaniel: Thank you.

Microphone 2.

WILLIAM FISKE: Mr. Chairman, I'm Bill Fiske. I call the question.

PRESIDING OFFICER McDaniel: Motion on the
floor and second to call the question to close debate.

Please record your vote, one in favor of the
motion or accept or two oppose the motion reject.

Five seconds. Balloting is closed. Motion
passes.

We'll proceed to the motion. Before we do,
let me restate the motion on the floor which is to
accept proposal 61-23.

Please record your vote, one in favor of the
motion accept or two opposed to the motion reject.

Five seconds. Balloting is closed. Motion
passes.
Linda/Amy:

Please accept this note as formal declaration of my intent to appeal committee actions on ATM amendments CAM 61-6, CAM 61-9 and CAM 61-10.

Please advise how much time I have to file the appeal.

Sincerely Yours,

Erdem
781-818-4114
CAM 61-10 Appeal
NITMAM Log #1041

NFPA 61: STANDARD FOR THE PREVENTION OF FIRES AND DUST EXPLOSIONS IN AGRICULTURAL AND FOOD PROCESSING FACILITIES

(1) Name, affiliation, and address of the appellant
Dr. Erdem A. Ural
659 Pearl Street
Stoughton, MA 02072
(781) 818-4114
Erdem.ural@lpsti.com

(2) Statement identifying the particular action to which the appeal relates
the floor action on CAM 61-10

(3) Argument setting forth the grounds for the appeal
Please see below.

(4) Statement of the precise relief requested
Uphold floor action, Accept Proposal 61-23. (Passed on Floor 145 to 98, Failed Committee Ballot.)

GROUND FOR THIS APPEAL

This appeal is seeking to add a new chapter to NFPA 61 for performance-based design. I assert that the reasons given to vote against the amendment in the committee ballot are not acceptable.

For example, some members expressed concern that new chapter on performance based design will make the standard more complicated. These members clearly do not understand that performance based design would generally be invoked when meeting the requirements of the prescriptive chapters would be too costly, or when a specific application is not covered in the prescriptive chapters. Nobody is required to use the performance based design chapter unless she wants to.

The majority of the members who voted against the amendment did not object to the concept of the performance-based design. Instead, they felt that it was already covered by the newly added annex statement:

“A.1.5 This standard permits the use of performance-based design options. Guidelines on performance-based design options for combustible dust hazards can be found in NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.”
In my view, leaving such a vague statement in the annex alone could produce dangerous outcomes because, without a formal and mandatory framework, performance based design option maybe abused or misused by a person who may not be sufficiently expert in the combustible dust hazards.

In this ballot, a number of committee members voting against the amendment invoked a justification that they already voted against it at the ROP and ROC ballots. This is not a valid justification because it obviates the function of the Association Technical Meeting.

The bottom line is, before the OSHA grain standard was implemented, this industry had a horrible safety record. The OSHA grain standard helped this industry’s safety record improve significantly, from horrible to bad. While the OSHA is rightly contemplating to revisit the grain standard, it would be unconscionable for NFPA to deliberately expose grain and food workers to significantly greater risks than their counterparts in other industries.

In Chapter 1, NFPA 61 states: “The provisions of this standard reflect a consensus of what is necessary to provide an acceptable degree of protection from the hazards addressed in this standard at the time the standard was issued.” How can this be true while NFPA 61 denies even the most basic requirements of other NFPA combustible dust standards?
July 6, 2012

Ms Amy Cronin
Secretary, Standard Council
National Fire Protection Association
1 Batterymarch Park,
Quincy, MA  02169-7471

Subject:  NFPA 61 Tech Session Motions and Committee Position

Dear Amy and Standards Council:

As Chairman of the Agricultural Dust Committee, I have the following comments regarding the NFPA 61 motions that passed at the annual Technical Session in Las Vegas and would like these comments to be considered as the Standards Council discusses the issues.

**Amendment 61-10 (Proposal 61-23)**

This is a proposal to add a new chapter which would provide the option of using performance based design for protection features at facilities covered under this standard. The committee accepted this proposal in principal at the ROP meeting and added Annex material to the Equivalency Clause to make it clear that performance based design is an option. However, the committee did not feel an entirely new chapter was necessary. The committee upheld this position three times by over 2/3 majority. The vote was as follows:

- ROP Ballot -  26 to 1
- ROC Ballot – 23 to 3
- Amendment Ballot – 19 to 9

Performance based design is a good option for many standards, but as this is an occupancy standard it is important to follow the prescribed protection. It would be too easy for persons not truly qualified to make a design interpretation to make a decision that could lead to a critical error. The committee does not want to make it obvious or easy for a user to bypass the standard by using performance based design. The wording in the proposal was poor and there was not enough support within the committee to revise it extensively to make it workable.
To my knowledge, there have been no outside questions asked of the committee about using performance based design. There does not appear to be any demand by the user of the standard for performance based design options. Adding this option would not improve the level of fire protection or solve any real or imaginary problem with the existing standard.

**Conclusion**

All three of the proposals were thoroughly discussed during the ROP and ROC meetings. The committee is well balanced and has full membership with a waiting list. Attempts were made to compromise on two of the issues by adding Annex material. The submitter of the proposals did not attend either meeting in person, but participated by conference call. These three proposals would make significant changes to the standard, but the submitter did not feel it was important enough to attend the meeting in person and explain his proposals. Now he is trying to use procedural maneuvers and a small minority opinion to bend the committee to his will. I request that the Standards Council uphold the committee’s intent and issue the new Agricultural Dust standard without delay.

Sincerely,

**Matt Bujewski**

Matthew J. Bujewski, PE, ARM
Agricultural Dust Committee Chairman

cc: Martha Curtis, NFPA
    Guy Colonna, NFPA
July 14, 2012

Ms Amy Cronin
Secretary, Standard Council
National Fire Protection Association
1 Batterymarch Park,
Quincy, MA 02169-7471

Subject: NFPA 61 Tech Session Appeals and Committee Position

Dear Amy and Standards Council:

As Chairman of the Agricultural Dust Committee, I have the following addition to my July 6, 2012 letter regarding the motions from the Technical Session in Las Vegas and new comments on the appeals that have just been made.

Addition to July 6 Letter Regarding Motions

My letter dated July 6 was based upon the tentative vote from the Agricultural Dust Committee. With the final vote, the count for rejecting increased by one. The final vote count for all three amendments is now:

Amendment 61-6 (Comment 61-9) – Rejected 18 to 10.
Amendment 61-9 (Comment 61-13) – Rejected 22 to 6.
Amendment 61-10 (Proposal 61-23) – Rejected 20 to 8.

All three motions have been overwhelmingly rejected three times by the committee.

Appeal on Motion 61-1 (Comment 61-4)

This is an appeal to remove the size qualification in the definition of Agricultural Dust in 3.3.1 of the 2008 edition of NFPA 61. The committee is strongly against the removal of the size qualification and the position is well documented in the substantiation in the ROP and ROC. The minutes of the Technical Session also provide the details on the positions.
Appeal on Motion 61-1 (Comment 61-4) (continued)
The votes on this issue are as follows:

ROP Ballot – Accepted in Part in Principal 25 to 2
(The committee agreed to modify the annex material to better support the existing definition but did not agree to remove the particle size criteria in the definition.)
ROC Ballot – Rejected comment 21 to 5
NFPA Tech Session – Failed 200 to 76

The submitter of the appeal is only thinking of the generic use of the term and does not take into account how it is specifically used in the standard. It is only used once in section 10.2 where housekeeping is discussed. Changing the standard without giving the user any information on general particle size would require the user to test all dust and all dust combinations at a facility to determine if they are explosive and subject to cleaning. This is impractical and unnecessary. The definition of 420 microns has been used for decades in the agricultural industry and is consistent with the OSHA definition in the regulation that governs that industry. The submitter did not provide any evidence that there have been explosions or fires due to misuse or misunderstanding of this definition.

Appeal on Motion 61-12 (Proposal 61-26)
This proposal would require isolation of equipment to mitigate the effects of an explosion. The submitter of the proposal wants to require the agricultural industry to use techniques that are used in other industries, such as woodworking, to isolate explosions. The agricultural and food industries, however, do not use the same type of equipment as other combustible dust industries and this proposal would have to be dissected on an equipment by equipment basis. Furthermore, many of the users of this document are subject to Food and Drug Administration requirements that have to be considered when modifying equipment. The submitter provided only generic requirements and did not provide any specific language for the various equipment and processes used in the agricultural and food industries. The committee felt there was some merit for specific processes, but further study is required. No one made a proposal for a specific process. For these reasons, the committee agreed at the ROC meeting that it should be put on hold until the next revision cycle.

ROP Ballot – Rejected 25 to 2
ROC Ballot – Committee agreed to hold for further consideration in the next cycle by 25 to 1
NFPA Tech Session – Failed 119 to 116

Again, the submitter did not provide any evidence of a recent loss or injury that could have been prevented by changing the standard. The committee cannot make such a substantial change without any relevant justification other than the submitters own opinion.

Conclusion
The submitter of these motions and subsequent appeals is strong in his opinions, but without adequate supporting evidence the committee cannot adopt such significant changes. There is simply no justification for it. These were not close votes and there are no significant divisions in the committee. The committee overwhelmingly rejected all of the proposals and comments that he is now appealing. If the will of the committee is not upheld, then I do not know the purpose of
having a committee. I urge the Standards Council uphold the committee’s intent and issue the new Agricultural Dust standard without delay.

Sincerely,

Matt Bujewski

Matthew J. Bujewski, PE, ARM
Agricultural Dust Committee Chairman

cc: Martha Curtis, NFPA
Guy Colonna, NFPA
Engineering Department Memo

TO:       NFPA Standard Council
FROM:     William F. Kearns, P.E., Vice President, Engineering
Member NFPA 61 Technical Committee
wkearns@pfening.com
DATE:     July 19, 2012

RE:       Silo safety – In reference to appeals 61-6, -9, and -10

The Fred D. Pfening Company has been supplying bulk silo systems to the baking industry since the 1950’s. Early projects were largely screw conveyor systems. Beginning about 1955, pneumatic conveying systems supplanted mechanical conveying and have been the baking industry standard ever since. These systems include both flour and sugar systems and a few other ingredients handled in bulk, such as corn flour, dextrose, etc.

The silos are commonly welded carbon steel, typically cylinders twelve feet in diameter and 35-60 feet tall storing 80,000 to 200, 000 pounds of material. A small percentage of the silos are horizontal bins of rectangular welded construction. A few of the silos are aluminum or stainless steel construction. Only a handful have been equipped with explosion vents or other protection.

We believe that these systems have an exemplary safety record and this paper presents some historical data to support this claim.

An informal review of Pfening’s larger projects 1955-2005 suggests that we can account for about 14,000 silo-years of service. Silo-years was calculated in the following manner:

- Project A, installed 1959, 10 silos, still in operation in 2012:
  - 52 years x 10 silos = 520 silo-years
- Project B, installed 1971, 2 silos, closed in 1999:
  - 28 years x 2 silos = 56 silo-years
We are aware of two dust explosion incidents involving silos. Both of these were flour silos and both incidents were due to gross negligence. Here is a brief description of both:

- A customer had two flour silos located outdoors. One was empty, being cleaned by a contractor. The top and bottom hatches were both open. A standard trouble light was being used and the bulb broke, causing an ignition. The resulting deflagration vented out the two hatches. A worker partially in the top hatch was burned. We have no information on the extent of his injuries, but believe he survived. There was no significant damage to the tank or any other equipment.

- A customer had two flour silos in a concrete block building with a wood truss roof. The customer added onto the building and extended the silo fill lines using plastic pipe. The truck drivers complained for months that the plastic pipe generated sparks and made snapping and crackling noises. One day one silo was being filled and the truck driver reported hearing a “whoomp” sound and looked up to see the building roof lift up a few feet, fire and smoke come out, and the roof fall back down. A fire was started in the silo. No one was injured, but the silo building had to be replaced. The only damage to the tank was to the interior paint.

So we have two incidents and no fatalities in 14,000 years of service. And neither of the incidents occurred in “normal” operation.

Pfening’s position is that a mandate that all silos be equipped with explosion venting is completely unwarranted and unsupported by historical data.
NFPA Standards Council
NFPA 61 Appeals
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

RE: Silo Safety in Reference to Appeals 61-6, 61-9 and 61-10

Hostess Brands Corporation has been in the bakery industry for over 100 years. During those years it has made several acquisitions of other baking companies. Continental Baking, JJ Nissen and Purity Baking to name a few.

In processing our baked goods we have utilized bulk silos to pneumatically convey ingredients. These systems primarily convey flour, sugar and a few other ingredients.

The silos are commonly made of welded carbon steel. Typically these cylinders are 12 feet in diameter and 35 to 60 feet tall, storing 80,000 to 200,000 pounds of material.

We also have a smaller percentage of horizontal bins of rectangular welded construction.

We believe these systems have an exemplary safety record and listed below are some facts to support this.

Our company currently has over 150 silos and horizontal bins in operation. The average age of these silos and bins are in the 30 year plus range.

In our company’s history we are not aware of any occurrences of a dust explosion incident that involved the silos or horizontal bins.

Since we have had no dust explosions related to silos in our history, our company’s position is that a mandate that all silos be equipped with explosion venting is completely unwarranted and unsupported by historical data.

Sincerely,

John Grauel

John Grauel
VP Engineering
John.Grauel@hostessbrands.com

klb
July 16, 2012

Secretary
Codes and Standards Administration
National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02169-7471

RE: Certified Amending Motions to NFPA 61 - Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities

To Whom It May Concern:

The undersigned individuals and the American Feed Industry Association (AFIA), the Grain Elevator and Processing Society (GEAPS), the National Grain and Feed Association (NGFA) and the U.S. Beet Sugar Association (USBSA) submit these comments in response to amendment motions concerning NFPA 61 and the discussions relating to them that took place during the June 13, 2012 NFPA Association Technical Meeting in Las Vegas, NV.

Representatives from several of these agriculturally-based trade and professional associations, as well as representatives from the association member companies serve on the NFPA 61 Technical Committee, Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities. Many of the representatives from these organizations attended the Association Technical Meeting and spoke during the discussion regarding the proposed amending motions. This document supplements the remarks recorded in the transcript.

AFIA is the national trade association for the feed industry representing nearly 500 member companies. AFIA members manufacture 75 percent of the feed and pet food sold annually in the United States, and membership includes manufacturers, ingredient suppliers, animal health companies, equipment manufacturers, large integrated livestock and poultry producers, and firms providing other goods and services to the animal food industry.

GEAPS is a not-for-profit professional association dedicated to advancing leadership, innovation and excellence in grain handling and processing industry operations. There are currently some 2,400 GEAPS members in 17 countries. The majority of members is employed in North America and is responsible for the operation of more than 10,000 grain handling facilities worldwide. The GEAPS organization comprises 30 local chapters in North America – including the United States and Canada.
The NGFA is comprised of 1,050 member companies that operate more than 7,000 facilities and handle more than 70 percent of the U.S. grain and oilseed crop. NGFA membership encompasses all sectors of the industry, including country, terminal and export grain elevators; commercial feed operations; biofuel producers; cash grain and feed merchants; end-users of grain and grain products, including processors, flour millers, and livestock and poultry integrators; commodity futures brokers and commission merchants; and allied industries.

The USBSA represents eight beet sugar companies, which operate twenty-one processing factories in nine states. These firms produce refined sugar from sugar beets grown by about 10,000 family farmers on about 1.2 million acres in eleven states. All of the member firms are farmer cooperatives.

Virtually all of the associations’ facilities are subject, in whole or in part, to the Occupational Safety and Health Administration’s (OSHA) grain handling standard, 29 C.F.R. 1910.272, as well as NFPA 61.

Taken together, the associations represent an important segment of the U.S. agricultural grain, feed and processing industry. Our members are critical in handling and producing the domestic food and feed supply, promoting U.S. agricultural exports, and promoting energy independence in the United States. Representatives from individual member companies, including, Ag Processing Inc., and ConAgra Foods, Inc. either serve as principal members or alternates on the NFPA 61 committee.

During the 1980s, NGFA, and the other trade groups, worked with OSHA to develop the grain handling standard, 29 C.F.R. 1910.272, which was promulgated in 1988, to address fires and explosions. Since that standard was implemented, NGFA has worked with OSHA officials to clarify compliance requirements and convey this information to industry. In addition, OSHA has published compliance information, including a booklet explaining the standard's requirements and enforcement guidance for compliance officers, clarifying regulatory obligations under the standard.

NGFA, as the principal representative of the grain handling industry, has been at the forefront of research and development designed to enhance safety. The industry is dedicated to pursuing and promoting technological innovations, new practices, and safety training and education programs that contribute to safe and efficient grain handling operations. All of these efforts are vital, first and foremost, to safeguard human resources. Clearly, the industry has demonstrated its commitment to safety, both prior to and after the promulgation of the grain handling standard.

More broadly, the grain, feed and processing industry has demonstrated a successful commitment to safety that is reflected in its excellent safety record for the past 25 years. Each of our associations has an experienced and active committee that aggressively promotes safety within the industry. The industry has spent hundreds of millions of dollars towards this success.
Therefore, when OSHA completed a regulatory review of the grain handling standard in 2003 they determined that there have been fewer fire and explosion related fatalities since the rule was promulgated. **OSHA further concluded that the standard should, “continue without major change.”**

In addition, Bill Wright, interim chair of the U.S. Chemical Safety and Hazard Investigation Board (CSB), testified during the House Education and Labor committee's March 12, 2008 hearing on H.R. 5522 -- the “Combustible Dust Explosion and Fire Prevention Act of 2008”-- that the frequency of grain facility explosions declined by 60 percent following implementation of the grain-handling standard. This is a testament to the combination of industry research, education, training and government involvement.

The current NFPA 61 standard, which has been carefully developed over the past 87 years, reflects the unique operational needs of the grain handling industry and the agricultural sector in general. The standard’s effectiveness is evident in the significant reduction of grain dust explosions over the years, including a large reduction since 1980 following several significant explosions that occurred in the late 1970s.

Over the years, many representatives from virtually every sector of the grain handling industry (grain elevators, feed mills, soy processing, starch manufacturing, flour milling, and other types of mills) have fine-tuned the recommendations of the NFPA 61 standard to fit our operations. Basic facility design elements, such as placing legs outside of facilities and using safety monitoring devices have also been shared through committee participation and NFPA 61 development. Any abrupt or confusing changes to NFPA design and management recommendations would threaten to undermine this safety record by forcing companies to amend their currently successful housekeeping and safety programs.

As a result, during the 2012 revision cycle, many of the changes either accepted or rejected by the committee were made by a large consensus of the group, not just solely industry representatives. Furthermore, we believe the proposed NFPA 61 standard clearly represents a workable consensus for the affected industries and should not be modified because a few persons not familiar with the industry believe they have better solutions. The NFPA 61 committee has continuously strengthened the standard over the past 35 years by adopting requirements reflecting technologies that are proven and feasible.

Therefore, many on the committee were quite disappointed by the proposed Notices of Intent to Make a Motion (NITMAMs) that were submitted and approved by the Motion Committee and discussed at the Association Technical Meeting for the following reasons:

- Almost all of the NITMAMs were based on topics that were previously proposed, discussed and voted upon many times during the NFPA 61 committee’s 2012 Revision Cycle.

- As explained further below, some of the NITMAMs would cause industry to meet theoretical requirements that will not work, are unproven, are not cost-effective, or
will divert attention from currently successful housekeeping and safety programs and facility designs. Several of the proposed changes offered through the NITMAMs appear to come directly from the current version of NFPA 654, the language of which is more generic, is unnecessarily complicated in comparison to NFPA 61 and, and for small companies, so difficult to apply that they would likely have to go to the expense of hiring special consultants. The special circumstances facing those in agriculture are specifically addressed in NFPA 61, which was written to specially reflect the circumstances of the agricultural sector, is more straightforward and easier for its users to understand.

Based on the NITMAM’s, many of the agricultural representatives attended the Association Technical Meeting to offer countering views to the proposed changes. There were 15 motions seeking changes to NFPA 61. Fourteen of these motions were from one of the committee members, Mr. Erdem Ural, and one motion was made by Mr. Marcelo Hirschler, regarding pneumatic conveying. The 14 motions made by Mr. Ural were essentially combined into 7 motions, which made for a total of 8, including Mr. Hirschler’s. The NFPA membership in attendance defeated five of the motions, but accepted three. The NFPA 61 committee’s previous votes on the matters are as follows:

- **Silo Venting (Amendment 61-9)** – Rejected 24 to 3 in the ROP ballot and rejected 21 to 5 in the ROC ballot.
- **Process Hazard Analysis (Amendment 61-6)** – Rejected 26 to 1 in the ROP ballot and rejected 23 to 3 in the ROC ballot.
- **Performance Based Design (Amendment 61-10)** – Accepted in principal and added Annex material at the ROP with vote of 26 to 1 and re-affirmed our position with a vote of 23 to 3 on the ROC ballot.

Some of the reasons why these amendments were and should continue to be rejected are as follows:

**With respect to Amendment 61-6:**

Process hazards analyses (PHA), management-of-change procedures (MOC), and these other requirements are completely unjustifiable and inappropriate for agricultural facilities. These requirements originated in the chemical industry, which has complex chemical processes and novel and varied chemicals, the behavior of which together can be dynamic and often difficult to predict. That is completely untrue of agricultural facilities. The behavior of agricultural dusts and their handling processes have long been known, have remained essentially unchanged for decades, and are not complex. Requiring process hazards analyses is therefore completely unjustifiable.

As to management of changes, in agricultural facilities, the frequency of subtle changes that can significantly increase fire and explosion hazards is rare, and certainly not great enough to require the multi-factor review process and documentation required of changes to less-well understood or more complex processes. So long as the design of, or design change to, an
agricultural facility is reviewed by a qualified person, i.e., a person knowledgeable about the cause, propagation and prevention of fires and explosions involving combustible dust, safety can be sufficiently assured. In sum, PHA’s and MOC’s are too elaborate to be justified.

All this is particularly in the many small facilities in the agricultural industry, in which, either by reason of the size of the facility or the small number of managers, all design elements and all changes come to the attention of a qualified person. So long as a qualified person approves the design or change, additional requirements, including documentation requirements, would not add appreciably to safety, and would add enough to the compliance burden for small facilities that it could not be said to be practical under the circumstances.

With respect to Amendment 61-9:

A rule requiring venting in all silos as a rule is infeasible and unproven. Not only is it very difficult except on an individual basis to determine which silos would be able to be vented and which ones would not, but the length and diameter ratio of large modern silos makes it physically impossible to design explosion vents in accordance with NFPA 68. The motion is based on speculation that the limited data available would justify a requirement for venting on the very much larger silos in use today. The test data submitted by the proponent represents a very small range of silo size, does not reflect the silo sizes used today, and cannot justify an across-the-board rule. The right action is what the committee voted for – an NFPA project to study explosion venting on the very large silos in use today.

In addition, as mentioned at the Association Technical Meeting, the National Grain and Feed Foundation is considering funding a study related to explosion silo venting. The project is intended to provide venting ratio data for silos in the range that are common in the agricultural industry. The study would be designed to follow-up on one conducted by the NGFA’s Fire and Explosion Research Council in 1983 and often referred to by Mr. Ural in his NITMAMs. The research will also evaluate the economic impact of applying NFPA venting standards within grain storage bins and silos.

With respect to Amendment 61-10:

Whether to have this material in the text of the standard or in the Annex is a judgment call that must take into account the nature of the industry that uses NFPA 61. The agricultural industry is comprised of a few large companies and untold numbers of small companies, almost none of whom will have the technical expertise to make any use of this material and nearly all of whom will find it confusing. And its placement in the middle of the standard will strike them as more confusing yet. That confusion is, however, entirely unnecessary. The Committee made a judgment call to place this material in the Annex and that judgment should be respected by those with less knowledge of the agricultural sector.
A Different Matter

We also wish to bring a different matter to the attention of the Standards Council. During the meeting, our representatives were appalled by the vicious personal attacks on our committee and its members by the maker of the motions and the three persons supporting them, all of whom serve on the NFPA 654 committee. Rather than relying on facts, they resorted to personal attacks and appeals to emotions, as documented in the transcript, especially during the silo venting debate.

For example, one person spoke as follows:

“…It’s a reality that addresses the fact that a bunch of gray-haired old guys sitting in the committee room wondering if they are going to finish their work before their plane leaves can’t conceive of all the problems and all the circumstances that exist out there in the real world.”

The proponent of the motions also made a personal remark about an NFPA 61 committee member: “Also this committee [NFPA 61] is the only committee that I serve on [that h]as a lobbyist as a member.”

What occurred during the meeting was a sorry display of disrespect for fellow NFPA members and committee members, all of whom serve as volunteers. NFPA leadership during the meeting should not have allowed it to occur.

It bears observation that almost all of the volunteers who serve on the committee took several days from their busy, everyday schedules to personally attend and participate in the ROP and ROC meetings where the aforementioned issues were discussed. One of the few committee members who did not take the time to appear in person was the same one who took the time to draft and propose fifteen NITMAMs.

We also point out that one participant falsely asserted that data on the Chemical Safety Board’s website shows that our industry has the worst safety record of all:

“If any of you would like to do so, I direct your attention, go to the CSB website, CSB.gov, and look up the statistics and you will find that the agricultural and food products has the worst safety record with respect to explosive dust any industry segment in the United States or Canada.”

The only document we were able to find on the CSB Web page was the 2006 CSB Investigative Report: Combustible Dust Hazard Study. On page 4 under the “Key Findings”, CSB notes:

- OSHA’s Grain Handling Facilities Standard has successfully reduced the risk of dust explosions in the grain industry.
Secondary dust explosions, due to inadequate housekeeping and excessive dust accumulations, caused much of the damage and casualties in recent catastrophic incidents.

On page 60 of the report we found the following quote,

“NGFA stated that its industry had experienced ‘an unprecedented decline in explosions, injuries and fatalities at grain handling facilities’ since 1980. Further, the NGFA credited the standard [OSHA grain handling standard] with stimulating technological advances in the design, layout and construction of grain handling facilities.”

Moreover, silo venting, process hazard analysis and performance-based design have nothing to do with housekeeping and dust accumulation.

Further, CV Technologies President, Martin Cvetes did not support such comments. He stated in a July 3, 2012 letter to Bunge North America (see attached):

“In response to some concerns expressed by Bill Stevenson…CV Technology has issued the following statement:

There is considerable merit to having industry specific standards because the operations are quite different for the industry segments addressed in NFPA 61…There are very useful and practical features to NFPA 61 that make it unique among the Occupancy Standards.

**Our involvement in NFPA document development should be limited to documents in which we actively hold a committee seat. Any comments made regarding other documents are those of individuals and do not represent the views of CV Technology.”**

Rather than continue to accept behavior that damages the NFPA, we as industry representatives respectfully request that the NFPA staff provide the membership with a set of instructions based on NFPA code of conduct (i.e., participants should conduct themselves at all times in a professional and respectful manner, and shall respect all rulings of the chair. They should express their views through the making of appropriate motions and through participation in the formal debate on motions) and that the moderator enforce decorum during the discussion of NITNAM’s. Those who resort to personal attack or who appeal to emotion should be first admonished and then after future such behavior should be removed from the proceedings.

The authors of this letter strongly support the concept set forth in the statement of General Principles, “promote the development of consensus through the broad and balanced participation of a variety of interests and through the full airing and discussion of all points of view.”
As previously mentioned, the committee’s actions on the ROP and ROC of the certified amending motions addressing silo venting, process hazard analysis and performance-based design show that all had an opportunity to participate and that every member’s view was heard. It is unfortunate that one committee member was not happy with the nearly-unanimous result and is doing everything procedurally possible to create an outcome congenial to himself. To ignore the consensus of the NFPA 61 Committee on these matters would violate the General Principle of consensus and damage the consensus process.

In closing, we strongly urge the NFPA Standards Council to consider and give weight to the consensus of the committee as a whole.

Thank you for your consideration of our views. We would be pleased to respond to any questions you may have.

Sincerely,

NFPA 61 Committee Principals

Keith Epperson, On behalf of the American Feed Industry Association

James Maness, On behalf of the Grain Elevator and Processing Society

Jess McCluer, On behalf of the National Grain and Feed Association

Lance Rick, On behalf of US Beet Sugar Association
Jeff Rogers
Ag Processing Inc.

J. Anthony Yount
ConAgra Foods, Inc.
Maynard, Mary

Subject: FW: NFPA 61 Appeals

From: David Kirby [mailto:Dkirby@BakerRisk.com]
Sent: Thursday, July 26, 2012 8:30 PM
To: Cronin, Amy
Cc: Fuller, Linda; Maynard, Mary; erdem.ural@lpsti.com; walt frank (wlf@frankrisk.com); Rodgers, Sam (Process Safety); Quentin Baker; Kelly Thomas; Bob Gombar

Subject: NFPA 61 Appeals

Amy, and Members of the Standards Council,

As former Chairman, and current member of NFPA 68 & 69, and member of NFPA 654, and with many years of experience with explosion/fire protection, I am writing to support two of Dr. Ural's appeals to the Standards Council, 61-9, Log#1034 and 61-10, Log#1041. My support of 61-9, Log#1034 is contingent on the assumption that they would apply to new construction only. Appeal 61-9, Log#1034 addresses the need for deflagration venting of grain silos. Either providing weak roof-to-shell venting of the entire top of the silo, or providing perimeter venting around the sides of the silo near the top are feasible and acceptable methods of deflagration venting, per NFPA 68. At Union Carbide, where I worked for many years, we developed a standard design for deflagration venting of granular polyethylene storage silos, with perimeter venting around the top of the shell, and at no significant increase in cost.

I support performance-based design language in NFPA 61 (61-10, Log #1041) that allows a risk-based approach to determine the protection to be provided (similar to language in NFPA 654). A process hazard risk assessment (PHRA) would likely determine that the risk of silo explosion without deflagration venting would meet generally accepted “acceptable risk guidelines” (see CCPS “Guidelines for Developing Quantitative Safety Risk Criteria (Risk Tolerance Criteria or RTC Guidelines, 2009)) for silos that are filled infrequently, such as family farms. These cases clearly have low risk, because of lack of enabling factor that explosion hazard typically only exists while the silo is being filled. Other examples of low risk because of low frequency include storage of high minimum ignition energy materials (MIE) where recognized ignition mechanisms are below (with appropriate safety factors) credible ignition energies. I support an exception for the low risk events. Note that CCPS gives no specific risk acceptance criteria, but that is up to the owner/operator to make a risk acceptance decision (presumably based on CCPS Guidelines or equivalent risk criteria). I support adding appropriate language in NFPA 61 Appendix that covers these situations, with a generic risk acceptance criteria, so that each location would not be required to do a documented risk assessment for each storage silo.

Some additional comments:

- Cost of explosion venting silos spread over the entire job is insignificant.
- Perimeter venting is much preferable to fragrable roof or weak roof-to-shell seam from a safety standpoint. Also, because of the (approximately 25 degree) angle of repose for most grains, the design to accommodate perimeter venting does not reduce storage capacity of large diameter silos if the silo is center filled.
- Using concrete construction for the roof of weak roof to shell design does not meet the intent of NFPA 68. A metal roof must be used, but can exceed the 2 ½ lbs/ft2 limitation found elsewhere in NFPA 68.

Thank you very much.

Kirby
To the Standards Council,

I am the current chair of the Technical Committee on Explosion Protection Systems and serve on 654, 484, and most recently 652 committees. I am writing in support of this appeal to include language that explosion protection be provided according to NFPA 68/69 with venting according to NFPA 68. I have read the supporting input provided by Dave Kirby and second that completely.

Except - Bins and silos where explosion venting is not practical due to bin or silo geometry, building constraints, or both....

By permitting that explosion protection can be eliminated in a general case based on practicality of installation, instead of on the basis of a risk evaluation or performance-based design, appears on the face to ignore the hazard presented by the explosion. No alternative mitigation is required in the case where it is not practical – rather the hazard is accepted.

Further, the position being taken by the 61 committee permits new silos and bins to be constructed without regard to protection against explosion while silo and bin explosions continue at a significant rate. In fact, it permits the situation to continue to worsen since the desired physical construction trumps the ability to be able to protect new equipment. New construction can be even larger L/D ratio, making it more difficult to protect and more likely to fail catastrophically in the event of an ignition.

I cannot imagine a similar argument with a dust collector....I would like to build this collector from 24 gauge steel and install it inside the building close to the operation. Since I have chosen to use 24 gauge metal, NFPA 68 requires more vent area than I can practically install. Therefore I accept the hazard.

I urge the Standards Council to support these appeals and recognize that uncontrolled rupture of bins and silos can be prevented using the methodologies in NFPA 68 and 69.

Regards,
Samuel Rodgers
July 30, 2012

NFPA Standards Council - NFPA 61 Appeals
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

Re: NFPA 61 – Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities - In reference to appeals 61-6, -9, and -10

Dear NFPA Standards Council:

The American Bakers Association (ABA) submits this brief letter in reference to appeals 61-6, -9 and 10 of NFPA 61 (Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities). The ABA is the Washington D.C.-based voice of the wholesale baking industry. Since 1897, ABA has represented the interests of bakers before the U.S. Congress, federal agencies, and international regulatory authorities. ABA advocates on behalf of more than 700 baking facilities and baking company suppliers. The baking industry generates more than $102 billion in economic activity annually and employs more than 633,000 highly skilled people.

Silos in the baking industry are commonly welded carbon steel, typically cylinders twelve feet in diameter and 35-60 feet tall storing 80,000 to 200,000 pounds of material. A small percentage of the silos are horizontal bins of rectangular welded construction. A few of the silos are aluminum or stainless steel construction. It is ABA’s understanding that only a handful of silos have been equipped with explosion vents or other protection.

Phening has set forth several examples that we believe accurately depict the baking industry practices to date. Beginning in the late 1950s pneumatic conveying systems supplanted mechanical conveying and have been the baking industry standard ever since. These systems include both flour and sugar systems and a few other ingredients handled in bulk (such as corn flour, dextrose, etc.).

We believe that these systems have good safety records. An informal review of Phening’s larger projects 1955-2005 suggests that Phening can account for about 14,000 silo-years of service. During this time period, Phening is aware of two dust explosion incidents involving silos. Both of these were flour silos and both incidents were due to gross negligence as discussed in the Phening comments dated July 2012. ABA believes that to mandate that all silos be equipped with explosion venting is unwarranted and unsupported by the historical safety data that Phening collected. Thank you for your consideration of the baking industry’s concerns.

Regards,

Rasma I. Zvaners
Policy Director
NFPA CAM 61-12 Appeal
NITMAM Log #1042

NFPA 61: STANDARD FOR THE PREVENTION OF FIRES AND DUST EXPLOSIONS IN AGRICULTURAL AND FOOD PROCESSING FACILITIES

(1) Name, affiliation, and address of the appellant
    Dr. Erdem A. Ural
    659 Pearl Street
    Stoughton, MA 02072
    (781) 818-4114
    Erdem.ural@lpsti.com

(2) Statement identifying the particular action to which the appeal relates
    the floor action on CAM 61-12

(3) Argument setting forth the grounds for the appeal
    Please see below

(4) Statement of the precise relief requested

GROUNDS FOR THIS APPEAL

This appeal is filed to adopt proposal 61-26 into the next edition of NFPA 61. The NITMAM failed by only 3 votes (116 to 119) at the Association Technical Meeting.

The proposal attempted to introduce into NFPA 61 generally accepted safety measures such as risk evaluation, explosion protection for equipment, explosion isolation for equipment and upstream areas which are sorely missing in NFPA 61. Without a doubt, isolation is a crucial element of any explosion prevention and protection strategy. Therefore, it must be addressed in NFPA 61 in order to avoid further unnecessary losses of life and property.

For example, in the tests sponsored by the National Grain and Feed Association (NGFA), deflagrations in a silo were successfully vented. In one test, when the flame was allowed to come into the silo as a turbulent jet (not unlike the situation that would arise when explosion isolation is absent), a violent deflagration occurred, venting did not work and the silo burst. That is why most other NFPA occupancy standards require at least consideration for explosion isolation. NFPA 69 explosion protection document also requires explosion isolation because if the deflagration is allowed to go from one enclosure to another, then none of the protection methods work. Then catastrophic failures occur. NFPA 68, the explosion venting standard also requires explosion isolation for venting to work.
I believe, during this cycle, NFPA 61 committee began to appreciate the importance of explosion isolation. In the ROP, the committee flat out rejected this proposal. In the ROC, the committee reconsidered this proposal and decided to hold it.

However, the issue is so deadly, neither NFPA nor the workers can not afford to sleep for five more years and wait for the next document cycle. If we wait for another committee cycle for the isolation to be adopted; or wait for the fundamentals committee and then the correlating committee to complete their acts, we may be talking about five, ten years. The standards council members must think they vote on this appeal about how many facilities will be built, designed and built in these upcoming years and how many deaths could have been prevented.

The bottom line is, before the OSHA grain standard was implemented, agricultural and food processing industry had a horrible safety record. The OSHA grain standard helped this industry’s safety record improve from horrible to bad. While the OSHA is rightly contemplating to revisit the old grain standard, it would be unconscionable for NFPA to deliberately expose grain and food workers to significantly greater risks than their counterparts in other industries.
A.6.2.3.1(1)(b) The maximum allowable concentration of oxygen is very dependent on the material, its environment, and the equipment. For particulate solids, the particle sizes. In addition, with many combustible metals, it is not advisable to completely eliminate oxygen from the transport gas. When that metal is finally exposed to oxygen-containing air, the rapid oxidation of the virgin metal could produce sufficient heat to ignite the material. It is, therefore, preferable to provide for a low concentration of oxygen in the transport gas stream to ensure the oxidation of virgin metal as it is exposed during the course of transport.

A.6.2.3.1(2) For deflagration relief venting through ducts, consideration should be given to the reduction in deflagration venting efficiency caused by the ducts.

A.6.2.3.1(5) This method is limited in effectiveness due to the high concentrations of inert material required and the potential for separation during handling. Other methods are preferred.

A.6.2.3.1(6) For information on dust retention and flame-arresting devices, see NFPA 68, Standard on Explosion Protection by Deflagration Venting, Section 9.7.

Methods of explosion protection using containment, venting, and suppression protect the specific process equipment on which they are installed. Chokes, flame front diverters, and abort gates are not acceptable devices for explosion isolation due to lack of specific test standards to validate the design. However, these devices can still provide benefits such as reducing pressure transmitted to connected equipment.

A.6.2.6.3(1) When rotary valves are installed in both the inlet and the outlet of equipment, care should be taken to ensure that the rotary valve on the inlet is stopped before the unit becomes overfilled.

A.6.2.5 Exposures of concern include, but are not limited to, bagging areas and hand-dumping operations where the discharge of a fireball from the pickup point endangers personnel.

A.6.2.5.1 A common example for the application of such isolation would be in the upstream duct work associated with a dust collection system servicing a work area. Loading chutes less than 10 ft (3 m) in length and designed for gravity flow are not considered as duct work.

Substantiation: Proposed text clarifies the requirements and makes the document result in safer applications.

Committee Meeting Action: Reject

Committee Statement: The Committee rejected the submitter’s recommendation to add the proposed requirements to NFPA 61 since many of the provisions do not relate to the agricultural industry.

Number Eligible to Vote: 28

Ballot Results: Affirmative: 25 Negative: 2

Ballot Not Returned: 1 Schoeff, R.

Explanation of Negative: MCLELLAND, B.: The text represents practice consistent with safe operations including mitigation of flame propagation through practice of isolation. The listed elements apply to combustible dust including the agricultural industry.

URAL, E.: Committee’s justification to reject this proposal is invalid. At the very least, the Committee agreed some of the proposed requirements apply to the agricultural industry but chose not to implement them without specifying a reason. The committee also ignored the fact that NFPA 61 applies to certain occupancies other than those considered as traditional “agricultural industry.”

Comment on Affirmative: YOUNG, J.: Agree with Committee Meeting Action and/or Committee Statement.
Let's now proceed to the discussion on certified amending motion 61-12 and 61-13.

Microphone 5, please.


PRESIDING OFFICER McDANIEL: There's a motion on the floor to accept proposal 61-26. Is there a second? We have a second.

Please proceed.

ERDEM URAL: This proposal is addressing the very problem that Mr. Maness has pointed out. He said they have tested a silo and when the flame came as a turbulent jet, then things were so crazy explosion venting didn't work and the silo burst. So that's from Mr. Maness' note.

Most other standards at NFPA occupancy standards require at least consideration for explosion isolation. NFPA 69 explosion protocols document also makes a requirement for explosion isolation because if you let things go from one enclosure to another, then none of the protection methods work. Then things go out of control and you are headed to catastrophe.

NFPA 68, the explosion venting document says you have to have explosion isolation. Otherwise, you are going to -- venting is not going to work.

So I strongly -- also the committee has recognized the importance of this and they didn't reject this proposal in the comment phase, but instead they decided to vote. It's coming to one second so I'm going to pause here for a second to one minute.

So the thing I was going to say is we can -- the committee put it on hold. So it's going to come in as a proposal in the next cycle. So we can let things sleep for five more years or we can accept this and then the committee maybe put some fire under the seats of the committee, then the committee can, if they can't live with it, come up with a more expedient solution such as TIA.

I have, as I said, I have investigated
recently grain elevator explosion and explosion isolation is partially responsible for the death of the workers. Thank you.

PRESIDING OFFICER McDANIEL: Thank you.

Mr. Bujewski, would you like to present the committee's position?

COMMITTEE CHAIR BUJEWSKI: This proposal is currently on hold as of the ROC meeting because it could require substantial rewriting of the standard. And it may well be covered in the new fundamentals of dust standard.

There's nothing in the proposal that would require immediate action by the committee. There's nothing that's going to substantially change the safety or the fire protection at grain handling facilities or food facilities.

So the committee felt it was certainly appropriate to put it on hold at this time and it will be addressed next time. Or it will be addressed by fundamentals of dust committee which is currently being developed right now.

PRESIDING OFFICER McDANIEL: Thank you, Mr. Bujewski.

With that, we'll open up debate on the motion. Please provide your name and affiliation and whether you're speaking in support or against the motion.

Microphone 5, please.

ERDEM URAL: Erdem Ural speaking for the motion.

Again, I'd like to point to your attention of existing facilities versus new designs. We are all more tolerant, more understanding for existing facilities. But if we wait for another committee cycle for this thing to be adopted or wait for the fundamentals committee and then the correlating committee to complete their acts, we may be talking about five, ten years.

Think, before you vote against this motion, think about how many facilities will be built, designed
and built in these upcoming years and how many deaths could have been prevented by your vote here.

If there is something not livable within the proposal, the committee has always the option of acting quickly and coming up with a TIA.

PRESIDING OFFICER McDaniel: Thank you.

Microphone 5.

Marcelo Hirschler, GB International, in favor of the motion.

I'm really confused as to how staff would have permitted this to occur. A proposal was put in, which of course proposal presents new material, then the proposal was rejected. A comment was put in to accept the proposal. The comment was held. You only hold new material that's introduced between the proposal and the comment.

This is ridiculous. This should have been accepted or this is the way the process should have worked. How can you hold something that says accept what was proposed in the proposal stage?

PRESIDING OFFICER McDaniel: Thank you.

Microphone 1.

Jim Cholin from JM Cholin Consultants. I'm speaking in favor of the motion.

I want the membership to know when I walk onto a job site, whether it's an ag dust, metal dust, plastic dust, wood dust or recycled sewage dust, I basically use the criteria that are listed out in Dr. Ural's proposal as one my first steps of developing the hazard management strategy.

It works. And I can't fathom why the technical committee would not want this information available to the users of their document. I urge the membership to vote in favor of the motion.

PRESIDING OFFICER McDaniel: Thank you.

Microphone 5.

Bill Stevenson: My name is Bill Stevenson. My company is CV Technology. I'm speaking in favor of the motion.

Let me give an example of why putting
something like isolation in as an annex item is weak and
my arguments this afternoon have been that 61 is a weak
document and it needs to be strengthened.
I have Customer A. Customer A makes food
product and they have evaluated their risks, established
their own internal committee, determined that
propagation could occur and have elected to isolate.
I have Customer B, direct competitor, looks
me right in the eye and says -- this is a true story --
I don't have to provide isolation because it's optional.
It's in the annex. It's not mandatory. Folks, this is
wrong.

PRESIDING OFFICER McDANIEL: One minute.
BILL STEVENSON: Thank you. Isolation
provides a measurable level of safety and the lack of it
provides a measurable level of risk to the process and
to the people concerned.
You do a disservice to yourself and your
industry by ignoring this problem and by not putting
this material in the mandatory section of the document.
Thank you very much.
PRESIDING OFFICER McDANIEL: Thank you.
Is there any other discussion?
Mr. Bujewski?
COMMITTEE CHAIR BUJEWSKI: Mr. Chair,
isolation is used extensively in the wood working
industry. It's used in the plastics industry. It's not
used in the agricultural dust industry. There's been no
data that shows that isolation is necessary in the
agricultural dust industry.
I take exception to Mr. Cholin's comments
that the committee did not work hard on every single
proposal. We did. Some of the other persons supporting
the motion were also free to submit proposals to the
committee or even make comments in the comments stage,
but they did not. Instead they chose to make comments
here.
Had they made comment here, maybe the
committee would have addressed those and maybe there
would be a different outcome.
But we have to follow what's given to us as a proposal or a comment. We can't just make things up. That's the way the committee works.

PRESIDING OFFICER McDANIEL: Thank you, Mr. Chair.

Before we vote, let me restate the motion.

The motion on the floor is to accept Proposal 61-26.

Please record your votes, one in favor of the motion accept or two opposed to the motion reject.

UNIDENTIFIED SPEAKER: Sir, sir.

PRESIDING OFFICER McDANIEL: Sorry. Didn't see you. Microphone 6, please.

FRED SANDS: My name is Fred Sands. I'm from Liberty Mutual Insurance Company and this is my first voting session. I'm sure some of you can appreciate how I feel.

PRESIDING OFFICER McDANIEL: Are you speaking for or against the motion?

FRED SANDS: I'm speaking against the motion.

I'm assuming that the committee is made up of -- I'm assuming it's balanced for one thing and I'm assuming they are made of experts in the field.

If they have chosen to keep this standard and it seems to be unfair that a group here is basically rewriting the standard over their heads. And unless the group here has a lot more expertise here, I don't believe we should be overruling the opinion of the committee.

So I have great sympathy for their position.

I have no doubt from an engineering perspective that some of these proposals are very sound. But I think that committee has chosen to keep their standards simple and basic for the people that use them. And I think we should take that into consideration.

Again, unless we have a lot of real experts in this field, I think we're doing the whole process a disservice. Thank you.

PRESIDING OFFICER McDANIEL: Thank you.
ERDEM URAL: Erdem Ural speaking for the motion. The response to the gentleman from Liberty Mutual, the committee is balanced perhaps according the NFPA definition. But NFPA definition is not always right because NFPA people who serve who are representatives of the companies, they retire, and when they retire, they get appointed as the special experts. The committee retains them.

So all actuality that shifts the balance of the committee, but NFPA process doesn't capture there's a shift. That's why NFPA process needs to be improved. So let's put that aside.

Also this committee is the only committee that I serve on as a lobbyist as a member. So let's put that aside, too.

The question was the -- I lost my train of thought. Oh, Mr. Bujewski was saying that these are all unfair. They came at us the last minute.

That's not true. The proposal was submitted in time according to the NFPA process. The committee acted on it.

And then I didn't like the outcome. I submitted as a comment. Again, that was on time accepted and logged by NFPA. So maybe he's also arguing that NFPA process needs to be improved. But your positive affirmative vote on this motion will save a lot of lives and you will sleep better.

PRESIDING OFFICER McDANIEL: One minute.

ERDEM URAL: I hope you will vote for this proposal.

PRESIDING OFFICER McDANIEL: Thank you.

Microphone 6, please.

FRED SANDS: Thank you. I don't want to continue --

PRESIDING OFFICER McDANIEL: Name and affiliation, please.

FRED SANDS: Fred Sands of Liberty Mutual.

PRESIDING OFFICER McDANIEL: Speaking for or against the motion?
FRED SANDS: Against. And I don't want to continue this on like I've seen so many of the others, but I think that from an engineering point of view, and they are only like half a dozen people that are speaking for this, and they are all probably great engineers and there may be a lot of excellent sound engineering judgment. I still say we should respect the opinion of the committee that wants to keep it simple. And then to question the whole process by saying that the committee is not -- by questioning whether or not they are balanced, I think is -- I think is now we're going off in into left field.

And after this whole process is over, I intend to go back to the microphone and make a motion to reconsider the whole report and send the whole report back to the committee. Thank you.

PRESIDING OFFICER McDaniel: Thank you. Is there any further discussion on motion 61-12 to accept proposal 61-26? Seeing none, before we vote, let me restate the motion. Motion on the floor is to accept proposal 61-26.

Please record your votes, one in favor of the motion accept or two opposed to the motion reject. Five seconds. Balloting is closed.

Proposal fails.
Item 12-8-6
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (72-1)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Accept Comment 72-6 (thereby rejecting Proposal 72-2a)

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS/HAS NOT** achieved the necessary $3/4$ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is $[19 \text{ (eligible to vote)} - \_ \text{ (ballots not returned)} - \_ \text{ (abstentions)} = \__ \times 0.75 = ____]$ [Blank]

<table>
<thead>
<tr>
<th>Eligible to Vote</th>
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<tbody>
<tr>
<td>___ Approve</td>
<td>___ Do Not Approve</td>
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<tr>
<td>___ Abstain</td>
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**TCC Action: PASS/FAIL**

SIG-TMS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary $2/3$ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is $18$ [28 (eligible to vote) – 2 (ballots not returned) – 0 (abstentions) = $26 \times 0.66 = 17.16$]

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<tr>
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<td>(Nash w/comment)</td>
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<tr>
<td>2 Do Not Agree</td>
<td>(Frable, Wayman)</td>
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<tr>
<td>0 Abstain</td>
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**TC Action: PASS**
Reason Statement
Do Not Agree

I do not agree with the action taken by the NFPA membership at the NFPA Annual 2012 Association Technical Meeting for rejecting Proposal 72.2a.

Based on the actions that the Technical Committee took on ROP 72-2a, the concept of risk analysis that is addressed in Chapter 24 and Appendix B was brought into Chapter 1 so that the concept of risk analysis could be applied to other sections of the Code. The Technical Committee also stated that the concept of "fire risk analysis" spans the material in several chapters and therefore should be under the jurisdiction of SIG-FUN. In addition, during the Report on Comments (ROC), ROC 72-4 modified ROP 72-2a by using broader terms to make it clear that any chapters such as Chapters 7, 10 and 26, could also use risk analysis where applicable. For example, Chapter 26 refers to evaluating "risk exposures". In addition, Chapter 24 of NFPA 72, as well as other codes and standards use risk analysis so there's no reason to limit its application to only the one chapter.

In addition, ROC 72-4 also stated that a fire risk analysis is only to be used where specifically permitted by the Code. In addition, the proposed Annex reference to NFPA 551, Guide for the Evaluation of Fire Risk Assessments provided guidance, even though not a mandatory requirement, suitable and acceptable guidance for an AHJ's to consider when reviewing, evaluating, and approving a risk analysis.

During the ROP and ROC the only negative ballots for ROP 72-1 and ROC 72-4 were from representatives classified by NFPA as "Manufacturers". One of the concerns raised in the negative ballots implied that conducting a risk analysis is not cost effective and therefore should not be considered an option for building owners to utilize in lieu following the prescriptive requirements in the Code. Promoting viable options for users of the Code should be a primary goal of the Technical Committee and not determining what is in the "best interest" of building owners.

Lastly it should be noted that to be an effective technical committee member, one needs to review and evaluate all material prior to voting on a ballot. Not having available the necessary materials, such as the transcripts from the Annual 2012 Association Technical Meeting, to evaluate prior to balloting impacts this process.
Amendment: Accept Comment 72-6 (thereby rejecting Proposal 72-2a)

NOTE: This Association Amendment ("Amendment") is being submitted for ballot to the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs."). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See 4.7.4(c) of the Regs. In this case, the result is that the new provisions on fire risk analysis will not be added as new sections 1.6, 1.6.1, 1.6.2 and A.1.6.1 This means that, whether the ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs., that recommendation is not binding. In the event of an appeal to the Standards Council, the ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

X Do Not Agree*

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I agree with the original committee action. Further, I disagree with the submitters substantiation. The new language does not require a risk analysis to be performed as the submitters substantiation implies, it simply permits a stakeholder to perform a risk analysis to determine the correct level of protection for a fire alarm system.

__________________________
Signature: William F. Wayman

Name - Please Print: William F. Wayman

Date: 06-25-2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
kshea@nfpa.org
617-984-7110 – fax
617-984-7953 - phone
Amendment: Accept Comment 72-6 (thereby rejecting Proposal 72-2a)

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☐ Agree

☐ Do Not Agree*  

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Agree with amendment. The final rejection of the proposed provision for risk assessment in protection of control panel and other components for fire alarm systems removed the benefit. This leaves only the potential conflict between the proposed 1.6.1.6.2 & A.1.6.1 and existing provisions and requirements for risk assessments for Emergency Communication Systems and Mass Notification Systems.

Signature: [Signature]

Name - Please Print: Louis Nash

Date: June 19, 2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
kshea@nfpa.org
617-984-7110 – fax
617-984-7953 – phone

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 336 of 2025
Comment 72-6 Accept

72-6 Log #414 SIG-FUN  Final Action: Reject
(1.6 and A.1.6.1)

Submitter: Shane M. Clary, Bay Alarm Co., Inc.

Comment on Proposal No: 72-2a

Recommendaion: Reject the proposal.

Substantiation: I do not agree that a risk analysis should be performed for the protection of a control unit. The expense of performing the risk analysis would in most cases be more than the cost of installing the detection device. Is the next step to require a risk analysis for the installation of a manual or automatic fire detection system?

Committee Meeting Action: Reject

Committee Statement: The risk analysis requirement to which the submitter writes on has been removed via other TC actions. See the TC action on Comment 72-4 (Log #372).

Number Eligible to Vote: 28

Ballot Results: Affirmative: 23 Negative: 4

Ballot Not Returned: 1 Wayman, Jr., W.

Explanation of Negative:

BEREZOWSKI, A.: See my explanation of negative vote on Comment 72-1 (Log #144).

GAUVIN, D.: See my Explanation of Negative on Comment 72-1 (Log #144).

MUNDY, JR., J.: See my Explanation of Negative on Comment 72-1 (Log #144).

WARNER, T.: I agree with the submitter of ROC 72-6, ROP 72-2a should be rejected. See 72-7 (Log #79).

Revise new sections 6.3.6 through 6.3.6.6 as follows for clarity and to comply with the manual of style;

6.3.6.4* CPVC Plastic Pipe. CPVC pipe in accordance with Table 6.3.1.1 shall be investigated for suitability in automatic sprinkler installations and listed for this service.

(new) 6.3.6.1 Listed CPVC shall be installed in accordance with it’s listing limitations.

(new) 6.3.6.1.1 Manufacturers installation instructions shall include it’s listing limitations.

6.3.6.1* (pick up annex text from ROP 6.3.6.1) When CPVC pipe is used in combination systems utilizing steel piping internally coated with corrosion inhibitors and CPVC piping, the steel pipe coating shall be investigated for compatibility with CPVC by a testing laboratory.

6.3.6.2* (pick up annex text from ROP 6.3.6.2) When CPVC pipe is used in combination systems utilizing steel pipe that is not internally coated with chemical corrosion inhibitors, no additional evaluations are required.

(new) 6.3.6.4 When CPVC pipe is used in combination systems utilizing steel pipe, cutting oils and lubricants used for fabrication of the steel piping shall be compatible with CPVC materials.

6.3.6.5 Fire stopping materials intended for use on CPVC piping penetrations shall be investigated for compatibility with CPVC materials.

6.3.6.6 Other construction materials such as paint, electrical and communication wiring, thread sealants, gasket lubricant shall not come in contact with CPVC unless they have been evaluated as compatible with CPVC materials by a testing laboratory.

6.3.6.7 CPVC listed for light hazard occupancies shall be permitted to be installed in ordinary hazard rooms of otherwise light hazard occupancies where the room does not exceed 400 ft² (37 m²).

6.3.6.8* CPVC shall not be listed for portions of an occupancy classification.

Committee Statement: Changes made to make specific reference to corrosion inhibitors as internal coating.

Number Eligible to Vote: 29

Ballot Results: Affirmative: 27 Negative: 2

Explanation of Negative:

DORNBOS, D.: I don’t believe that compatibility issues are limited to one material and it is inequitable to single one material out. Compatibility is a concern for all potential system components and the Standard should address the issue for all materials.

MCPHEE, R.: I agree with the comment from Dornbos.

Backup Proposal 72-2a to Comment 72-6

72-2a Log #CP210 SIG-FUN  Final Action: Accept
(1.6 (New) and Annex A.1.6.1 (New))

TCC Action: The TCC makes reference to new 1.6 Fire Risk Analysis and advises that the meaning of “protection of fire alarm and signaling systems” is not clear. Is it referring to the protection requirements addressed in 10.15 or something broader (as suggested in the committee statement)? If it pertains only to 10.15 the requirement should be located

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012  Page 337 of 2025
1.6.2. The fire risk analysis conducted in Section 1.6.1 shall be documented.  

Committee Statement: The TC removed the documentation requirement because documentation is a basic part of any risk analysis.

Number Eligible to Vote: 28  
Ballot Results: Affirmative: 22 Negative: 5  
Ballot Not Returned: 1 Wayman, Jr., W.

Explanation of Negative:  
BEREZOWSKI, A.: See my explanation of negative vote on Comment 72-1 (Log #144).  
GAUVIN, D.: See my Explanation of Negative on Comment 72-1 (Log #144).  
MCNAMARA, J.: The committee action on this comment is inconsistent with the action on comments 72-1 (Log #144), 72-2 (Log #96), 72-3 (Log #271), 72-5 (Log #409), 72-6 (Log #414) and 72-7 (Log #79) which rejected proposal 72-2a.  
MUNDY, JR., J.: See my Explanation of Negative on Comment 72-1 (Log #144).  
WARNER, T.: I disagree with the committee action. I believe ROP 72-2a should be rejected. See 72-7 (Log #79).
SHANE CLARY: Thank you, Mr. Chair. My name is Dr. Shane M. Clary and I move to accept Comment 72-6 which is seen in sequence 72-1.

PRESIDING OFFICER BELL: The motion is to Comment 72-6. Is there a second?

Please proceed.

SHANE CLARY: Thank you very much, Mr. Chairman.

What this does is basically return us to the former text, which is found in the 2010 edition of 72, which does not have a requirement per se for risk analysis within the administrative section. This does nothing to affect a risk analysis as required for ECS systems. That is not being challenged in this certifying amending motion.

This particular, both the proposal and the comment which I had submitted to basically remove this from the administrative chapter, was again over the past nine years, our discussions on CIG fund, which is the technical committee for fundamentals of fire protection systems, fire alarm systems, is to in lieu of installing a smoke detector to protect the panel or power supply, that a risk analysis would be allowed. And I'm not opposed to being that if it was your wishes to do that, the perform based analysis. However this is not, as the committee clearly stated, this is not the same as doing performance based analysis for a system. This is just a risk analysis. But sort of vague. The administrative chapter could be perceived by some that risk analysis is then required for every single system that's installed. And so I'm asking for support of my motion to remove this from the administrative Chapter 72.

Thank you.

PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: The technical correlating committee has no comment on this certifying amending motion. And as Mr. Clary is the chair of the committee, I have asked Manny David, a member of the fundamentals committee, to comment on the technical
MANNY DAVID: The technical committee contends that a fire analysis, fire risk analysis could be separate from a perform based design. That's why we provided the additional text to allow fire risk analysis as an alternative means to support a design.

PRESIDING OFFICER BELL: Thank you.

We'll proceed with further discussion.

Microphone 5.


At our meeting on Tuesday, the electrical section voted to support motion 72-1.

PRESIDING OFFICER BELL: Thank you.

Microphone 4.

JACK BEBE: Jack Bebe, American Society for Health Care Engineering, representing the health care section and voting opposition of the motion in front of you.

At business meeting on Tuesday, we voted as a section to oppose the current certifying amending motion. We believe that the fire risk analysis gives us, as was previously mentioned, an alternative way of analyzing this and gives us better criteria and more consistency for both AHJ and for users of the document. So I urge you to oppose this certifying amending motion.

PRESIDING OFFICER BELL: Thank you.

Microphone 5.

BRUCE FRASER: Bruce Fraser of Fraser Fire Protection and I speak in support of the motion.

My concern is that the fire risk analysis the requirements are not clearly defined in 72 now if this goes ahead. It would be very difficult to be enforced. For instance, who is permitted to perform a fire risk analysis? Who would that be? Are there qualifications that you have to have? It's real really not spelled out.

This would open the doors also for virtually all of the requirements in NFPA 72 to be challenged by a fire risk analysis. I believe this would cause nightmare for the enforcing authorities.
Although we've heard it before, there is a process that's already defined and in place to allow departures from prescriptive requirements and that being the performance based design. It's documented. And by the way, when you're doing a performance based design, there is a risk assessment involved with it. So I think the pathway is already there. Again, I would urge support of the motion on the floor.

PRESIDING OFFICER BELL: Thank you. Any other discussion on this motion?

I'm sorry. Microphone 3. Sorry about that.

TOM HAMMERBERG: Thank you. I'm the one kind of tucked over here on the side. I'm Tom Hammerberg with the Automatic Fire Alarm Association and the AFA's codes and standards committee is in favor of this motion. I'm not going to go through and repeat. Pretty much agreement with what Bruce Fraser just stated. Thank you.

PRESIDING OFFICER BELL: Thank you.

Any additional discussion?

Seeing no one at the microphone, Mr. Schifiliti, any final comments?

COMMITTEE CHAIR SCHIFILITI: Correlating committee has no additional comments. I would defer to Manny David if there's any followup from the committee.

MANNY DAVID: No.

PRESIDING OFFICER BELL: Okay. We'll move to the vote on the motion on the floor which is to accept Comment 72-6. Please record your vote, one in favor of the motion or two opposed to the motion. Voting closes in five seconds. Voting is closed. Motion passes.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 24, 2012

AMENDMENT (72-1)

**Document:** NFPA 72, *National Fire Alarm and Signaling Code*

**Motion:** To Accept Comment 72-6 (thereby rejecting Proposal 72-2a)

**TCC FINAL Ballot Results**

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary \( \frac{3}{4} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **10** \([19 \text{ (eligible to vote)} - 5 \text{ (ballots not returned)} - 1 \text{ (abstention)} = 13 \times 0.75 = 9.75]\)

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<td>5</td>
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<tr>
<td>Yes, Correlation Issues</td>
<td>0</td>
</tr>
<tr>
<td>No, Correlation Issues</td>
<td>13</td>
</tr>
<tr>
<td>Abstain (Fiore)</td>
<td>1</td>
</tr>
</tbody>
</table>

**TCC Action: PASS**

**SIG-TMS FINAL Ballot Results**

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary \( \frac{2}{3} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **18** \([28 \text{ (eligible to vote)} - 2 \text{ (ballots not returned)} - 0 \text{ (abstentions)} = 26 \times 0.66 = 17.16]\)

<table>
<thead>
<tr>
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<tr>
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</tr>
<tr>
<td>Agree</td>
<td>24</td>
</tr>
<tr>
<td>(Nash w/comment)</td>
<td></td>
</tr>
<tr>
<td>Do Not Agree</td>
<td>2</td>
</tr>
<tr>
<td>(Frable, Wayman)</td>
<td></td>
</tr>
<tr>
<td>Abstain</td>
<td>0</td>
</tr>
</tbody>
</table>

**TC Action: PASS**
Kim

I know today is the cutoff. I have been rather tied up of late and continue to be so. I am sorry to say that I have not properly followed this. So please enter my votes on all ballots as abstaining. My reason is that I am not available to properly follow the issues and cannot cast a meaningful vote on any of these ballots.

Thank you,
Lou
Sent from my Verizon Wireless BlackBerry

From: "Shea, Kimberly" <kshea@NFPA.org>
Date: Wed, 18 Jul 2012 08:59:16 -0400
To: Ltfiore@aol.com<Ltfiore@aol.com>
Subject: RE: NFPA 72 Amendment Ballots

Lou,

I have received your ballots and because the way the ballot is set up, I would like to verify that you voted “Yes” indicating that you believe there will be correlation issues if the amendment passes. Voting “No” would indicate that you do not see any correlation issues being caused if the amendment is implanted in the document. If you do believe that correlation issues will be created, please provide an explanation of vote and identify what the correlation issue(s) may be.

If you have any questions, feel free to call.

Kimberly Shea
Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
617-984-7953

From: Ltfiore@aol.com [mailto:Ltfiore@aol.com]
Sent: Tuesday, July 17, 2012 7:10 PM
To: Shea, Kimberly
Cc: Walker, Nancy
Subject: Re: NFPA 72 Amendment Ballots

Kim,

Please see the attached ballots.

Lou
Reason Statement
Do Not Agree

I do not agree with the action taken by the NFPA membership at the NFPA Annual 2012 Association Technical Meeting for rejecting Proposal 72.2a.

Based on the actions that the Technical Committee took on ROP 72-2a, the concept of risk analysis that is addressed in Chapter 24 and Appendix B was brought into Chapter 1 so that the concept of risk analysis could be applied to other sections of the Code. The Technical Committee also stated that the concept of "fire risk analysis" spans the material in several chapters and therefore should be under the jurisdiction of SIG-FUN. In addition, during the Report on Comments (ROC), ROC 72-4 modified ROP 72-2a by using broader terms to make it clear that any chapters such as Chapters 7, 10 and 26, could also use risk analysis where applicable. For example, Chapter 26 refers to evaluating "risk exposures". In addition, Chapter 24 of NFPA 72, as well as other codes and standards, use risk analysis so there's no reason to limit its application to only the one chapter.

In addition, ROC 72-4 also stated that a fire risk analysis is only to be used where specifically permitted by the Code. In addition, the proposed Annex reference to NFPA 551, Guide for the Evaluation of Fire Risk Assessments provided guidance, even though not a mandatory requirement, suitable and acceptable guidance for an AHJ's to consider when reviewing, evaluating, and approving a risk analysis.

During the ROP and ROC the only negative ballots for ROP 72-1 and ROC 72-4 were from representatives classified by NFPA as "Manufacturers". One of the concerns raised in the negative ballots implied that conducting a risk analysis is not cost effective and therefore should not be considered an option for building owners to utilize in lieu following the prescriptive requirements in the Code. Promoting viable options for users of the Code should be a primary goal of the Technical Committee and not determining what is in the "best interest" of building owners.

Lastly it should be noted that to be an effective technical committee member, one needs to review and evaluate all material prior to voting on a ballot. Not having available the necessary materials, such as the transcripts from the Annual 2012 Association Technical Meeting, to evaluate prior to balloting impacts this process.
Amendment: Accept Comment 72-6 (thereby rejecting Proposal 72-2a)

NOTE: This Association Amendment ("Amendment") is being submitted for ballot to the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs."). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See 4.7.4(c) of the Regs. In this case, the result is that the new provisions on fire risk analysis will not be added as new sections 1.6, 1.6.1, 1.6.2 and A.1.6.1. This means that, whether the ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs., that recommendation is not binding. In the event of an appeal to the Standards Council, the ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☒ Do Not Agree*

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I agree with the original committee action. Further, I disagree with the submitters substantiation. The new language does not require a risk analysis to be performed as the submitters substantiation implies, it simply permits a stakeholder to perform a risk analysis to determine the correct level of protection for a fire alarm system.

William F. Wayman

Signature:

Name - Please Print: William F. Wayman

Date: 06-25-2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
kshea@nfpa.org
617-984-7110 – fax
617-984-7953 - phone
Amendment: Accept Comment 72-6 (thereby rejecting Proposal 72-2a)

NOTE: This Association Amendment ("Amendment") is being submitted for ballot to the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See 4.7.4(c) of the Regs. In this case, the result is that the new provisions on fire risk analysis will not be added as new sections 1.6, 1.6.1, 1.6.2 and A.1.6.1 This means that, whether the ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs., that recommendation is not binding. In the event of an appeal to the Standards Council, the ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☐ Do Not Agree* 

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Agree with amendment. The final rejection of the proposed provision for risk assessment in protection of control panel and other components for fire alarm systems removed the benefit. This leaves only the potential conflict between the proposed 1.6-1.6.2 &A.1.6.1 and existing provisions and requirements for risk assessments for Emergency Communication Systems and Mass Notification Systems.

Signature: [Signature]

Name - Please Print: Louis Nash

Date: June 19, 2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
kshea@nfpa.org
617-984-7110 - fax
617-984-7953 - phone

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 346 of 2025
ASSOCIATION AMENDMENT BALLOT RESULTS

AMENDMENT (72-3)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Accept Comment 72-182

Follow-up Motion: Return a portion of the Report in the form of Proposal 72-187a and related Comments 72-179 through 72-182.

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS/HAS NOT achieved the necessary \(\frac{3}{4}\) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is \(\_\_\_\_\) \([19 \text{ (eligible to vote)} - \_\_\_\_ \text{ (ballots not returned)} - \_\_\_\_ \text{ (abstentions)} = \_\_\_\_ \times 0.75 = \_\_\_\_]\)

\_\_\_\_ Eligible to Vote
\_\_\_\_ Not Returned

___ Approve
___ Do Not Approve
___ Abstain

TCC Action: PASS/FAIL

SIG-TMS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary \(\frac{2}{3}\) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 18 \([28 \text{ (eligible to vote)} - 1 \text{ (ballot not returned)} - 0 \text{ (abstentions)} = 27 \times 0.66 = 17.82]\)

28 Eligible to Vote
1 Not Returned (Breen)

25 Agree
2 Do Not Agree (Elvove, Larrimer)
0 Abstain

TC Action: PASS
NFPA 72
TC BALLOT for Testing and Maintenance of Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-3 and associated FOLLOW-UP AMENDMENT

Amendment: Accept Comment 72-182

Follow-up Amendment: Return a Portion of the Report in the form of Proposal 72-187a and Related Comments 72-179 through 72-182

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs, if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, the result is:

(2010 Table 14.4.2.2 Item 14(j), Method)
Water shall be flowed through an inspector's test connection indicating the flow of water equal to that from a single sprinkler of the smallest orifice size installed in the system for wet-pipe systems, or an alarm test bypass connection for dry-pipe, pre-action, or deluge systems in accordance with NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-based Fire Protection Systems.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs, that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree
☐ Do Not Agree*
☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

ROC 72-181 had this correct. The scope of testing should only be to verify the component electrically connects to the fire alarm system such that the switch transmits a signal to the fire alarm system. If an operational test of the flow switch is a desired option, then guidance should be placed in the Annex with a reference to NFPA 25. Existing text is not within the scope of NFPA 72 and no standard should dictate how to conduct a test when that test is governed under another standard. The result of maintaining this requirement is the potential for conducting four water flow tests when only two may be needed. If when testing water flow devices per NFPA 25, the alarm signal is verified at that time.

Signature: /s/ Joshua W. Elvove

Name - Please Print: Joshua W. Elvove

Date: 6/22/2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to via email to kshea@nfpa.org or via fax to 617-984-7070.
FIRE PROTECTION SYSTEMS

July 31, 2012

Standards Council Supplemental Agenda August 7-9, 2012

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Related Proposal 72-187b to Proposal 72-187a

TCC Action: The TCC clarifies that Table 14.4.5 is deleted and is incorporated in new Table 14.4.2.1. The TCC also advises that the following items in the committee action need to be clarified or completed:

1. Table Item 1(f) of the committee action appears to be missing the test method.
2. Table Item 3(a) - the added words “Other than for DACT” may be confusing as it could apply to the single sentence or the remainder of the paragraph.
3. Table Item 4(c) through 4(d) appear to be missing the testing frequency. The SIG-SSS committee should be consulted on this.
4. Table Item 4(d) through 4(f) appear to be missing “X” for initial acceptance.
5. Table old Item 7 was deleted but the test methods appear to be unique to public emergency alarm reporting systems. The SIG-PRS committee should be consulted on this.
6. Table Item 10(c) appears to have a redundant entry with “NA” in the initial field and “Annually” in the periodic field—compare to the first column.
7. Table Item 10(e) - in two places (once for acceptance and once for periodic) the description in the test method uses “initiating device” and “notification appliance” and should read “initiating device circuit” and “notification appliance circuit” respectively.
8. Table Item 12(i)(5) has “?????” in the test frequency field.
9. Table Item 12(i)(5) appears to have redundant test methods.
10. Table Item 24(j) is missing periodic frequency and “X” for initial acceptance.

The TCC directs that the committee reconsider the action on this proposal to clarify or complete the items noted above. This shall be considered as a public comment.

Submitters: Technical Committee on Testing and Maintenance of Fire Alarm and Signaling Systems,
Recommendation: Revise and combine Tables 14.4.2.2 and 14.4.5. See table on page 350-161 thru 2-173.

Standards Council Supplemental Agenda August 7-9, 2012

Standards Council Supplemental Agenda August 7-9, 2012
<table>
<thead>
<tr>
<th>Device</th>
<th>Initial Acceptance</th>
<th>Periodic</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Smoke detectors - sensitivity testing</td>
<td>N/A</td>
<td>See 14.4.5.7</td>
<td>Any of the following tests shall be performed to ensure that each smoke detector is within its listed and marked sensitivity range: (1) Calibrated test method; (2) Manufacturer's calibrated sensitivity test instrument; (3) Testing control equipment arranged for the purpose; (4) Smoke detector/connector unit connected wherein the detector causes a signal at the control and when its sensitivity is outside its listed sensitivity range; (5) Other calibrated sensitivity test method approved by the authority having jurisdiction</td>
</tr>
<tr>
<td>(2) Smoke/carbon monoxide alarms in other than one- and two-family dwellings</td>
<td>N/A</td>
<td>See 14.4.5.3</td>
<td>As for smoke detectors</td>
</tr>
<tr>
<td>(j) Carbon monoxide detectors/carbon monoxide alarms for the purposes of fire detection</td>
<td>X</td>
<td>Annually</td>
<td>The devices shall be tested in place to ensure CO entry to the sensing chamber by introduction of CO gas from the protected area, through the vents, to the sensing chamber</td>
</tr>
<tr>
<td>(k) Initiating devices, supervisory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Control valve switch</td>
<td>X</td>
<td>Annually</td>
<td>Valve shall be operated and signal received shall be verified to be within the first two revolutions of the handle and within one-fifth of the travel distance, or per the manufacturer’s published instructions</td>
</tr>
<tr>
<td>(2) High- or low-air pressure switch</td>
<td>X</td>
<td>Annually</td>
<td>Switch shall be operated. Receipt of signal obtained where the required pressure is increased or decreased a maximum of 1 psi (70 kPa) from the required pressure level shall be verified</td>
</tr>
<tr>
<td>(3) Room temperature switch</td>
<td>X</td>
<td>Annually</td>
<td>Switch shall be operated. Receipt of signal to indicate the decrease in room temperature to 40°F (4.4°C) and its restoration to above 40°F (4.4°C) shall be verified</td>
</tr>
<tr>
<td>(4) Water level switch</td>
<td>X</td>
<td>Annually</td>
<td>Switch shall be operated. Receipt of signal indicating the water level raised or lowered a maximum of 2 ft (60 cm) from the required level within a pressure tank, or a maximum of 12 in. (300 mm) from the required level of a non-pressure tank, shall be verified, as shall its restoration to required level</td>
</tr>
<tr>
<td>(5) Water temperature switch</td>
<td>X</td>
<td>Annually</td>
<td>Switch shall be operated. Receipt of signal to indicate the decrease in water temperature to 40°F (4.4°C) and its restoration to above 40°F (4.4°C) shall be verified</td>
</tr>
<tr>
<td>(q) Mechanical, electronic, or pressure-type water flow device</td>
<td>X</td>
<td>Semi-Annual</td>
<td>Water shall be flowed through a test connection for wet-pipe systems or an alarm bypass for dry-pipe, deluge and pre-action systems (72-187) An impeller-based flow device indicating the flow of water equal to that from a single sprinkler of the smallest effective size installed in the system for one-pipe systems or an alarm test bypass connection for dry-pipe, pre-action, or deluge systems in accordance with NFPA 20, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems</td>
</tr>
<tr>
<td>(r) Multi-sensor fire detector or multi-criteria fire detector</td>
<td>X</td>
<td>Annually</td>
<td>(1) Each of the detection principles present within the detector (e.g. smoke/heat/CO, etc.) shall be tested independently for the specific detection principle, regardless of the configuration of the system at the time of testing. Each detector shall also be tested in accordance with the published manufacturer’s instructions (2) Individual sensors shall be tested together if the technology allows individual sensor responses to be verified (3) Tests shall be performed as described for the respective devices by introduction of the physical phenomena to the sensing chamber of element, and an electronic check (magnets, analogue values, etc.) is not sufficient to comply with this requirement (4) The result of each sensor test shall be confirmed. This shall be through indication at the detector or control unit (5) Where individual sensors cannot be tested individually, the primary sensor shall be tested (6) All tests and results shall be recorded</td>
</tr>
</tbody>
</table>

Proposal 72-187b Table 14.4.2.2 (continued)
Related Proposal 72-169c

TCC Action: The Technical Correlating Committee takes action to address issues of general correlation and issues related to the Standards Council action on agenda item 8-11-32 concerning the Report of the Summit Task Group on Inspection, Testing and Maintenance as follows:

General Correlation. The Technical Correlating Committee makes reference to Item 18(c) in Table 14.4.2.2 and advises that the provision for the annual test at the frequency shown is incorrect.

The Technical Correlating Committee directs that Item 18(c) be revised to show "N/A" in place of "Annually" and add "Annually" for periodic testing.

Council Action. The Technical Correlating Committee acknowledges the action on Item 72-169c to revise Item 19 (renumbered to Item 20) for emergency control functions for compliance with the Standards Council Action of September 20, 2011. However, the Technical Correlating Committee advises that this revision does not comply with the Council's action and does not address other revisions made during the proposal phase that address testing of systems outside the scope of NFPA 72.

Therefore, to more fully comply with the Council's direction to reject proposals that address testing of interconnected systems, including testing at the interface with other systems, the Technical Correlating Committee directs the following actions be taken:

1) Revise the "Method" for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the emergency control test and action in Table 72-169c as follows:

For initial, reacceptance, and periodic testing, verify emergency control function interface device activation.

Where an emergency control function interface device is disabled or disconnected during testing of interconnected systems, including testing at the interface with other systems, the Technical Correlating Committee directs the following actions be taken:

2) Revise the Annex material identified as "Table 14.4.3.2, Item 19" at the end of the committee action on Item 72-169c as follows:

Table 14.4.3.2, Item 19 for the testing of end-to-end testing of a fire alarm or signaling system, including devices and systems that were not tested should be documented per the Test Plan in 14.2.10. NFPA 72 does not require testing of an emergency control function, such as elevator recall, but does require testing of the emergency control function interface device, such as the relay required by the fire alarm or signaling system. Where the emergency control function is not being tested concurrent with the fire alarm or signaling system testing, it is not tested; measurement of the emergency control function interface device output should be verified using the proper test devices. This may require recording or observing the condition of a relay, a voltage measurement, or the use of another type of test instrument. Once testing is complete, verification that any disabled or disconnected interface device have been restored to normal is essential and this verification should be documented in the test results. [ROP-214]

Testing of the emergency control functions themselves is outside the scope of NFPA 72. A complete end-to-end test that demonstrates the performance of emergency control functions activated by the fire alarm or signaling system, might be required by some other governing laws, codes, or standards, or the authority having jurisdiction. In that situation, other applicable installation standards and design documents, NFPA 72, would address addressing and performance of the emergency control functions. NFPA 7, Recommended Practice for the Commissioning and Integrated Testing of Fire Protection and Life Safety Systems, provides guidance for integrated (end-to-end) testing of combined systems. The following excerpt from NFPA 7 includes guidance on when integrated testing should be performed:

7.7.2 Test Frequency. [12]

7.7.1 In new construction, integrated testing of fire protection and life safety systems should occur following:

(1) Verification of compliance and integrity of building construction

(2) Individual system functional operation and acceptance as required in applicable installation standards and test documents

(3) Completion of pre-functional tests of integrated systems [12]

7.7.2 Existing fire protection and life safety systems should have periodic integrated testing. [12]

7.7.2.1 Integrated systems that were commissioned use.

Integration in accordance with Chapter 6 should have integrated testing at the interval specified in the commissioning plan. [12]

7.7.2.2.2 For integrated systems that were not commissioned, an integrated testing plan should be developed to identify the appropriate test extent and frequency of integrated system testing. [12]

7.7.2.3 In addition to periodic integrated testing, integrated system testing should be done when any of the following events occur:

(a) New component fire protection or life safety systems are installed and interconnected to existing fire protection and life safety systems.

(b) Existing fire protection or life safety systems are modified to become components of interconnected systems.

(c) Interconnections or sequence of operations of existing, interconnected fire protection and life safety systems are modified. [12]

For initial acceptance testing, a complete end-to-end test should be done that demonstrates the performance of the emergency control functions activated by the fire alarm system per the applicable installation standards and design documents. For reacceptance testing due to a system modification, building remedial or addition to a building, the testing of emergency control function system testing, or testing of the emergency control functions is not under the jurisdiction of the standard. [ROP-214]

For periodic testing, a complete end-to-end test should be done that demonstrates the performance of the emergency control functions activated by the fire alarm system per the applicable installation standards and design documents, but may not be able to be done due to building operations or other control functions. For initially emergency control functions that are tested for complete systems during routine periodic fire alarm system testing, in cases it may be easier to verify the emergency control function operation than to stop the testing at the emergency control interface device. In this case, the test plan must clearly document the extent of the testing of the emergency control functions. [ROP-214]

Emergency control function activation is simultaneously initiating the start of the emergency control function. Emergency control function operation is intended to include the overall performance of the emergency control functions. NFPA 7 also includes guidance on test methods for integrated testing. It is important to note that the appropriate NFPA standard would provide the acceptance criteria for the overall emergency control function operation requirements including performance and test methods while NFPA 72 covers the required performance and testing of the emergency function interface device. [ROP-214]

For instance, an end to end test for a building with an engineered smoke control system is required by other governing laws, codes, or standards, or the authority having jurisdiction, the test protocol would have unique criteria for the smoke control system design and a special inspector would be responsible for the overall operation and performance of the smoke control system in accordance with the appropriate standard (NFPA 30A and NFPA 101) during the testing including measuring pressure differentials and ensuring proper fan and damper operation. Extract from NFPA 101 on smoke control:

5.3.2 The engineer of record shall clearly identify the intent of the system, the design method used, the appropriateness of the method used, and the required means of inspecting, testing, and maintaining the system. [101, 2012]

5.3.3 Acceptance testing shall be performed by a special inspector in accordance with Section 9.9. [101, 2012]

5.3.2.4 The engineer of record shall clearly identify the intent of the system, the design method used, the appropriateness of the method used, and the required means of inspecting, testing, and maintaining the system.

5.3.4 Acceptance testing shall be performed by a special inspector in accordance with Section 9.9. [101, 2012]

5.3.2.4.3 The engineer of record shall clearly identify the intent of the system, the design method used, the appropriateness of the method used, and the required means of inspecting, testing, and maintaining the system.

5.3.2.4.4 Other emergency control operation requirements may be as follows: For fan shut down and smoke damper operation, the fan and damper operations should be in accordance with NFPA 90A and NFPA 101 respectively and those equipment operations should be verified by those responsible, for HVAC systems in combination with the fire alarm system personnel. Guidance for inspection and testing of elevator can be found in ANSI A17.7, Guide for Inspection of Elevators, Escalators and Moving Walks. For elevator systems, the recall function, elevator power shutdown, and light illumination should be done with the elevator mechanics present during the test. This operational test is often accomplished during routine periodic fire alarm testing. For fire door and fire shutter release, it would be expected that the emergency control function operation of the doors/shutters would be verified in accordance with NFPA 80 and NFPA 101 during the test. In some cases, the door manufacturer representative may need to be present to test the equipment. [ROP-214]

Some emergency control functions have test requirements established in other NFPA standards that are more or less frequent than the fire alarm system initiating devices used to activate the emergency control function. Where emergency control function frequencies are not established by other standards, it is expected that the same test frequency as the fire alarm initiating device be tested. [ROP-214]

For instance, NFPA 105 requires smoke dampers to be tested every 4 years even though the initiating device used to activate the smoke damper is tested for annual acceptance. Fire doors are required to be done annually in accordance with NFPA 80A. [ROP-214]

Whenever an emergency control function is observed to not operate properly during a test of an emergency control function initiating device, the problem should be reported to the building owner or designated representative. The
Guidance on documenting and handling or faults, failures and corrective action for integrated testing can be found in 7.4.5 of NFPA 72.

3) Reject portions of the material added by Proposal 72-175 as follows:
   a) In proposed A.14.2.1.2 delete the last sentence of the second paragraph. (Complete end-to-end testing of the integrated systems should then be performed to a final step to ensure that the systems are functional and that the feedback mechanisms are effective. 
   b) In proposed A.1.4.2.1.3 delete the last two sentences of the second paragraph. (However, the preferred method of testing is to perform an integrated end-to-end test of the combined systems. NFPA 72 requires that where any interfacedit system or function is bypassed or disconnected to permit testing of the fire alarm or signaling system alone, a complete end-to-end test or some other method of verification should be performed to ensure that the interfaced system or function is placed back in service at the end of testing of the fire alarm or signaling system.)
   and add “Refer to A.14.4.2.2. Table 14.4.2.2 item 20.”

4) Revise the committee action on Proposal 72-179 as follows:

14.2.10* Test Plan. [ROP-179]

14.2.10.1 For those systems with emergency control functions, releasing systems, or interface equipment, a test plan shall be written to clearly establish the scope of the testing for the fire alarm or signaling system, emergency control functions, releasing systems, or interface equipment. [ROP-179]

14.2.10.2 The test plan and results shall be documented with the testing records. [ROP-179]

A.14.2.10 The test plan is intended to clarify exactly what is to be tested and how it is to be tested. Testing of fire alarm and signaling systems is often done in a segmented fashion to accommodate the availability of testing or other personnel, or to minimize the interruption of building operations. Building operations can be affected by testing of the fire alarm or signaling system itself and by the operation of emergency control functions activated by the fire alarm or signaling system. The boundary of the fire alarm or signaling system extends up to and includes the emergency control function interface device. The testing requirements prescribed in NFPA 72 for fire alarm and signaling systems end at the emergency control function interface device. For emergency control functions, the fire alarm system boundary ends at the emergency control function interface device. However, fire alarm system testing often extends beyond the boundary of the fire alarm system and may verify the actual performance of an emergency control function, releasing system, or interface equipment. The purpose of the test plan is to document what devices were and were not actually tested. [ROP-179]

The testing of emergency control functions, releasing systems, or interface equipment is outside the scope of NFPA 72. Requirements for testing other systems are found in other governing laws, codes or standards. Requirements for integrated testing of combined systems also fall under the authority of other governing laws, codes, standards or the authority having jurisdiction. NFPA 72, Recommended Practice for the Commissioning and Integrated Testing of Fixed Protection and Life Safety Systems, provides guidance for such testing. NFPA 72 recognizes the importance of the development of an integrated testing plan.

Further information on testing associated with emergency control functions can be found in Table 14.4.2.2. Item 20 and its related annex material in A.14.4.2.2.

Some test plans may indicate that the test was terminated at the emergency control function interface device. This might be necessary where building operations must continue without interruption during the fire alarm testing or where the emergency control function is compromised such as a large smoke control system. [ROP-179]

Other test plans may test the emergency control function. An elevator test plan may be written to verify all elevator functions such as recall, shutdown, and elimination of the fire alarm in the cab. Another example would be testing of smoke dampers. The test plan for a smoke damper may verify that the emergency control function, interface device activated and that the smoke damper system was operated or that the smoke damper actually closed. For a fire alarm system, the fire alarm may be tested after the control head has been removed from a cylinder and the documentation would reflect this. Some organizations may have existing testing protocols and procedures for equipment that may be used to meet the intent of this requirement without writing new plans. [ROP-179]

5) Modify a portion of the material added by Proposal 72-229a and Comment 72-240b as follows:
   a) Delete the “Interconnected Systems Supervisory Inspection and Testing form.”
   b) Delete 6.6 of the “System Inspection and Testing Form.”

Substantiation: Editorial and manual of style changes are made throughout. Also refer to the committee statement on Comment 72-165a (Log #CC901).

Item 19 (now 20) for emergency control functions was revised per order of the Standards Council directive of September 20, 2011.

Item 19 was rewritten to allow referencing of Table 14.3.1 for correlation with Table 14.4.2.2 (see Comment 72-165a (Log #CC901) committee statement item 3.

Committee Meeting Action: Accept
Number Eligible to Vote: 28
Ballot Results: Affirmative: 25
Ballot Not Returned: 3 Breon, K., Kelly, R., Rochholz, M.
Comment on Affirmative: Koval, C., See comment on ROC 72-165 (Log #211) pertaining to Interface Equipment and Emergency Control Functions and the correlation problem with Table 14.3.1, Visual Inspections.

Van Overmeiren, F., Editorial Change: Table 14.4.3.2 Item 18(e) should have 2 sections like Items 18(a) and 18(b), Replace “Annually” with N/A for first section and replace N/A with Annually for second section covering periodic testing.
<table>
<thead>
<tr>
<th>Device</th>
<th>Initial Acceptance</th>
<th>Periodic Frequency</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Equipment</td>
<td>X</td>
<td></td>
<td>See Table 4.3.1</td>
</tr>
<tr>
<td>Control Equipment and transponder [72-171]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Functions</td>
<td>X</td>
<td>Annually</td>
<td>Verify correct receipt of alarm, supervisory, and trouble signals (inputs); operation of evacuation signals and auxiliary functions (outputs); circuit supervision, including detection of open circuits and ground faults; and power supply supervision for detection of loss of ac power and disconnection of secondary batteries.</td>
</tr>
<tr>
<td>(b) Fuses</td>
<td>X</td>
<td>Annually</td>
<td>Verify rating and supervision.</td>
</tr>
<tr>
<td>(c) Interfaced equipment</td>
<td>X</td>
<td>Annually</td>
<td>Verify integrity of single or multiple circuits providing interface between two or more control units. Test interfaced equipment connections shall be tested by operating or simulating operation of the equipment being supervised. Verify signals required to be transmitted shall be verified at the control unit.</td>
</tr>
<tr>
<td>(d) Lamps and LEDs</td>
<td>X</td>
<td>Annually</td>
<td>Illuminate lamps and LEDs shall be illuminated.</td>
</tr>
<tr>
<td>(e) Primary (main) power supply</td>
<td></td>
<td></td>
<td>Disconnect and test All secondary (standby) power shall be disconnected and tested under maximum load, including all alarm appliances requiring simultaneous operation. Reconnect All secondary (standby) power shall be reconnected at end of test. Test for redundant power supplies, each shall be tested separately.</td>
</tr>
<tr>
<td>(f) Transponders</td>
<td>X</td>
<td>Annually [72-171]</td>
<td></td>
</tr>
</tbody>
</table>

2.3. Fire Alarm Control Unit Trouble Signals

(a) Audible and visual | X | Annually | Verify operation of control unit trouble signals shall be verified, as well as Verify ring-back feature for systems using a trouble-silencing switch that requires resetting. |
(b) Disconnect switches | X | Annually | If control unit has disconnect or isolating switches, verify performance of intended function of each switch shall be verified and Verify receipt of trouble signal when a supervised function is disconnected shall also be verified. |
(c) Ground-fault monitoring circuit | X | Annually | If the system has a ground detection feature, verify the occurrence of ground-fault indication shall be verified whenever any installation conductor is grounded. |
| (d) Transmission of signals to off-premises location | X | Annually | Activate an initiating device shall be asserted and verify receipt of alarm signal at the off-premises location shall be verified. |
| | | | Create A trouble condition shall be created and verify receipt of a trouble signal at the off-premises location shall be verified. |
| | | | Activate A supervisory device shall be asserted and verify receipt of a supervisory signal at the off-premises location shall be verified. If a transmission carrier is capable of
<table>
<thead>
<tr>
<th>Test Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Smoke/carbon monoxide alarms in other than one- and two-family dwellings.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>See 14.4.3</td>
</tr>
<tr>
<td>(i) Carbon monoxide detectors/carbon monoxide alarms for the purposes of fire detection</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>(j) Initiating devices, supervisory</td>
<td></td>
</tr>
<tr>
<td>(1) Control valve switch</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) High- or low-air pressure switch</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Room temperature switch</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Water level switch</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Water temperature switch</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>(k) Mechanical, electronic, or pressure-type waterflow device</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>(l) Multi-sensor fire detector or multi-criteria fire detector or combination fire detector</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approved by the authority having jurisdiction

Perform any of the following tests shall be performed to ensure that each smoke alarm is within its listed and marked sensitivity range:

1. Calibrated test method
2. Manufacturer's calibrated sensitivity test instrument
3. Other calibrated sensitivity test method approved by the authority having jurisdiction

Test: The devices shall be tested in place to ensure CO entry to the sensing chamber by introduction through the vents, to the sensing chamber of listed and labeled product acceptable to the manufacturer or in accordance with their published instructions through the vents, to the sensing chamber. [ROP-202]

Operate valve shall be operated and verify signal receipt shall be verified to be within the first two revolutions of the handwheel or within one-fifth of the travel distance, or per the manufacturer's published instructions.

Operate switch shall be operated and verify receipt of signal obtained where the required pressure is increased or decreased a maximum 10 psi (70 kPa) from the required pressure level shall be verified.

Operate switch shall be operated and verify receipt of signal to indicate the decrease in room temperature to 40°F (4.4°C) and its restoration to above 40°F (4.4°C) shall be verified.

Operate switch shall be operated and verify receipt of signal indicating the water level raised or lowered a maximum 3 in. (76 mm) from the required level within a pressure tank, or a maximum 12 in. (300 mm) from the required level of a non-pressure tank shall be verified, or shall. Also verify its restoration to required level.

Operate switch shall be operated and verify receipt of signal to indicate the decrease in water temperature to 40°F (4.4°C) and its restoration to above 40°F (4.4°C) shall be verified.

Flow water shall be flowed through a test connection for wet-pipe systems or an alarm bypass for dry-pipe, deluge, and preaction systems. [ROP-187a]

(1) Test each of the detection principles present within the detector (e.g., smoke/heat/CO2, etc.) shall be tested independently for the specific detection principle, regardless of the configuration status at the time of testing. Also test each detector shall also be tested in accordance with the published manufacturer's instructions.

(2) Test individual sensors shall be tested together if the technology allows individual
Related Comments 72-179 through 181 and 72-183 through 186

72-179 Log #130 SIG-TMS Final Action: Accept in Principle
(Table 14.4.2.2, Item 14(j))

Submitter: Vince Bachkowski, National Electrical Manufacturers Association (NEMA)

Comment on Proposal No: 72-187a

Recommendation: Revise text to read as follows:

Water shall be flowed through an inspector's test connection indicating the flow of water, equal to that from a single sprinkler of the smallest orifice size, installed in the system for wet pipe systems, or an annular bypass for dry pipe systems, or in accordance with NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, as required per NFPA 25.

Substantiation: NEMA supports the original proposal and asks the committee to reject the changes made at the ROP and to accept the original proposal. Further NEMA supports adding material to direct the reader to NFPA 25. NFPA 72 and 25 should be correlated as the original proposal's substantiation stated.

Committee Meeting Action: Accept in Principle

Committee Statement: See committee action on Comment 72-181 (Log #220).

Number Eligible to Vote: 28
Ballot Results: Affirmative: 25
Ballot Not Returned: 3 Breen, K., Kelly, R., Rochholz, M.

72-180 Log #213 SIG-TMS Final Action: Accept in Principle
(Table 14.4.2.2, Item 14(j))

Submitter: Joshua Elowen, U.S. General Services Administration

Comment on Proposal No: 72-187a

Recommendation: Revise Table 14.4.2.2 item 14(j) as follows:

Water shall be flowed through a test connection for wet pipe systems or an annular bypass for dry pipe, deluge, and preaction systems. Testing shall be in accordance with NFPA 25. Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.

Substantiation: NFPA 72 has no business describing how to conduct a water flow test in the fire alarm code as flow testing falls under the purview and scope of NFPA 25. As such, any requirement should point to NFPA 25. As an alternative, extract text directly from NFPA 25 and include in this table.

Committee Meeting Action: Accept in Principle

Committee Statement: See committee action on Comment 72-181 (Log #220).

Number Eligible to Vote: 28
Ballot Results: Affirmative: 25
Ballot Not Returned: 3 Breen, K., Kelly, R., Rochholz, M.

72-181 Log #220 SIG-TMS Final Action: Accept
(Table 14.4.2.2, Item 14(j))

TCC Action: The Technical Correlating Committee makes reference to the recommendation and advises that revision is needed to provide consistency with the instructions for other test methods - removing mandatory (shall) language from the test method.

The Technical Correlating Committee directs that the test method be revised to read as follows:

"Operate the switch and verify receipt of the signal."

Submitter: Peter A. Larrimer, US Department of Veterans Affairs

Comment on Proposal No: 72-187a

Recommendation: Revise 14.4.2.2(14)(j) to read:

Water shall be flowed through a test connection for wet pipe systems or an annular bypass for dry pipe, deluge, and preaction systems.

The switch shall be operated and receipt of the signal shall be verified.

Add and asterisk (*) to:

A.14.4.2.2(14) Testing of the water flow switches should be done in accordance with the requirements of NFPA 25. Testing waterflow alarm devices on wet pipe systems should be accomplished by opening the inspector's test connection.

Substantiation: The change will correlate with the other switch requirement in NFPA 72 and the information in NFPA 25. The information provided in the annex is taken from NFPA 25 with the "shall" modified to "should". The requirement for testing dry pipe, pre-action and deluge systems are not specific in NFPA 25.

Committee Meeting Action: Accept

Committee Statement: The proper way to test a flow switch is with water flow through the inspectors test connection in accordance with NFPA 25. There may be extreme circumstances where the water cannot be flowed to activate the switch and this must be indicated on the test plan that is required by 14.2.10.
Submitter: Thomas P. Hannenberg, Automatic Fire Alarm Association Comment on Proposal No. 72-203
Recommendation: Reject Proposal 72-203.

Substantiation: This proposed language assumes the same technicians test a particular fire alarm system all the time and would notice a building change. In reality, this is not true. I acknowledge that testing audibles in a residence to owners, but I feel strongly that the most important function of a fire alarm system is to alert the occupants of a fire emergency so they have time to react. By eliminating the requirement for QF testing, there is no way to assure the fire alarm signals will be heard when needed.

Committee Meeting Action: Reject
Committee Statement: The building owner or designated representative is responsible to verify that any facility changes do not adversely affect the fire alarm system.

Periodic testing was changed for all three types of notification appliances to indicate that the fire alarm testing was to verify operation of the device and not ensure compliance with any particular design.

Annex notes were added for periodic testing to suggest that the owner should be informed of missing devices if obvious to the alarm technician, but it is not the responsibility for the alarm technician to measure the operation against the original system design.

For audible devices, annex material was added to help identify the difference between public mode and private mode.

Number Eligible to Vote: 28
Ballot Results: Affirmative: 23; Negative: 2
Ballot Not Returned: 3

Explaination of Negative:

EDWARDS, S.: There is more than adequate reason to reject this proposal as it is entirely plausible that changes may have occurred since price testing which will affect audibility. Each device should be functionally tested to ensure proper operation. Relying upon a technician is not an acceptable method of verification.

SHACKLEY, D.: See my Explanation of Negative on Comment 72-184 (Log #131).

Submitter: Joe Scibetta, Building Reports
Comment on Proposal No: 72-203
Recommendation: Revert text to read as follows:

Table 4.4.2.2.2 Item 15b (a) Periodic testing shall verify the operation of the notification appliances, comply with the following: Sound pressure levels for signals shall be measured with a sound level meter meeting ANSI S1.4a, Specifications for Sound Level Meters, Type 2 requirements. Sound pressure levels shall be measured for conformity to Chapter 18 where building system or occupancy changes have occurred. The sound level meter shall be set in accordance with ANSI S1.4a, American National Standard Audible Evacuation Signal, using the time-weighted characteristic F (FAST). Sound pressure levels shall be measured to ensure that audible signals reach at least the minimum alarm DBA level above the average ambient sound level for the given area(s), as outlined in Chapter 18.

(b) Periodic testing shall verify the operation of the notification appliances, comply with the following: Sound pressure levels for signals shall be measured with a sound level meter meeting ANSI S1.4a, Specifications for Sound Level Meters, Type 2 requirements. Sound pressure levels shall be measured for conformity to Chapter 18 where building system or occupancy changes have occurred. The sound level meter shall be set in accordance with ANSI S1.4a, American National Standard Audible Evacuation Signal, using the time-weighted characteristic F (FAST). Sound pressure levels shall be measured to ensure that audible signals reach at least the minimum alarm DBA level above the average ambient sound level for the given area(s), as outlined in Chapter 18. Audible information shall be verified to be distinguishable and understandable, and shall comply with 4.4.3.4 where building system or occupancy changes have occurred.

Substantiation: Sound level meters should still be used during periodic testing. While I agree with the submitter's statement that testing audibles during periodic testing should not include ensuring compliance with any particular design, the alarm technician should still ensure that audible signals are still meeting at least the minimum DBA level above the average ambient sound level for a given mode. Such verification assures the building owner that audible signals can still be heard, without providing commentary on whether design changes have had any impact.

Not equipping the alarm technician with a sound meter on the periodic test undermines their ability to pinpoint for the building owner areas where achieving mandatory alarm DBA levels have been compromised due to renovations or by additional equipment being added to the area since the last periodic test.
FRANK VAN OVERMEIREN: Frank Van Overmeiren with FP&C Consultants and member of the inspecting testing maintenance technical committee. I move to accept Comment 72-182.

PRESIDING OFFICER BELL: The motion on the floor is to accept 72-182; is that correct, which is motion sequence number three?

FRANK VAN OVERMEIREN: Yes, sir.

PRESIDING OFFICER BELL: Okay. And I heard a second.

FRANK VAN OVERMEIREN: I apologize for the complexity of this CAM as it affects the technical committee's actions on one proposal and four comments and will require a followup motion at the end of this session. I recommend approval of the CAM and the followup motion that will be made at the end of NFPA 72 portion of this session. The CAM recognizes the errors and the recommendation of Comment 72-182 as being incorrect text.

Also, the committee's statement for Comment 72-181 is incorrect as noted in my negative technical committee ballot. It should be noted that the intent of Comment 72-182 is essentially met by returning the provisions of the 2010 code. In returning the language of the text method for water flow devices to that of the 2010 codes as it has been for 26 years since the 1986 edition of NFPA 72, this will allow the correlation task group of NFPA 72 and NFPA 25 the opportunity to discuss this issue of the verification of small orifice for sprinkler system.

The technical issues to be resolved that the older sprinkler system still in service that were installed before the installation requirements for an inspector's test connection currently in NFPA 13. My intent is through the correlation of NFPA 72 and NFPA 25 to move sprinkler system component inspection tasks to NFPA 25 where they can be better addressed by sprinkler technician than by a fire alarm system.
I speak in favor of the motion.

PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: The technical correlating committee is in favor of this motion because it resolves a correlation issue with the requirements in Chapter 17 which address the performance of sprinkler water flow switches.

Specifically the requirement to verify activation of the device when flow occurs that equal to or greater than that of a single sprinkler of the smallest orifice size in the system.

The requirement which has existed as Frank said for 26 years in NFPA 72 was removed in the ROP and ROC as part of in part the standard council directive to not require testing of systems outside the scope of NFPA 72.

However, since Chapter 17 of NFPA 72 requires a specific performance, including a 90 second response time, a test that flows water is necessary. As it stands, the text would allow testing by manually operating the switch or shorting the contacts.

Unfortunately, there have been losses where an improperly calibrated flow switch retard have resulted in no response, no fire department call when one or more sprinklers is operated and the system controlled the fire, but caused large water damage.

Passage of this CAM will allow a followup motion as this CAM will not by itself accomplish the intent of the submitter or the TCC.

In addition, the TCC, technical committee chair, and several members that have submitted proposals and comments on this matter have agreed to form a task group to work with NFPA 13 and NFPA 25 technical committees to work on language and possible TIAs that will separate and differentiate requirements for acceptance testing and inspections from that of periodic testing and inspections.

In addition, the task group will try to work on common language that might redundant tests required by NFPA 72 and NFPA 25 which result in unwanted oxygen...
being introduced into sprinkler systems.
For these reasons, we seek your support of
this CAM.
And I also ask that the inspection testings
and maintenance chair, Jeff Moore, be permitted to
comment on this motion.
PRESIDING OFFICER BELL: Microphone 3.
JEFF MOORE: My name is Jeff Moore. I'm with
Hughes Associates. I'm the chair of the technical
committee on inspection, testing and maintenance.

Just basically to explain the committee
action. The committee's position was actually based on
our interpretation of direction we received from the
standards council to eliminate tests that crossed the
bounds of fire alarm systems and crossed into other
systems service like sprinkler systems.
I don't think that the final, what we ended
up with was what was the final intent necessarily. So
neither for nor against, just trying to explain the
committee's position. And also as Mr. Schifiliti and
Mr. Van Overmeiren explained, if we accept this
proposal, then we'll need a followup proposal or a
follow on motion to reject ROP 72187A and ROC 181.
PRESIDING OFFICER BELL: Thank you,
gentlemen.

ROGER RISLEY: Thank you. Roger Risley with
Symplex Bernal Tico International speaking in favor
support of the motion on the floor.

Basically what happened is on the automatic
fire alarm association submitted a proposal to eliminate
the requirement for the fire alarm inspector to verify
the orifice size of the inspector's test valve.
What we tried to do was eliminate that. And
we still want to believe that the free flow water,
however, it's not for the electronic fire alarm person
to go out and verify the orifice is the right size.
Based on that, that was approved in the
comment stage it was put in. And basically it now just
states that the operation of the switch, operating the
switch and verify receipt of the signal.
So just as Mr. Schifiliti had said,
basically now a fire alarm technician can go out, take the cover off the flow switch, push a button, put the cover back on and walk away. Nobody ever verified that water did flow and activate the switch. Based on that, Symplex Bernal Tico International is in favor of supporting this motion. Thank you.

SHANE CLARY: Yes. Thank you, Mr. Chairman. Shane M. Clary, Bay Alarm Company. We're a large regional company within the state of California, about 5,000.

PRESIDING OFFICER BELL: Speaking for the motion?

SHANE CLARY: Speaking for it. Oh, my God. I missed that. I would hear about that later on. Anyway, you got me.

Anyway, we have about 25,000 fire alarm accounts throughout the state. When I'm not here debating code issues here in Nevada, I have about 45 fire inspectors beneath me that perform inspections in accordance with NFPA 72.

And the biggest item to which we have reasons for failing the inspection is the vein flow switches. And they get gummed up or stuff like that, they need adjustments and the only true way to make certain that the vein flow switch is operating is to do the flow from the inspector's test valve for the 90 seconds to see if the flow switch is working. So I'm in support of the CAM and also in the pursuit hopefully the followup motion which will be following. Thank you.

PRESIDING OFFICER BELL: Thank you.

Any further discussion? Microphone 3. I saw you this time.

TOM HAMMERBERG: Thank you. Tom Hammerberg, Automatic Fire Alarm Association speaking in favor of the motion.

The Automatic Fire Alarm Association originally put in the proposal as Roger Risley said before, that our intent was just to not have the 72
requirements more restrictive than NFPA 25. It was never our intent to get rid of flowing due to the flow tests of water and just making an electrical test. So we are in favor of this motion. Thank you.

PRESIDING OFFICER BELL: Thank you.

Further discussion? Seeing no one known at the microphone, Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: Correlating committee has no further comment. I would defer to the chair if he has any comments for the committee. None.

PRESIDING OFFICER BELL: We'll move to the vote. And the motion on the floor is to accept Comment 72-182.

Please record your vote, one in favor of the motion or two opposed to the motion. Voting closes in five seconds. Voting is closed. Motion passes.

The next sequence is 72-4.

Microphone looks like it's 7.

JOE SCIBETTA: Thank you, Mr. Chair. My name is Joe Scibetta, technical member of the NFPA 72 technical committee for testing maintenance. And I rise to call for the accepting amending motion 72-4.

PRESIDING OFFICER BELL: So I understand your motion is to actually accept Comment 72-186; is that correct?

JOE SCIBETTA: Correct, Mr. Chair.

PRESIDING OFFICER BELL: Okay. Thank you.

Is there a second?

Please proceed.

JOE SCIBETTA: A proposal was submitted and accepted to eliminate the use of sound level meters on periodic testing of audible notification appliances.

The thinking behind that proposal was that the use of a sound level meter to designate low sound areas was essentially allowing a technician to make observations on system design.

Such designation would be equivalent to stating the design changes had taken place and a fire alarm technician should not be ensuring compliance with any particular design.
I commented on that proposal and in doing so did not take issue with the submitter's concern about the use of a sound level meter to ensure design compliance.

As such, in my comment, I agreed with some of the rewording of Items 15A and 15B of the testing methods table. In my rewording of those two items, I, too, deleted the sentence which reads, quote:

Sound pressure levels shall be measured in conformity to Chapter 18 where building systems or occupancy changes have occurred, end quote.

I agreed that sentence should be removed. However, to remove the sound level meter altogether from periodic testing is not a wise decision. There are too many real world scenarios that make the sound level meter indispensable on a periodic test.

It's been argued that one can simply use their hearing to tell whether an appliance is emitting sound or not. However, one's own hearing is a highly subjective and unreliable tool.

Furthermore, if the sound test is being done correctly and safely, the technician is wearing hearing protection, further undermining subjectivity of one's own hearing and underscoring the vital need for a sound level meter to do the hearing for the technician.

How does a technician, with hearing protection in place, no sound level meter, know if the average ambient level within an industrial occupancy has exceeded 105 dba since the last test. He doesn't. And therefore, he will not include in his report what the code requires in that case, the installation of the physical notification appliance.

Mr. Chair, I'll pause for the one minute warning.

PRESIDING OFFICER BELL: That's fine. I'll probably give you a 30 second warning, too.

JOE SCIBETTA: How does a technician with hearing protection in place and no sound level meter know if the combined alarm and ambient dba in an area within industrial occupancy is now greater than 110, exceeding the maximum limit allowed by the code? He doesn't. And will therefore allow a violation of NFPA
72 to go undocumented.
9 Remove the statement about using sound level
10 meters where building system or occupancy changes have
11 taken place. I agree. But do not remove altogether
12 from the periodic test of audible appliances the use of
13 such an essential piece of equipment as a sound level
14 meter.
15  
16 PRESIDING OFFICER BELL: 30 seconds.
17 JOE SCIBETTA: Verifying that alarm sound
18 levels can still be heard above ambient levels from one
19 year to the next, helps to ensure the life safety of
20 building occupants.
21  
22 PRESIDING OFFICER BELL: Thank you.
23 Mr. Schifiliti.
24 COMMITTEE CHAIR SCHIFILITI: The technical
25 correlating committee has no position on this particular
26 certifying amending motion. I would defer to the
27 chairman of the testing and maintenance committee, Jeff
28 Moore.
29  
30 PRESIDING OFFICER BELL: Microphone 6.
31 JEFF MOORE: My name is Jeff Moore. I'm
32 with Hughes Associates. I'm the chair of the technical
33 committee on inspection, testing and maintenance. I'm
34 speaking against the motion.
35 The committee position was that the code
36 already does require that we do the audibility testing
37 at the original acceptance test to confirm compliance
38 with the design criteria that was in place for the
39 original design.
40 The purpose of a periodic test as explained
41 in the code, now we have specific explanation of what's
42 required for each type of test acceptance test,
43 reacceptance, test periodic test, the purpose as
44 explained in the code for periodic testing is to confirm
45 operation and it's not to intended to ensure compliance
46 with any particular design criteria.
47 And I point out that the committee voting to
48 reject this, the vote was 23 for rejection, two against
49 and three ballots not returned.
50  
51 PRESIDING OFFICER BELL: Thank you,
52 gentlemen.
53 Any further discussion? Microphone 3.
TOM HAMMERBERG: Tom Hammerberg representing the Automatic Fire Alarm Association. The AFAA speaks in favor --

PRESIDING OFFICER BELL: Are you speaking for?

TOM HAMMERBERG: I'm speaking for the motion.

PRESIDING OFFICER BELL: Thank you.

TOM HAMMERBERG: Removing the requirement for periodic sound level testing in our opinion is a step backwards since the most important feature of a fire alarm system, in my opinion, is notification of the occupants, it's important to assure the system is loud enough to be heard.

We all know that conditions in buildings change after that the original acceptance test. Conducting a sound level test provides documentation of the state of the system and provides a means to correct any deficiencies.

Thank you for supporting this motion.

PRESIDING OFFICER BELL: Thank you.

Any further discussion? Microphone 6.

FRANK VAN OVERMEIREN: Frank Van Overmeiren, FP&C Consultants, member of the NFPA 72 technical committee on inspection, testing, maintenance, chairman of the task group for the tables, which this requirement resides in.

I'm speaking against the motion. As part of our current code cycle activity, we have put great effort into redefining our tables to eliminate duplicated requirements and to differentiate the requirements between initial acceptance testing and periodic testing.

We also combine the frequency table with the test methods table as part of that action. As part of that, we had great discussion on this particular issue to try and differentiate the requirements of when audible testing is done and how it's to be done in different situations of acceptance testing versus periodic testing.

The task group did not feel it was warranted to require a sound meter on every one of those tests and
recordings of those readings to be done only in the
situations where the inspector or tester noted
differences in construction or where there was potential
differences in the application of the sound or the
production of the sound. In those cases the meter would
then be used. So we felt that was sufficient with the
use of the periodic testing.

PRESIDING OFFICER BELL: Thank you.
Microphone 5.

JOHN CAPUS: John Capus with Ralph Jenson & Associates speaking in favor of the motion.
The basis that experience has demonstrated
that notification appliances, especially speakers, can
degrade over a period of time as well as the settings of
amplifiers. It is imperative that the initial
acceptance testing measurements be validated during
periodic testing of the systems. And therefore, to do
so the use of the sound pressure level meters are
essential to perform that task.

PRESIDING OFFICER BELL: Thank you.
Microphone 8.
PETE LARIMER: Thank you. Pete Larimer with the Department of Veterans Affairs. I'm also a member
of the TMS committee and it was actually my proposal
that originally put this in the way it is as part of the
task group. The main issue --
PRESIDING OFFICER BELL: You're speaking against?
PETE LARIMER: I'm speaking against the
motion.
PRESIDING OFFICER BELL: Thank you.
PETE LARIMER: The main issue relative to
periodic testing, the initial testing will have the test
performed based on the design to measure the decibel
readings as necessary. But in many, many cases there
are no baseline levels for which to test for on a
periodic basis.
If an inspector goes into a facility and
uses a decibel meter and gets a reading, he doesn’t
actually have a basis by which to apply that because
there may not be documentation to establish what that
ambient level was or whatever level above which he needs
to show this measurement that he's testing for so that
the system passes.
So the periodic testing was removed that
meter so we would still know that the device was
operating, but we would no try the measure something
when we didn't have a pass fill criteria in many cases.
Thank you.

PRESIDING OFFICER BELL: Thank you.

Any further discussion? Seeing nobody at
the microphone, Mr. Schifiliti any final comments?
COMMITTEE CHAIR SCHIFILITI: No comments
from the correlating committee. I would defer to the
committee chair for any followup.
PRESIDING OFFICER BELL: Microphone 6.
JEFF MOORE: Jeff Moore, Hughes &
Associates, chair of the inspection testing and
maintenance technical committee.
I urge you to support the committee and vote
against this. As Mr. Larimer pointed out, that was the
basic discussions within the committee is that you can
go out and you can take the readings, but what are you
comparing them to? The technician in the field doesn't
have anything to say whether it's good, bad or whatever.
So we're spending time doing something that doesn't seem
to have any real effect on the reliability and adequacy
of the fire alarm system. Thank you.
PRESIDING OFFICER BELL: Thank you.
Microphone 7.
JOE SCIBETTA: Joe Scibetta, principal on
the technical committee for testing and maintenance.
I'm speaking in favor of the motion.
Just a real world, another real world
scenario I was personally involved in, walking through a
tenant space, early morning, limited lighting. I got my
sound meter. And I noticed I'm not getting 15 dba above
ambient in a certain area.
Sure enough there's clear tape over a horn
that the tenant put in there because the horn was
causing irritation during fire drills. The sound meter
was the indication to me there was a problem in the
area.
I could see the horn was emitting sound, or
I could tell that the horn was emitting sound, but when I went up, sure enough, there was the clear tape. So it's not design change, it's a tampering of the horn. I agree with the Automatic Fire Alarm Association, this is a startling step backwards. The technician through the course of the inspection is taking ambient readings. That's what he compares the alarm readings to, the ambient readings he has taken during the course of the inspection. And when it comes time for the alarm tests, he's got the ambient readings taken that day to measure against.

I would urge my fellow members please pass this motion, keep sound level meters in the code as an indispensable tool during periodic testing of audible notification appliances. Thank you.

PRESIDING OFFICER BELL: Thank you.

Microphone 5.

JOHN CAPUS: John Capus, Ralph Jensen & Associates speaking in favor of the motion. To add into the discussion that there was no baseline criteria, therefore, no need for periodic testing to include a meter that we have added language into the 2013 edition that supports that documentation contain those baseline requirements. And therefore, taking this out of the code would invalidate even the ability to utilize that baseline document in the measurements created during the initial acceptance test for the inspectors to perform the baseline periodic testing.

So again, in favor of support of keeping the sound pressure level in there, we will have those baseline requirements. Thank you.

PRESIDING OFFICER BELL: Thank you.

Microphone 6.

JEFF MOORE: Jeff Moore, Hughes Associates, chair of the technical committee on inspection, testing and maintenance speaking against the motion.

Just to clarify something, the problem with tampering with notification appliance, audible notification appliances that could decrease the sound pressure level is recognized by the technical committee. That's why we already have requirements in the code that require visual inspections of the notification
appliances to detect any tampering like that.

PRESIDING OFFICER BELL: Thank you.

Microphone 6 again.

KENT WEISS: Kent Weiss, Church of Jesus Christ of Latter Day Saints speaking against the motion.

This is a difficult thing when you have facilities that may be operating for extended periods of time and being able to go in and do these types of audible testing, you need to be able to do this very quickly, sometimes employing more than one inspector at once.

This presents resource problem to be able to go throughout a facility taking sound pressure readings all throughout to be able to accomplish this task.

Thank you.

PRESIDING OFFICER BELL: Thank you. Any further discussion?

Microphone 7.

JOE SCIBETTA: Joe Scibetta, principal member of the technical meeting on testing and maintenance speaking in favor of the motion on the floor.

I would just like to remind fellow NFPA members what we’re all very much well aware of, this is life safety issue. We just talked about in the last motion that was considered on the floor that what was inadvertently removed from the code had been in the code for many, many years.

Well, same instance in this case. Why are we removing the use of a sound level meter for periodic testing? This is a very important tool for the fire alarm technician to ensure life safety to building occupants. This is a good thing.

Again, I encourage my fellow NFPA members to please support this motion.

PRESIDING OFFICER BELL: Thank you.

Microphone 8.

PETE LARIMER: Pete Larimer, Department of Veterans Affairs speaking against the motion.

I just wanted to bring one additional point that in health care facilities, we often use what they call the private operating mode. And the sound pressure
level requirements even for a new system will be
different and dictated by the designer and where those
ambient levels or what those sound levels are needed,
what thresholds are need in what particular area.
So for a general evacuation system, you
might be able to justify some sound pressure level
readings. But in a hospital where private operating
mode is often used, somebody has to stipulate what sound
levels are necessary in what areas for a sound pressure
measurement to be worthwhile doing after the fact.
So it's not a one size fits all for this
situation. Thank you.

PRESIDING OFFICER BELL: Thank you.

Any further discussion?
Mr. Schifiliti, any additional comments --
COMMITTEE CHAIR SCHIFILITI: I have none and

I would defer the committee chair. He has none.
PRESIDING OFFICER BELL: Okay. We'll move
to vote on the motion.
The motion on the floor is to accept Comment
72-186.
Please record your vote now. One if you're
in favor of the motion and two if you're against the
motion.
Voting closes in five seconds. Voting is
closed. Motion fails.
Move on to motion sequence 72-5. Microphone
5.
SHANE CLARY: Thank you, Mr. Chairman.

Shane M. Clary, Bay Alarm Company. And I move, my
motion sequence 72-4, which is to reject identifiable
part in Comment 72-169C, the identifiable part are the
TCC actions listed under quote, council action, close
quote.
PRESIDING OFFICER BELL: The motion on the
floor is to reject an identifiable part of Comment
72-169C as noted in the motions committee report. Is
there a second?
Thank you, proceed.
SHANE CLARY: Thank you, Mr. Chair.
It's kind of a unique motion I have here.

What this motion is attempting to do is to revert back
to the language that the technical committee on testing
and inspection and maintenance did prior to the TCC who
were following the direction of the standards council in
relation to integrated testing for a new document, NFPA
4, the standard for the testing of integrated fire
protection systems.

However, NFPA 4 does not yet exist. It is
still in a draft mode. The technical committee for this
document still has three more meetings to go through,
another preliminary meeting. And later on this year a
first draft meeting. Next year a second draft meeting.
And it will not be up for adoption until NFPA gathers
the next time on the shores of Lake Mead here in Las
Vegas.

All states right now adopt NFPA 72 which has
right now some direction for the testing of integrated
systems. No one yet has adopted NFPA 4. Again, it does
exist.

And so I think that in deference to the
standards council that the directive was a little
premature. Let's wait until NFPA 4 is published and
then at that time get the directive out there to
segregate between what NFPA 72 does and NFPA 4 does. We
still need to get states to adopt NFPA 4. So at that, I
will step away from the mike.

PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: The technical
correlating committee is opposed to this motion. This
CAM seeks to overturn changes put in place to comply
with the standards council directive limiting the
testing scope of NFPA 72.

The language resulting from the TCC action
includes additional annex language addressing
integrating testing and comments on a new requirement to
establish a test plan that clearly addresses the scope
of testing and what is tested and what is not being
tested.

The language resulting from the TCC action
also addresses a test method for emergency control
function interface devices to assure that interface
device connections are properly restored at the end of
Further, the language resulting from the TCC action includes significant explanatory annex material discussing the importance of assuring the functionality of interconnected systems while making it clear that NFPA 72 does not require the testing of these interconnected systems, nor does it define the performance of those integrated systems.

The resulting explanatory annex material makes references to other codes and standards responsible for these interconnected systems as well as reference to the new NFPA 3 recommended practice for commissioning and integrated testing of fire protection and life safety systems.

It should be noted this CAM will reintroduce required testing of interconnected systems outside the scope of NFPA 72 with little or no guidance as to the extent of the testing or recognition of the jurisdiction of the other responsible codes and standards.

Acceptance of this CAM would undo the refinements put in place by the TCC action, including the clarified annex guidance, as well as the use of new standard terminology developed by one of the other technical committees, protected premises, and that is now used throughout the Chapter 21 on emergency control function interfaces.

If this CAM was accepted, the resulting language would be contrary to the standards council action of September 20, 2011, limiting the scope of testing requirements addressed in NFPA 72 to those addressed -- to those systems addressed in NFPA 72.

For this reason, the technical correlating committee is opposed to the motion.

And I also ask that Jeff Moore, chair of the inspection, testing and maintenance committee, be permitted to comment on this.

PRESIDING OFFICER BELL: Microphone 6.

JEFF MOORE: Jeff Moore, Hughes Associates.

I'm the chair of the inspection, testing and maintenance technical committee speaking basically just to explain the position of the technical committee.

The ITM technical committee made a number of
changes during this cycle to comply with the standards
council direction to not include inspection, testing and
maintenance requirements for systems that were outside
the scope of NFPA 72.
Comment 72-169C was a technical correlating
committee comment that kind of expanded on our work to
further clarify the intent of the standards council
direction again to not include inspection, testing and
maintenance requirements for interconnected systems
which were outside the scope of NFPA 72.
But there was significant annex material
added both by the technical committee and the
correlating committee to explain that while these
interconnected systems are not under the jurisdiction of
NFPA 72, the best methods for testing are still an
integrated testing approach.
So this is strictly to comply with the
technical correlating committee -- excuse me -- the
standards council instructions to not mess with the
systems that are not the under NFPA 72.
Just as a bit of history the whole thing
arose with the standards council and a summit between a
number of technical committees affected by inspection
testing and maintenance over the issue of testing smoke
dampers.
The way the code was written, if you had a
smoke damper that was actuated by a smoke detector, as
most smoke dampers are, you had to test the smoke damper
on the same frequency as the fire alarm code said you
had to test smoke detectors. Whereas, the standard
covering the smoke damper would allow a testing
frequency of two to five years depending on the
application. Thank you.
PRESIDING OFFICER BELL: Thank you,
gentlemen.
Further discussion. Microphone 5.
BOB BAIRD: Bob Baird, Independent
Electrical Contractors Association, chairman of the
electrical section. At our meeting on Tuesday, the
electrical section --
PRESIDING OFFICER BELL: You're speaking for
the motion?
BOB BAIRD: Speaking for the motion.

PRESIDING OFFICER BELL: Thank you.

BOB BAIRD: On Tuesday the electrical section discussed this matter. Mr. Clary explained his position. The electrical section voted to support this CAM.

PRESIDING OFFICER BELL: Thank you.

Microphone 3.

TOM HAMMERBERG: Tom Hammerberg representing the Automatic Fire Alarm Association.

While we're not opposed to the suggestions by the standards council to get rid of the testing of equipment that is outside of the scope of 72, we feel that it's very premature.

This leaves a major loophole out there for the next code cycle. NFPA 4 is not going to be available for a couple of years. Even the reference to NFPA 3, which is wills available now, is simply a recommended practice. It's not going to be a standard. And we feel that from the safety point, it's much better off to leave it in 72 for one more cycle. I have no problem with taking it out next cycle after we had something to replace it, but there's nothing to replace it right now.

To me it makes absolutely no sense to take these requirements out at this particular point because it's going to do is reduce life safety. Thank you very much.

PRESIDING OFFICER BELL: Thank you.

Microphone 6.

FRANK VAN OVERMEIREN: Frank Van Overmeiren, FP&C Consultants, member of the NFPA 72 technical committee and now the long term historian of the group speaking against the motion.

While I personally am not in favor of the direction that we have chosen, and as Mr. Hammerberg just mentioned, we're going to end up with a gap in the sequence of the code and the adoption of NFPA 4 when it does become available, I've long term believed this is a consensus process and we need to work towards acceptance of the direction we're given by the standards council and what we receive as instructions by the technical...
correlating committee.

We will have an integrated testing approach.

The technical committee has adopted a test plan to try and address those gaps in that time point in time.

Both Mr. Schifiliti and I are on the NFPA 4 technical committee to try and ensure we'll end up with the right configuration for performance when that new document is adopted.

So I think while we do have a gap in the time, following direction of the standards council at this point in time is the reasonable way to go.

PRESIDING OFFICER BELL: Thank you.

Any further discussion?

Mr. Schifiliti, any additional comments?

COMMITTEE CHAIR SCHIFILITI: The only comment I have is that technical correlating committee feels that the other standards do have test requirements in place. So the only gap is having it in one location, which eventually NFPA 4 will have.

So I would seek that you ask that you support the technical committee and the technical correlating committee by voting against this motion.

PRESIDING OFFICER BELL: Thank you.

With that, we'll move to the vote on the motion which is to reject an identifiable part of Comment 72-169C as noted in the motions committee report.

Please record your vote now, one if you're in favor of the motion and two if you're opposed to the motion.

Voting closes in five seconds. Voting is closed. Motion passes.

Next motion is sequence number 72-6.

Microphone 5.

BRUCE FRASER: I'm Bruce Fraser, Fraser Fire Protection, and I move to reject an identifiable part of Comment 72-251.

PRESIDING OFFICER BELL: The motion on the floor is to reject an identifiable part of Comment 72-251 as noted in the motions committee report and I heard a second.

Please proceed.
BRUCE FRASER: This should be a fairly quick one and a no brainer, but the identifiable part is the TCC action which modified the TC's action on the main paragraph of 21.3.3.

And in an effort to maintain consistency throughout NFPA 72, the technical committees were instructed to use the phrase, where other governing laws, code, standards or other parts of this code require, et cetera, et cetera, and replace the term where required. So universal changes were made in that regard.

In attempting to use this terminology in 21.3.3 there was an unintended consequence that occurred and effectively it changed the intent of the paragraph. I can get into it. Effectively elevator recall can only now be initiated by devices in elevator lobbies, machine rooms and hoistways and other devices would not be permitted to initiate elevator recall.

For years it's been in the code to allow other devices to the jurisdiction requires it. And we inadvertently took that out unfortunately. The intent of 21.3.3 has always been to permit other devices.

Now, if this motion is successful, it would restore the original intent as shown on the salmon colored sheet, Page 32 in the right-hand column. So I would recommend highly that the motion on the floor be supported.

PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: The technical correlating committee agrees with the submitter and is in favor of the motion because it restores an important provision that allows the authority having jurisdiction to permit or require the use of initiating devices for elevator recall different from the default of those that are specified in the code provisions.

This provision was inadvertently removed but is important in order to maintain the flexibility that is currently needed by enforcing authorities.

The motion retains the language accepted by the technical committee in Proposal 72-279 which was
their main intent at adjusting that particular section. And it also includes the exception that was added by Comment 72-251 which was in the comment phase some additional work they wanted to do on that section. So the TCC asks that you support this CAM. And I also ask that Burton Bunker, chair of the protected premises committee be permitted to address the committee's position.

PRESIDING OFFICER BELL: Thank you.

Microphone 2.

BURTON BUNKER: Thank you, Mr. Chairman.

Burton Bunker, U.S. Department of State. I'm the chairman of the protected premises signaling committee.

The intent of the committee, as both Mr. Schifiliti and Mr. Fraser have stated, was to create consistency within the document on the terminology referring to other laws, codes or standards. It's always been our position on this committee in the past to remit other initiating devices to cause recall. Therefore, this was an unintended consequence. Thank you.

PRESIDING OFFICER BELL: Thank you, gentleman.

Further discussion. Microphone 5.

ROBERT BAIRD: Robert Baird, Independent Electrical Contractors Association, chairman of the electrical section. The electrical section supports this action.

PRESIDING OFFICER BELL: Thank you.

Any further discussion? Seeing none we'll move to the vote, which is to reject an identifiable part of the Comment 72-251 as noted in the motions committee reports.

Please vote now, one if you're in favor of the motion, two if you're opposed to the motion. Voting closes in five seconds. Voting is closed. Motion passes.

Next motion sequence is 72-7.

Microphone 3.

FRANK VAN OVERMEIREN: Frank Van Overmeiren, FP&C Consultants, alternate designated representative for Josh Elvove.
PRESIDING OFFICER BELL: You are authorized to make the motion.
FRANK VAN OVERMEIREN: Move to accept Proposal 72-343.
PRESIDING OFFICER BELL: Motion on the floor is accept Proposal 72-343. Is there a second? I heard a seconds.
Please proceed.
FRANK VAN OVERMEIREN: This proposal, I move to accept the motion, speak in favor of the motion. This proposed motion seeks to modify Section 24.3.5.4.1 as follows:
For systems employing relocation or partial evacuation, a level one, two or a level three pathway survivability shall be required.
This is the first of three similar motions to permit pathway level one as a survivability option.
This motion deals with building emergency voice alarm communication systems employing relocation or partial evacuation.
The others deal with two-way in-building wired ECS and the third deals with area of refuge communication systems.
Prior to the 2010 edition, all requirements pertaining to voice systems and the survivability of these systems was located in Chapter 6 under the purview of the technical committee for protected premises. That edition listed five options.
During the 2010 cycle, the new ECS technical committee was created which was given the responsibility
for all systems that use live voice for communicating various emergencies. However, the protected premises committee remained responsible for defining survivability introduced new defined pathway levels in
Chapter 12 that other chapters could use. In essence, previous survivability requirements became level two while other requirements became level one, which was essentially the sprinkler action. During the 2010 ROP, the ECS took those pathway levels to establish survivability requirements for a number of different communication systems. For in-building evac employing partial evacuation, the options originally included both levels one and two. However, during ROC, the TC revised the requirement to level two or three. No technical justification was given for the change. But as part of the process, the TC also created an annex to permit a performance based approach or risk analysis where other pathway levels might be acceptable and included examples in such instances, including buildings of construction that is less than two hours, such as a one story type five nursing home that would employ relocation. Given there are a number of examples where this would not be appropriate to use pathway level two since the wiring would outlast the building construction --

PRESIDING OFFICER BELL: 30 seconds.

FRANK VAN OVERMEIREN: The essence is we have buildings that are adopted, accepted and approved that are one hour fire rated construction. And we have listed cable or requirements for those systems greater than the one hour construction for the building.

PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: The technical correlating committee has no comment on this motion and I defer to the chairman of the emergency communication systems chapter, Wayne Moore, to comment on the committee’s position.

PRESIDING OFFICER BELL: Mr. Moore.

Microphone 2.
WAYNE MOORE: Thank you, Mr. Chair. My name is Wayne Moore with Hughes Associates. I'm chairman of the risk communication systems chapter. And the chapter committee rejected this to 1. And basically after review of information provided to the committee, they felt especially for evac system was crucial for the pathways used for systems employing relocation of partial evacuation be particularly robust bus for an extended period of time as required by the code and possibly at the fire scene. There's no assurance that the sprinklers will be located the areas of the risers. Therefore, it was critical that additional protection be provided to those circuits. That was the reason the committee rejected this particular motion. Thank you.

PRESIDING OFFICER BELL: Thank you, gentlemen.

We'll move to further discussion.

Microphone 2.

BRUCE FRASER: Bruce Fraser, Fraser Fire Protection and I'm speaking against the motion.

I am a member of Chapter 24 emergency communications. And the subject has been debated considerably. And I feel that allowing the lessening of the survivability requirements to be a detriment to the overall reliability and capability to operate during a fire condition. And I noted in the response, the committee statement, there is a way to achieve what the submitter had wanted. And it allows in Section 23.10.2 of the NFPA 72 2010 edition, that number might have changed, but the content is still -- an evaluation is allowed to lessen the requirement. So that is permitted.

But I also wanted to mention something, I won't repeat what Wayne had said, but the concern was with the system water supply could be compromised under those conditions where fires sometimes are the result of arson or today we're looking at terrorism, things like that, where one of the most robust wiring capability wiring system.

So I urge to vote against the motion on the floor.
PRESIDING OFFICER BELL: Thank you.

Microphone 5.

RAY GRILL: Ray Grill with ARAP. I'm the chair of the notification appliances technical committee and NFPA 72 and an alternate on the emergency communications systems committee.

I'm speaking in favor of the motion on the floor. As was stated by Frank Van Overmeiren in the initial discussion of this motion, there are a lot of situations where partial evacuation or relocation can be implemented in buildings that are not two hour rated.

The standard has allowed conduit and sprinklers as a method of providing survivability.

There has been no justification to increase the required level of survivability.

So I would urge this body to support the motion on the floor. Thank you very much.

PRESIDING OFFICER BELL: Thank you.

Microphone 8.

ED WALTON: Good afternoon. Ed Walton representing DRACA talking against the motion.

Basically there's substantiation that was submitted that brought up the point there was no evidence to show that level two survivability cable offered protection over level one sprinkler building.

We assert that this is false. We have a study that was done on a building fire in Wooster, Massachusetts that was performed by a fire protection engineer. It was done at the request of a fire marshall and also a fire chief and electrical inspector.

In this building, which was a fully sprinklered building, there was an electrical system that went from the basement to the ceiling providing emergency power to the elevator.

This system survived a four-story electrical closet fire that took out every other cable in the building. Even though the sprinkler system was operational, this cable continued to work and continued to provide that kind of emergency protection in the building.

One further comment. Since I involved with
the development of the pathway levels one, two and three, it was recognized by that committee that level one sprinklers would prevent the size of the fire becoming greater and greater, whereas the cable level two would protect the systems that are there to provide emergency up to the survivor. Thank you.

PRESIDING OFFICER BELL: Thank you.

Microphone 5.

PETE LARIMER: Thank you. Pete Larimer with the Department of Veterans Affairs. I speak in favor of the motion.

I just want to bring the membership to the attention that this applies to voice communication systems as it's in paragraph 243541, which addresses voice communication systems used for partial evacuation. I work for the Department of Veterans Affairs. We have about 153 medical center campuses, many of which use other than voice communication systems, we use coded service that provide staff an indication of where the fire is and where they need to respond in order to help patients be relocated in a partial evacuation mode.

The requirement for survivability of the wiring in that system that we use throughout our medical centers is not required to meet the two hour.

We have had no situations that I can verify in my 20 plus years with the VA that it what about a problem in our sprinkler buildings. And even to this day, you're still permitted to use coded systems for partial evacuation without having a two hour cable that's being proposed for the voice only system.

So inasmuch as we're indicating in here that we have to increase the survivability of these systems, there are many systems out there that are working in sprinklered buildings and I can tell you we've had fires with sprinklers that have gone off with an adequate response both from the fire alarm system and the building in general.

So I believe that this is more of a solution and we're still seeking the problem. Thank you.

PRESIDING OFFICER BELL: Thank you.

Microphone 2.
BRUCE FRASER: Bruce Fraser, Fraser Fire Protection and I just wanted to respond to two items. Number one, there was rationale during our committee --

PRESIDING OFFICER BELL: You're speaking against the motion?

BRUCE FRASER: I'm sorry. I'm speaking against the motion, yes.

PRESIDING OFFICER BELL: Thank you.

BRUCE FRASER: During our committee session, there were -- the rationale was created, although we might not have put it in the commentary, for especially for the water supply. I love sprinklers. I want to be a sprinkled building.

However, the discussion was around the arson and the terrorism. And we wanted to have that as a more stringent level. And there's always the ability to step down via 23.10.2 which allows the evaluation to allow the lessening of the system.

So again, I speak against the motion.

PRESIDING OFFICER BELL: Thank you.

Microphone 3.

FRANK VAN OVERMEIREN: Frank Van Overmeiren, FP&C Consultants. I speak in favor of the motion. I just want to address the issue of arson and terrorism. This is a minimum standard. It is the desire in the industry to install more voice communication systems in buildings than it is to install standard generally evacuation systems.

One of the reasons to accomplish this is by maintaining a reasonable cost for installing voice communication systems that give us greater ability to utilize the systems for emergency mass notification purposes.

We have more and more buildings across the United States that are being installed with these types of systems that are only of construction classification with one hour fire resistance ratings.

We have college campus buildings. We have hospital campus buildings. We have municipal building campuses. We have all kinds of configurations of military facilities that are installing voice
communication systems as part of their configurations that do not have two hour fire rated construction. So making a mandatory requirement for rated construction greater than that of the building just doesn't make sense and increases cost. It will go through and make a configuration to where building owners will look at that and say, I'll just install a general evacuation system and not gain the benefits that these systems have.

I speak in favor of the notion. PRESIDING OFFICER BELL: Thank you.

Microphone 2.

TOM HAMMERBERG: Tom Hammerberg representing the Automatic Fire Alarm Association. While I can agree with what Frank was just saying about the building --

PRESIDING OFFICER BELL: Speaking.

TOM HAMMERBERG: Speaking against the motion.

PRESIDING OFFICER BELL: Thank you.

TOM HAMMERBERG: Sorry. I agree with Frank when he's talking about there are some occupancies that only have one hour rating, but we have to remember that NFPA 72 is not an occupancy specific requirement. By making these changes, it changes it globally to have any type of system to allow the use of sprinklers as opposed to one of the other more robust means of survivability requirements. So the Automatic Fire Alarm Association speaks against the motion.

PRESIDING OFFICER BELL: Thank you.

Microphone 5.

DAVID DESHONAY: My name is Dave Deshonay. I'm speaking on behalf of the American Society of Health Care Engineers.

We've heard a lot of things today about sprinklers not working, terrorism, arson and a variety of things. Clearly this provision is intended to be a minimum requirement.

PRESIDING OFFICER BELL: You're speaking for the motion?

DAVE DESHONAY: For the motion, thank you.
To have a voice system that is going to function greater than the building, just makes no common sense. If we think about this, an individual has the ability to choose the level of protection that they have. To require, this a two hour system in a building that only is designed to withstand one hour, visualize this in your head.

The building is completely to the ground and you have a functional voice activated system. It just does not make sense. This is a common sense decision. It's not necessary. We urge you to vote for this motion. Thank you.

PRESIDING OFFICER BELL: Thank you.

TOM JAGGER: Tom Jagger from Jagger & Associates and I represent the American Health Care Association leading age which represent 80 percent of the long term care facilities in the United States. Almost 75 percent of our buildings, new and existing, are either zero or one hour rated. We have never had a failure of a sprinkler system since at least 1970 that resulted in multiple death fire in a sprinklered building.

I would hope we were past the stage in 2012 where somebody gets up at the mike and references one fire and we should reacting to that one fire. And I agree with the gentleman who just spoke. If you're in a building with zero or one hour rating and the sprinkler system fails, that building is not going to be tenable in two hours. I can guarantee you that.

So I speak in favor of the motion.

PRESIDING OFFICER BELL: Thank you.

Any further discussion? Any additional comments?

Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: I have no comments and I would defer to the committee chair for committee's position.

PRESIDING OFFICER BELL: Microphone 2.

WAYNE MOORE: Wayne Moore from Hughes Associates, chair of the committee for enriched
communication systems. And I just want to clarify a
couple of issues that I've heard so far and I apologize
to say if I misunderstood what he said.
But we're allowed -- we're only requiring
the survivability of cables where we relocate people in
a building. If we have -- and I've seen 12-story
buildings that are made of concrete that had a voice
system and they evacuate the entire building.
Obviously, if you have a type zero or one
hour construction and you're evacuating the whole
building, then there's no need for survivability. So I
just want to clarify that's not the intent.

PRESIDING OFFICER BELL: Thank you
gentlemen.
With that, we'll move to the vote. And the
motion on the floor is to accept Proposal 72-343.
Please vote now, one if you're in favor of
the motion and two if you're opposed.
Voting closes in five seconds. Voting is
closed. Motion fails.
Next motion sequence is 72-8.
Microphone 3.
FRANK VAN OVERMEIREN: Frank Van Overmeiren,
FP&C Consultants, designated representative for Mr. Josh
Elvove will.
PRESIDING OFFICER BELL: Thank you. You are
authorized as a representative.
FRANK VAN OVERMEIREN: I move acceptance of
Proposal 72-346.
PRESIDING OFFICER BELL: The motion on the
floor is to accept Proposal 72-346 is there a second?
Do I hear a second? I hear a second.
Please proceed.
FRANK VAN OVERMEIREN: This proposal is
essentially a repeat of the previous one. However, the
difference is this is for two-way in-building wired
emergency communication systems so that they can have a
pathway survivability of level one, level two or level
three. Same configuration, just a different use of the
cable.
Speak in favor of the motion.
PRESIDING OFFICER BELL: Thank you.
Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: Thank you. The correlating committee has no position on this and I would defer to the committee chair, Mr. Moore.

PRESIDING OFFICER BELL: Microphone 2.

WAYNE MOORE: Thank you, Mr. Chairman.

Wayne Moore from Hughes Associates, chairman of the ECS committee. The vote on this one was 23 to 2.

Just to give a little background, obviously these firefighter telephones or these telephone circuits are used by firefighters use and in some cases fire warden use during the course of a fire.

Again, the committee felt that the additional robustness was needed for the circuits. And I won't go into the rest of the discussion we've had already in the first proposal, but all these same reasons apply.

PRESIDING OFFICER BELL: Thank you, gentlemen.

Further discussion. Microphone 5.

JOHN CAPUS: John Capus with Ralph Jensen & Associates speaking in favor of the motion.

We talked about this being two way firefighter wired communication system. However, we also have to consider the fact that wired communications for firefighters also employs the use of their wireless radio systems and that there is not a cable on the market that is made to the two hour capability that is it for these radio repeater systems for firefighters in-building communication systems.

In addition, to use the threat of terrorism that would not consider the capability of taking out the sprinkler system, you would have to say why aren't they taking out the fire alarm system as well. The scare tactic to that is not a valid argument.

Again, I vote in favor of this motion.

PRESIDING OFFICER BELL: Thank you.

Microphone 2.

WAYNE MOORE: Wayne Moore from Hughes Associates, chair of the ECS committee.

Just to clarify, these are wired systems and the reason that these systems were initially installed
in buildings many years ago is the radios that the
firefighters use do not work unless there's an
enhancement system in the building, which is a whole
different subject. This is strictly the traditional
wired telephone systems.

PRESIDING OFFICER BELL: Thank you.

Any further discussion?

Mr. Schifiliti, any additional comments --

COMMITTEE CHAIR SCHIFILITI: No additional

comments.

PRESIDING OFFICER BELL: With that, we'll

move to the vote.

And the motion on the floor is to accept
Proposal 72-346.

Please vote now, one if you're in favor of
the motion or two if you're opposed to the motion.

Voting closes in five seconds. Voting is
closed. Motion fails.

Next sequence is number 72-9.

Microphone 3.

FRANK VAN OVERMEIREN: Frank Van Overmeiren,
FP&C Consultants, designated representative of Mr. Josh
Elvove.

PRESIDING OFFICER BELL: You're an
authorized designated representative.

FRANK VAN OVERMEIREN: I've been authorized
by Mr. Elvove that based upon the voting in the last two
issues that my discretion I can go through and defer and
not pursue the next motion CAM 72-9 and I choose to do
so.

PRESIDING OFFICER BELL: So I understand
you're not pursuing motion sequence number 72-9?

FRANK VAN OVERMEIREN: That is correct.

PRESIDING OFFICER BELL: Okay. So with that
action, we'll be moving on to motion sequence number
72-10.

FRANK VAN OVERMEIREN: Frank Van Overmeiren,
FP&C Consultants, designated representative to Mr. Josh
Elvove.

PRESIDING OFFICER BELL: Please proceed with
the motion.

FRANK VAN OVERMEIREN: I move to accept
Comment 72-304.

PRESIDING OFFICER BELL: The motion on the to floor is to accept Comment 72-304. Is there a second? I hear a second.

Please proceed.

FRANK VAN OVERMEIREN: This issue is similar but different in the result of what we're having as far as the requirements. This proposal seeks to provide a provision that states pathway survivability levels for systems employing relocation of partial evacuation to an in-building wire emergency communication systems and area of refuge, emergency communication systems shall be permitted to be determined via risk analysis.

Essentially what we're trying to do is make the possibility within the code where we can utilize a risk analysis that's stated within the main body of this chapter so that it can be utilized as part of a substantiation of a variance or equivalency request to the authorities having jurisdiction to go through and utilize a change to reduce the level of survivability of a particular wired system.

I speak in favor of the motion.

PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: The correlating committee has no comment on this motion and defers to chair of the committee to state the committee's position.

PRESIDING OFFICER BELL: Mr. Moore.

Microphone 2.

WAYNE MOORE: Thank you, Mr. Chair. Wayne Moore, Hughes Associates, chair of the ECS committee.

The risk analysis that is mentioned here is already allowed for all of the other systems that make up mass communication systems. But the committee still feels strongly that when it comes to fire evacuation, areas of refuge and two-way wired telephone systems, that the robustness the system still needs to be there. So that the committee voted 24 to 1 to reject this comment and proposal.

PRESIDING OFFICER BELL: Thank you, gentlemen.
Further discussion. Microphone 1.

CHAD BEBE: Chad Bebe American Society of Health Care Engineers representing the health care section in support of the motion before you.

At the health care business meeting on Tuesday we voted to support this as a section. I urge you to support it.

PRESIDING OFFICER BELL: Thank you.

Any additional discussion?

Any additional comments, Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: I have no comments.

PRESIDING OFFICER BELL: With that, we'll move to the vote on the motion on the floor which is to accept Comment 72-304.

Please vote now, one in favor of the motion and two if you're against the motion.

Voting closes in five seconds. Voting is now closed. Motion fails.

Next motion sequence is 72-11.

ANTHONY MUCCI: Anthony Mucci, ADT Security Services, member of the supervising station technical committee.

I make a motion to reject an identifiable part of Comment 72-352.

PRESIDING OFFICER BELL: The motion on the floor is to an identifiable part of Comment 72-352 as noted in the motions committee report. Is there a second? I hear a second.

Please proceed.

ANTHONY MUCCI: As written, effective January 1, 2014 any signal received by the supervising station that has not restored to normal within 24 hours of initial receipt and every 24 hours thereafter until restored, shall be redisplayed to an operator as a non-restored signal and shall be reported to the subscriber.

The requirement does not consider the burden placed on supervising station. The resources will be used for undetermined period of time to report a
non-life threatening situation to the subscriber. Repeated notifications could continue for days and weeks with no apparent benefit to the subscriber, but to detriment to the resources of the supervising station. The building could be out of service without a known subscriber. A limit must be placed on the subsequent notifications with the number that does not distract the supervising station from other events but places the burden on the subscriber to take action. An open ended requirement for this with situation is not appropriate. A more reasonable approach would be one telephone call notification within 24 hours of initial receipt followed by notification of an alternate method such as a letter or e-mail. The code is a minimum standard. So it tell us that we need to notify the subscriber, but it shouldn't do so where we have to do it every 24 hours thereafter. I urge you to support in favor of the motion. Thank you.

Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: The correlating committee has no comment on this and as the original preparer of the motion or proposal I have no comment and defer to the committee chair.

PRESIDING OFFICER BELL: Microphone 2.

WARREN OLSON: Good afternoon. Warren Olson, Fire Safety Consultants and chairman of supervising station alarm systems.

The committee voted 25 affirmative to one negative to accept in principal the comments that came to us. And just clarify some wording, our intent entity was to have the recontacting of the subscriber every 24 hours if signalling conditions were still present, alarm trouble or supervisory. We did make it rather, I don't want to use the word vague, but that's what it is, we didn't specify the method in which to notify the subscriber, so we did leave that open.

But we felt it was important to constantly
bring to the attention of the subscriber that his alarm

system was not in full service.

PRESIDING OFFICER BELL: Thank you, gentlemen.

Any further discussion on this motion?

Microphone 3.

LOUIS FIORE: Speaking in favor of the motion, this is Lou Fiore, L.T. Fiore, Inc. I just want to say that the Central Station Alarm Association is in support of this motion.

PRESIDING OFFICER BELL: Thank you.

Any further discussion? Seeing no one at the microphone, we'll move to the vote on the motion which is to reject an identifiable part of Comment 72-352 as noted in the motions committee report.

Please vote now, one if you're in favor of the motion and two if you're against.

Voting closes in five seconds. Voting is now closed. Motion passes.

Next motion sequence is number 72-12.

LOUIS FIORE: Lou Fiore, L. T. Fiore, Inc.

I move to accept Comment 72-367.

PRESIDING OFFICER BELL: The motion on the floor is to accept Comment 72-367. Is there a second?

I hear a second.

Please proceed.

LOUIS FIORE: First of all, I'd like to let you know I'm a long term member of NFPA 72 back when it was NFPA 71. And now Chapter 26, I chair the task group of that, made some sweeping changes to Chapter 26 in the areas of technology.

Historically, the DACT, digital alarm communicator transmitter, had a 24 hour test sequence.

But now we have evidence that backup power provided to us to the PSTN and its approved the MFVN, managed facilities voice networks has diminished to eight hours. So therefore, I understand the spirit in which this proposal was made or those changes were made. However, there's a subject here of belted suspenders. Fundamentally the new text requires two technologies. If you have a DACT and it's connected to
a telephone line, the second line goes through another
technology, be it digital cellular, IP radio, whatever.
So that we've already covered the deficiency there.
There's no need to add suspenders when we already have
the belt.
If we don't go back to 24 hours, we'll have
four times the additional traffic at the supervising
station. This could, and I say could, it doesn't have
to, have the requirement for additional hardware and
telephone lines at the supervising situation station.
But the four times traffic is irrefutable.
Also, this will disturb trade. When you
have a DACT and a customer's business three times a day
during business hours, two or three times a day the
telephone will be disrupted this obviously will cause
complaints.
But most importantly, the one telephone line
is supervised by the other technology. And so
therefore, technology is available to send alarm
supervisory and trouble source.
My motion still leaves intact the exception,
if you read it, there's an exception that says if you
must use telephone, two telephone lines because you're
in an area of the country you don't have an option, then
six hours is appropriate so.
PRESIDING OFFICER BELL: 50 seconds.
LOUIS FIORE: The use of DACT is in its
twilight. The PSTN will sunset soon. In fact, the FCC
is proposing 2018. At this point there is no need to
make the situation worse than it is.
I urge you to vote in favor of my motion.
Thank you.
PRESIDING OFFICER BELL: Thank you.
Mr. Schifiliti?
COMMITTEE CHAIR SCHIFILITI: The correlating
committee has no comments and I defer to the technical
committee chair Warren Olson.
PRESIDING OFFICER BELL: Microphone 2.
WARREN OLSON: Warren Olson, Fire Safety
Consultants, chairman of the supervising station alarm
system committee.
The committee voted 26 to nothing to approve
the language that came out of the comments section.
During the work of the committee, we made changes
regarding the available secondary path of connection for
DACT. And basically it eliminated, with some
exceptions, with one real exception, the use of two pot
slides. So there has been a change overall in what's
being accepted.

As a result of other committee action and
one we're really talking about here, we went across the
board with a six-hour supervised check-in for DACTs. So
that was generally the work of the committee.
I think what the proponent here is asking
for is not necessarily -- it's a reasonable I think
request. There is an issue though with the language
that was submitted and I'm not certain how we want to
deal with that.
But he does indicate where two DACTs are
used, I believe in talking with him, he meant where two
phone lines were used or POTS lines. So that's my
comment.

PRESIDING OFFICER BELL: Thank you,
gentlemen.
Microphone 2.
ART BLACK: Thank you, Mr. Chair. Art
Black. Carmel Fire Protection. I rise in opposition of
the motion on the floor.

PRESIDING OFFICER BELL: Very good.
ART BLACK: I would like -- the only reason
that I agree with the chair of the committee that it's
really a technical issue more than anything else.
But I'm concerned about what is in his
motion, what is in the submitter's motion in the second
paragraph. And it does say success, if successful, this
proposed motion seeks to modify the section to read as
follows and the second paragraph is incorrect. You do
not have two DACTs, you have two phone lines on a DACT.
So for that reason alone, I urge defeat of
this motion. We can fix this, but adopting this
language is going to create the need for at least a TIA
to fix this later on hopefully before the book gets
published.
So I urge defeat of the motion.
SHANE CLARY: May I touch to microphone?

Yes, Shane M. Clary, Bay Alarm Company, standing in favor of the motion.

Again, I don't dispute some of the stuff that's being said on the opposing side. I think the language, we will have to do some repair in a TIA. I would just prefer if we can get the support of those that are in this hall to accept the motion, then we'll get a TIA to correct the inadvertent difference between two DACTs facts as opposed to two phone lines.

Again, as Mr. Fiore stated, POTS, plain old telephone service, is being will be sunsetting because of the phase out of the public switch telephone network. The company I work for, Bay Alarm Company, we probably have 40,000 or so systems on the digital dialers. Yes, occasionally we do see some issues with the phone lines coming in, of course we get our 20-hour test items report, to kick it over to six hours for new systems that was not retroactive.

My one fear is, though, if it goes into the code, that you could have some trying to make it retroactive, though that is not a requirement. And I just would prefer if possible we just maintain the language that has been in the standard many for a number of years. Thank you.

LOUIS FIORE: Lou Fiore again, L. T. Fiore, Inc. I want to address the concern about this inappropriate second paragraph.

PRESIDING OFFICER BELL: You're speaking for the motion?

LOUIS FIORE: I'm speaking for the motion, yes.

The original draft committee proposal, which I actually have in my hand, that has that same error. If you read the paragraph, it's clear the intent is two telephone lines, one DACT, two telephone lines. And I submit that that's just -- it's simply an editorial change, but the word line should be added...
after DACT. One should say lines and the other should say lines.

And the meaning is very, very clear. It was just a simple error. And I actually transposed that paragraph into my CAM. Thank you.

PRESIDING OFFICER BELL: Thank you.

Microphone 2.

DAN FINNEGAN: Good afternoon. My name is Dan Finnegan with Seimans Building Technologies and also retired firefighter and firefighter prevention officer and I am speaking against the motion for really two key points.
The fact that as we have been hearing so far this afternoon, there are some technical challenges with the motion as it has been presented. I think we need to make sure we're crisp and we're clear in the language as we move forward in the motion.

This issue of the 24-hour survivability is known as a fact and I think this really confuses the situation as we move forward.

So for the benefits of system reliability for overall good life safety, we need to vote against this motion and let the thing come back when it's clearer and better well defined as we move forward. So I am in favor of supporting the action of the technical committee in voting against this motion.

Thank you.

PRESIDING OFFICER BELL: Thank you.

Any further discussion?

Any additional comments, Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: I have no additional comments. If the committee chair? No?

PRESIDING OFFICER BELL: With that, we'll move to the vote and the motion on the floor is to accept Comment 72-367.

Please vote now, one if you're in favor of the motion and two if you're against.

Voting closes in five seconds. Voting is now closed. Motion fails.

Next sequence is Comment 72-13.

Microphone 5.
LOUIS FIORE: Lou Fiore again. I move to accept Comment 72-388.

PRESIDING OFFICER BELL: The motion is to accept Comment 72-388. Is there a second? Is there a second? I hear a second.

Thank you. Please proceed.

LOUIS FIORE: Thank you. At the ROP and the ROC I put in a comment to add the addition of voice driver for fire enunciation. And it was rejected. And the substantiation, if you will, committee statement was cited the Brook report, Professor Dorothy Brook from Australia, I believe.

She, however, has a whole different take, I mean if this report was in fact read. And she has been quoted many, many times in the press. And she's a leading researcher.

She believes that house fire fatalities may be the result of people not hearing their smoke alarms. The parents, this is regarding children, by the way, not adults, regarding children.

The parents were very surprised to see, gee, we're wondering if there's a problem with the smoke detector considering how loud it sounded.

Overall, not many children, this is a quote from her, not many children are waking up and those are that are younger than primary school age have a particularly prone to this problem.

She goes on to say, this is actually in the report that was cited trying to defeat my motion, that voice alarms are proving to be more reliable in waking younger children than standard smoke alarm tones.

Voice alarms were designed to convey a sense of urge and emotion. The mother's voice was used using the children's names often. All the children, a hundred percent of the children woke up when they heard that versus 57.1 percent with the standard tones.

I urge this group to send this back to committee, have the committee properly analyze the report that they cited in opposition to what we put in here, and then we can hopefully have a better outcome.

Thank you.

PRESIDING OFFICER BELL: Thank you.
Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: The technical correlating committee has no direct position on this one way or the other, but I would note that the chairman of the emergency communication systems chapter has indicated that they have begun the process of developing a TIA to require the tones that precede voice instructions when used in sleeping areas match the requirements in the household chapter that require the tone to sound for a minimum of 30 seconds before the voice instructions are instituted, and that that tone be the new required low frequency tone, which has been shown to work very effectively for both hearing abled, hearing impaired and alcohol impaired.

PRESIDING OFFICER BELL: Thank you.

COMMITTEE CHAIR SCHIFILITI: And I would defer to, I'm sorry, the committee chair LJ Lair.

PRESIDING OFFICER BELL: Microphone 2.

LAWRENCE LAIR: Thank you, Mr. Chairman. My name is Lawrence Lair. I'm with Architects Capital.

The underlying comment was rejected in committee 23 to 1. The motion seeks to permit unregulated voice messages to be used in household fire alarm systems after two cycles of a T3 pattern or approximately six and a half seconds.

The household committee worked on the issue of voice notification in sleeping areas for several cycles and we added the allowance for some voice notification in 2007 edition.

The code permits a short voice message between individual cycles of the T3 pattern which would fit within 1.5 dead space or allow a longer message to interrupt the T3 pattern provided that pattern is preceded by at least eight cycles of the T3 pattern.

The requirement is based on research indicating that sleeping occupants require 30 seconds of temporal pattern to awaken.

The committee carefully considered the reference comment during the ROC phase and again the comment was objected 23 to 1. Neither the comment or the underlying proposal provided any data to support the change.
The rejection was based not only on the Brook's report, but also working in the 2005 National Institute of Health Phase 2 Report. Thank you.

PRESIDING OFFICER BELL: Thank you, gentlemen.

Further discussion? Microphone 3.

PETER LOITT: My name is Peter Loitt, Central Station Alarm Association and I stand in support of the proposal. I can cite Mr. Fiore's remarks regarding the study done in New Zealand and Australia which was 100 percent accurate in terms of children waking up when a mother's voice is heard.

And as a parent and a grandparent, I can tell you emphatically that hearing a parent's voice instructing a child will get a child up from a dead sleep. An alarm that I have seen many times children do not react to. Thank you.

PRESIDING OFFICER BELL: Thank you.

Microphone 6.

STEVE OLENIK: Thank you very much. My name is Steve Olenik. I'm with Combustion Science and Engineering and I also represent Safe Awake on this issue.

I'm a principal with the chapter 29 residential technical committee and I'm speaking against the motion.

Dr. Brooks basically starting in 1995 did several studies and found that he would get a lot of the people to awaken if you kept the signal going for at least 30 seconds. That was a good number of awakenings.

She did 41 tests with 22 subjects.

My primary reason for being here is that Combustion Science and Engineering, as the chairman indicated, did a lot of work on this back about five to six years ago, we did approximately test included over 400 different individual tests. And again found you needed 30 seconds to T3 signal to awaken people.

If we go to voice and put that in there before having the eight cycles, Dr. Brook in 2008 has indicated they had some problems with the voice awakening the older adults. So what we may ending up
doing is possibly being more somewhat effective for kids, but being less effective for the older adults.

So it's a complex issue and given that, I mean I think that it's probably not the right thing to do to favor this motion, but at worst it's premature and I think the data needs to be highly scrutinize before we put this motion through. Thank you.

PRESIDING OFFICER BELL: Thank you.

Microphone 2.

ROGER RISLEY: Roger Risley with Symplex Bernal Tico International standing against the motion on the floor. The gentleman before me was exactly right what he was saying.

The project that everyone is talking about is the Fire Protection Research Foundation project for awakening a sleeping people, a decade of research by Ian Thomas and Dorothy Brook from the Center of Environmental Safety and Risk Engineering from Victoria University in Melbourne, Australia.

In their report they address voice alarms used for smoke alarms. And I quote, this is right out of their report, a voice alarm was quite effective for younger age groups, but not for older adults.

The voice alarm is also found to have real problems in waking participants with limited English, i.e., what kind of message, how long should the message be, how do I play it? It is recommended that the 520 hertz be adopted as a replacement for the smoke alarm sound.

Again, as many people have said before, 72 is not an occupancy document. It doesn't say specifically if you're going to awaken children. It just says all people.

Therefore, I would urge you to vote against this motion.

PRESIDING OFFICER BELL: Thank you.

Microphone 3.

LOUIS FIORE: Hundred percent in agreement were Roger.

PRESIDING OFFICER BELL: State your name.

LOUIS FIORE: Lou Fiore speaking in favor of the motion.
What Roger said is true, but he also said the children, and the Dorothy Brook says children, I believe was 5 to 10 years old, are a hundred percent awakened by their parents' or mother's voice, and not at all or only 57 percent by the conventional tone. What we sought to do here was give the option. And again, Dorothy Brook said the way a lot of homes are configured, you've got the sleeping quarters for the children on one end and the parents on the other end. That creates a need for the option of having two different kinds of sounders. These are not sounders that are manufactured. These are actually recorded with a human voice of the mother. It's not a language issue, it's not a name issue. So the option is what we're after here. Not one or the other. Thank you.

PRESIDING OFFICER BELL: Thank you. Any further discussion? Seeing no one at the microphone, any additional comments, Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: Correlating committee has no comments. How about the chair? No. PRESIDING OFFICER BELL: With that, we'll move to the motion on the floor which is to accept Comment 72-388.

Please vote now, one if you're in favor of the motion and two if you're opposed to the motion. Voting closes in five seconds. Voting is now closed. Motion fails. Ladies and gentlemen, the authorized maker of the motion on 72-14 has notified NFPA that they are not pursuing this motion and so we're going to move to motion sequence number 72-15.

Microphone three.

TOM HAMMERBERG: Thank you. Tom Hammerberg representing the Automatic Fire Alarm Association and I move to accept Comment 72-441.

PRESIDING OFFICER BELL: The motion on the floor is to accept Comment 72-441. Is there a second? I hear a second.

Please proceed.
TOM HAMMERBERG: Thank you. I'm going to make this short and sweet because I know I'm the last thing between everybody in this room and the door. And this should be fairly straightforward. I had put in a Comment 72-441 that was rejected by the committee saying that if it was accepted, it would have been in conflict with Comment 72-259. Well, in 72-259, the technical correlating committee overturned the committee's action and rejected that. So the committee's response to mine no longer matter. So those comments should have been accepted. Thank you.

PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti?

 COMMITTEE CHAIR SCHIFILITI: Correlating committee has no comment on this motion and I defer to the chair of protected premises committee Burton Bunker.

PRESIDING OFFICER BELL: Microphone 2.

BURTON BUNKER: Thank you, Mr. Chair.

Burton Bunker, U.S. Department of State, chairman of protected premises signalling committee. This one got a little bit messy, but essentially Mr. Hammerberg is correct. The original proposal, which was 72-587, was accepted in principal. And it essentially did what Mr. Hammerberg is proposing. Then along comes Comment 259 which was accepted in principal and modified the text. And the correlating committee rejected that based on the fact that the technical committee had created a problem with scope with respect to A 17.1, elevator and escalator safety codes. So that was rejected. And then as Mr. Hammerberg correctly points out, we at that point in time during the ROC thought that the proposal -- I'm sorry -- Comment 259 was accepted and said that accepting 441 would create a contradiction or a problem, a conflict with accepting 259. So 259 was rejected by the TCC and Mr. Hammerberg is correct.

PRESIDING OFFICER BELL: Thank you, gentlemen.
Further discussion? Microphone 5.

BRUCE FRASER: Bruce Fraser, Fraser Fire Protection, and I’m speaking in favor of the motion. I’m a liaison between NFPA 72 and the ASME A17.1 emergency operations committee. And if this motion is not approved, it will leave erroneous and confusing information as a result of reverting back to the TC action on Proposal 72-587.

So accepting Comment 72-441 would now more clearly explain the intent of the delay of power shut down which is to allow completion of elevator recall. And also now there will be no conflict with A17.1.

So I strongly urge acceptance of Comment 72-441 is and ask support of the motion on the floor.

PRESIDING OFFICER BELL: Thank you.

BOB BAIRD: Bob Baird, Independent Electrical Contractors Association, chair of the electrical section. On Tuesday the electrical section voted to support this action.

PRESIDING OFFICER BELL: Thank you. Any further discussion?

Any additional comments, Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: No, sir.

PRESIDING OFFICER BELL: With that we'll move to the motion on the floor which is to accept Comment 72-441.

Please vote now, one if you’re in favor of the motion and two if you’re opposed. Voting closes in five seconds. Voting is now closed. Motion passes.

Is there any further discussion?

Microphone 3.

FRANK VAN OVERMEIREN: Frank VAn Overmeiren, FP&C Consultants. I wish to make a followup motion to CAM 72-3.

PRESIDING OFFICER BELL: That was a successful motion, so please tell us what your motion is.

FRANK VAN OVERMEIREN: Wish to return a portion of the report in the form Proposal 72-187A and related Comment -- I’m sorry -- related Comments 72-179
PRESIDING OFFICER BELL: Can you explain why that's necessary?

FRANK VAN OVERMEIREN: This essentially takes the partial accepting comments -- I'm sorry, accept principal, accept in part, technical committee actions that we did to the water flow switch testing issue, that the technical committee did to the water flow switch testing issue, and reverts it back to the 2010 existing code text.

PRESIDING OFFICER BELL: I'm going to rule that motion is in order. So the motion on the floor is to return a portion of the report in the form of a Proposal 72-187A and related Comments 72-179 through 182. Is there a second? Is there a second second?

Please proceed.

FRANK VAN OVERMEIREN: I have no additional comments other than to process that motion and speak in favor of the motion.

PRESIDING OFFICER BELL: Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: I have reviewed the necessary information with staff and we agree that this is the correct procedure to return to the 2010 language and that's what we're seeking support for.

PRESIDING OFFICER BELL: Any further discussion?

Seeing no one at the microphone, we'll move to the vote on the motion on the floor which is to return a portion of the report in the form of Proposal 72-187 and related Comments 72-179 through 182.

Please vote now. Voting closes in five seconds. Voting is now closed. Motion passes.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 24, 2012

AMENDMENT (72-3)

Document: NFPA 72, *National Fire Alarm and Signaling Code*

Motion: To Accept Comment 72-182

Follow-up Motion: Return a portion of the Report in the form of Proposal 72-187a and related Comments 72-179 through 72-182.

TCC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary \( \frac{3}{4} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **9** \[19 \text{ (eligible to vote)} - 5 \text{ (ballots not returned)} - 2 \text{ (abstentions)} = 12 \times 0.75 = 9\]

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<td>No, Correlation Issues</td>
<td>12</td>
</tr>
<tr>
<td>Abstain</td>
<td>2</td>
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**TCC Action: PASS**

SIG-TMS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary \( \frac{2}{3} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **18** \[28 \text{ (eligible to vote)} - 1 \text{ (ballot not returned)} - 0 \text{ (abstentions)} = 27 \times 0.66 = 17.82\]

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<tr>
<td>Abstain</td>
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**TC Action: PASS**
NFPA 72
TECHNICAL CORRELATING COMMITTEE BALLOT
JUNE 2012 ASSOCIATION AMENDMENT 72-3

Amendment: Accept Comment 72-182

Follow-up Amendment: Return a Portion of the Report in the form of Proposal 72-187a and Related Comments 72-179.

With respect to this amendment, do you see any CORRELATION issues that will be caused as a result of this amendment being implemented into the document:

☐ Yes*  ☐ No  ☐ Abstain*

*Please give reasons for voting “Yes” or “Abstain”:

I am in favor of the floor action to return the language to prior text which requires flowing of water to test a waterfall switch. Contrary to some negative TC comments, this does not require a fire alarm technician to flow water. It requires that water be flowed, but does not say who must do it. A TG will be working with NFPA 25 to try and develop coordinated language so that it is clear that any test that validates a receipt and correct response of an alarm system to flow equal to a single sprinkler is acceptable to meet the NFPA 72 requirement – even I done as part of an NFPA 25 test.

Please return as soon as possible, but no later than Wednesday, July 18, 2012 to:

Kimberly Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
617-984-7955
617-984-7070
kshea@nfpa.org

Signature: _______________________

Name - Please Print: Robert Schiulliti

Date: 2012 07 17

Note: Please remember that the return of ballots and attendance at Committee Meetings is required in accordance with Section 3.1.3.1 of the Regulations Governing Committee Projects.
Shea, Kimberly

From: lffiore@aol.com
Sent: Wednesday, July 18, 2012 9:20 AM
To: Shea, Kimberly
Subject: Re: NFPA 72 Amendment Ballots

Kim

I know today is the cutoff. I have been rather tied up of late and continue to be so. I am sorry to say that I have not properly followed this. So please enter my votes on all ballots as abstaining. My reason is that I am not available to properly follow the issues and cannot cast a meaningful vote on any of these ballots.

Thank you,
Lou
Sent from my Verizon Wireless BlackBerry

From: "Shea, Kimberly"<kshea@NFPA.org>
Date: Wed, 18 Jul 2012 08:59:16 -0400
To: lffiore@aol.com; lffiore@aol.com
Subject: RE: NFPA 72 Amendment Ballots

Lou,

I have received your ballots and because the way the ballot is set up, I would like to verify that you voted “Yes” indicating that you believe there will be correlation issues if the amendment passes. Voting “No” would indicate that you do not see any correlation issues being caused if the amendment is implanted in the document. If you do believe that correlation issues will be created, please provide an explanation of vote and identify what the correlation issue(s) may be.

If you have any questions, feel free to call.

Kimberly Shea
Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
617-984-7953

From: lffiore@aol.com [mailto:lffiore@aol.com]
Sent: Tuesday, July 17, 2012 7:10 PM
To: Shea, Kimberly
Cc: Walker, Nancy
Subject: Re: NFPA 72 Amendment Ballots

Kim,

Please see the attached ballots.

Lou
Amendment: Accept Comment 72-XX.

Follow-up Amendment: Return Position of the Report in the form of Report 72-XX and Related Comments 72-17A.

With respect to this amendment, do you see any CORRELATION issues that will be caused even if the final amendment is implemented into the document?

[ ] Yes  [ ] No  [x] Absent

Please indicate reasoning "Yes" or "N/A" above.

While the 72-XX is being considered, it is possible that additional 72-XX will be included for the final report. The responsibility of the Technical Steering Committee remains that the requirements within NEMA 75 do not extend the boundaries of the freight movement system.

I recognize that it is still appropriate to today update and discuss system with the show about criticisms of the 72-XX and 72-17A. However, I believe that it is now best to consider the 72-XX in terms of the RDLT and the requirements that are necessary for the system installation. It is also important to address the need to make changes to NEMA 75. This will be discussed further.

Important that the comments made are addressed as soon as possible and the date is Tuesday, July 16, 2012.

Kimberly Shee, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
617-983-7292
617-983-7000
tshee@nfpa.org

Signature: [Signature]
Date: [Date]
NFPA 72
TC BALLOT for Testing and Maintenance of Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-3 and associated FOLLOW-UP AMENDMENT

Amendment: Accept Comment 72-182

Follow-up Amendment: Return a Portion of the Report in the form of Proposal 72-187a and Related Comments 72-179 through 72-182

NOTE: This Association Amendment ("Amendment") is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects ("Regs"). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(e). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, the result is:

(2010 Table 14.4.2.2 Item 14(j), Method)
Water shall be flowed through an inspector's test connection indicating the flow of water equal to that from a single sprinkler of the smallest orifice size installed in the system for wet-pipe systems, or an alarm test bypass connection for dry-pipe, pre-action, or deluge systems in accordance with NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-based Fire Protection Systems.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs., that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☒ Do Not Agree*

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

ROC 72-181 had this correct. The scope of testing should only be to verify the component electrically connects to the fire alarm system such that the switch transmits a signal to the fire alarm system. If an operational test of the flow switch is a desired option, then guidance should be placed in the Annex with a reference to NFPA 25. Existing text is not within the scope of NFPA 72 and no standard should dictate how to conduct a test when that test is governed under another standard. The result of maintaining this requirement is the potential for conducting four water flow tests when only two may be needed, if when testing water flow devices per NFPA 25, the alarm signal is verified at that time.

Signature: /s/ Joshua W. Elvove

Name - Please Print: Joshua W. Elvove

Date: 6/22/2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to via email to kshea@nfpa.org or via fax to 617-984-7070.
Supplemental Attachment 12-8-6-b
Page 6 of 8

Standards Council Supplemental Agenda August 7-9, 2012
Document and Committee Scopes

COMMITTEE SCOPES

Correlating Committee on Signaling Systems for the Protection of Life and Property (SIG-AAC)

Committee Scope: This Committee shall have primary responsibility for documents on the installation, performance, maintenance, testing, and use of signaling components and signaling systems for the protection of life, property and mission continuity.

Committee on Testing and Maintenance of Fire Alarm and Signaling Systems (SIG-TMS)

Committee Scope: This Committee shall have primary responsibility for documents and requirements for the proper inspection, testing, and maintenance of fire alarm and emergency communications systems and associated components, for both new and existing systems.

Committee on Commissioning Fire Protection Systems (CMI-AAA)

Committee Scope: This Committee shall have primary responsibility for documents that address commissioning and integrated system testing activities and tasks for fire protection and life safety systems. This includes the requirements for planning, organization, coordination, responsibility, implementation, and documentation of commissioning and integrated system testing of active and passive systems and features that serve a fire protection or life safety purpose.

DOCUMENT SCOPES

NFPA 72, National Fire Alarm and Signaling Code

Document Scope: 1.1 Scope. 1.1.1 NFPA 72 covers the application, installation, location, performance, inspection, testing, and maintenance of fire alarm systems, supervising station alarm systems, public emergency alarm reporting systems, fire warning equipment and emergency communications systems (ECS), and their components. 1.1.2 The provisions of this chapter apply throughout the Code unless otherwise noted.

Chapter 14 Scope: 14.1 Application. 14.1.1 The inspection, testing, and maintenance of systems, their initiating devices, and notification appliances shall comply with the requirements of this chapter. 14.1.2 The inspection, testing, and maintenance of single and multiple-station smoke and heat alarms and household fire alarm systems shall comply with the requirements of this chapter.

NFPA 3, Recommended Practice for Commissioning and Integrated Testing of Fire Protection and Life Safety Systems
**Document Scope:** This recommended practice provides the recommended procedures, methods, and documentation for commissioning and integrated testing of active and passive fire protection and life safety systems and their interconnections with other building systems.

**NFPA 4, Standard for Integrated Fire Protection and Life Safety System Testing**

**Document Scope:** The standard shall provide the minimum requirements for testing of integrated fire protection and life safety systems where such testing is required by governing laws, codes, regulations, or standards. 1.1.2* This standard shall not provide requirements for testing of individual systems. 1.1.3 The requirements of this standard shall apply to new and existing systems.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (72-5)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Reject an Identifiable Part of Comment 72-169c

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS/HAS NOT achieved the necessary $\frac{3}{4}$ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is $19$ (eligible to vote) $- $ ___ (ballots not returned) $- $ ___ (abstentions) $= ___ \times 0.75 = ____$

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<td>___ Abstainers</td>
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TCC Action: PASS/FAIL

SIG-TMS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary $\frac{2}{3}$ majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 18 $[28$ (eligible to vote) $- 1$ (ballot not returned) $- 0$ (abstentions) $] = 27 \times 0.66 = 17.82$

28 Eligible to Vote
1 Not Returned (Breen)

23 Agree (Van Overmeiren w/comment)
4 Do Not Agree (Elvove, Larrimer, Moore, Schifiliti)
0 Abstain

TC Action: PASS
NFPA 72
TC Ballot for Testing and Maintenance of Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-5

Amendment: Reject an Identifiable part of Comment 72-169c. The identifiable parts are the TCC Actions listed under “Council Action”

☐ Agree

If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under “Council Actions”) on Comment 72-169c which are summarize below:

1) Revise the “method” for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as “Table 14.4.3.2, Item 19” at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-179
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the “Interconnected Systems Supplementary Inspection and Testing” form
   b) Delete 6.6 of the “System Inspection and Testing Form”

The effect of reversing each of these five TCC actions is shown in Attachment A.

☒ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, refer to Attachment B for any previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Text as proposed by SIG-TMS during ROC, which would be in effect if this ballot were passed, would imply that end-to-end testing is part of the scope of NFPA 72 when in fact, it is not. The TCC’s subsequent revisions to ROC 72-169c were needed in order to ensure end-to-end testing was not part of the document scope, and to align the document with the decision made by the standards council. Therefore, we’re better off returning text to that of the previous edition, than adding provisions, even if some are reasonable, that would exceed what the document scope permits. Those “reasonable” provisions, such as describing what end-to-end testing is, the test plan and having the engineer of record document the intent of the design, could be added to the document as a TIA since I don’t believe these issues were contentious.

Signature: _/ Joshua W. Elvove

Name – Please Print: Joshua W. Elvove

Date: 6/22/2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshe@nfpa.org or via fax to 617-984-7070.
NFFA 72
TC Ballot for Testing and Maintenance of Fire Alarm and Signalling Systems
June 2012 ASSOCIATION AMENDMENT 72-5.

Amendment: Reject an Identifiable part of Comment 72-169c. The identifiable parts are the TCC Actions listed under “Council Action”

☐ Agree

If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under “Council Actions”) on Comment 72-169c which are summarized below:

1) Revise the “method” for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as “Table 14.4.3:2; Item 19” at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-197
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the “Interconnected Systems Supplementary Inspection and Testing” form
   b) Delete 6.6 of the “System Inspection and Testing Form”

The effect of reversing each of these five TCC actions is shown in Attachment A.

☐ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, refer to Attachment B for any previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:
End to end testing goes beyond the scope of NFPA 72.

__________________________________________
Signature: [Signature]

Name - Please Print: [Name]

Date: [Date]

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshes@nsha.org or via fax to 617-984-7070.
NFPA 72
TC Ballot for Testing and Maintenance of Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-5

Amendment: Reject an Identifiable part of Comment 72-169c. The identifiable parts are the TCC Actions listed under “Council Action”

☐ Agree

If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under “Council Actions”) on Comment 72-169c which are summarized below:

1) Revise the “method” for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as “Table 14.4.3.2, Item 19” at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-179
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the “Interconnected Systems Supplementary Inspection and Testing” form
   b) Delete 6.6 of the “System Inspection and Testing Form”

The effect of reversing each of these five TCC actions is shown in Attachment A.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, refer to Attachment B for any previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Reversal of the Technical Committee actions will directly conflict with the instructions provided by the Standards Council that the jurisdiction of NFPA 72 is limited to fire alarm system and that testing of interconnected systems is under the jurisdiction of the appropriate code or standard for the interconnected system. Returning to the previous text will result in NFPA 72 specifying the means and frequency of testing for systems and features that are not covered by NFPA 72. It will also continue to create the false impression that these interconnected systems have been “fully and completely” tested when the only test that is typically completed as part of the fire alarm system testing is a test of the fire alarm device.

Signature: _____________________________
Name - Please Print: Jeffrey Moore
Date: 6/21/2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
Amendment: Reject an Identifiable part of Comment 72-169c The identifiable parts are the TCC Actions listed under “Council Action”

☐ Agree If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under “Council Actions”) on Comment 72-169c which are summarize below:
1) Revise the “method” for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as “Table 14.4.3.2, Item 19” at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-179
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the “Interconnected Systems Supplementary Inspection and Testing” form
   b) Delete 6.6 of the “System Inspection and Testing Form”

The effect of reversing each of these five TCC actions is shown in Attachment A.

☐ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, refer to Attachment B for any previous edition text.

Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I agree with the committees original action

Signature: jschifiliti

Name - Please Print: Jimbo Schifiliti

Date: 6-27-2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
NFPA 72
TC Ballot for Testing and Maintenance of Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-5

Amendment: Reject an identifiable part of Comment 72-169c. The identifiable parts are the TCC Actions listed under “Council Action”.

Agree

With Comment (See Attached)

If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under “Council Actions”) on Comment 72-169c which are summarize below:

1) Revise the “method” for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as “Table 14.4.2, Item 19” at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-179
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the "Interconnected Systems Supplementary Inspection and Testing" form
   b) Delete 6.6 of the “System Inspection and Testing Form”

The effect of reversing each of these five TCC actions is shown in Attachment A.

Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, refer to Attachment B for any previous edition text.

Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

______________________________

Signature: [Signature]

Name - Please Print: [Name]

Date: 06/28/2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to lshea@nfpa.org or via fax to 617-894-7070.
NFPA 72 - Association Amendment 72-5

Frank Van Overmeiren Agree with comment

I am in strong support of this amendment. I was and continue to be opposed to the action of the TCC for this issue. Given that this was the direction of the NFPA Standards Council, my self and others on the TC developed code language that complied with the directive. The NFPA code adoption system is a consensus process and the membership has spoken against the Standards Council's directive. The original code language developed by the TC should be adopted until at least the time when NFPA 4 has been developed and adopted as a standard.

Frank Van Overmeiren

06/28/2012
Comment 72-169c Reject an Identifiable Part

TCC Action: The Technical Correlating Committee takes action to address issues of general correlation and issues related to the Standards Council action on agenda item 8-11-32 concerning the Report of the Summit Task Group on Inspection, Testing and Maintenance as follows:

General Correlation. The Technical Correlating Committee make reference to Item 18(c) in Table 14.2.2.2 and advises that the provision for the annual periodic test frequency is shown incorrectly.

The Technical Correlating Committee directs that Item 18(c) be revised to show “N/A” in place of “Annually” and add “Annually” for periodic testing.

Council Action. The Technical Correlating Committee acknowledges the action on Comment 72-169c to revise Item 19 (renumbered to Item 20) for emergency control functions for compliance with the Standards Council Action of September 20, 2011. However, the Technical Correlating Committee advises that this revision does not comply with the Council’s action and does not address other revisions made during the proposal phase that address testing of systems outside the scope of NFPA 72.

For initial, reacceptance, and periodic testing, verify emergency control functions interface device activation.

Where an emergency control function device is disabled or disconnected during initiating device testing, verify that the disabled or disconnected emergency control function device has been properly restored, no less than one test shall be conducted at the end of the testing to verify control function activation.

For periodic testing, a complete end to end test should be done that demonstrates the performance of all the emergency control functions activated by the fire alarm system per the application installation standards and design documents. For reacceptance testing due to a system modification, building reconfiguration, or addition to a building, the above would apply to the affected portions. Testing of the emergency control functions is not required by the jurisdiction of this standard. [ROP-214]

For periodic testing, a complete end to end test should be done that demonstrates the performance of the emergency control functions activated by the fire alarm system per the application installation standards and design documents, but may not be able to be done due to building operations or other restrictions. It is unlikely emergency control function operation would be tested for complex systems during routine periodic fire alarm system testing though in some instances, it may be easier to verify the emergency control function operation than for initiating device testing of the emergency control system. The test plan must clearly document the extent of the testing of the emergency control functions. [ROP-214]

Emergency control function activation is simply initiating the start of the emergency control function. Emergency control function operation is intended to demonstrate the overall performance of the emergency control system. NFPA 3 also includes guidance on test methods for integrated testing. It is important to note that if the appropriate NFPA standard would provide the acceptance criteria for the overall emergency control function operation requirements including performance and test methods while NFPA 72 covers the required performance and testing of the emergency control function device. [ROP-214]

For instance, if an end to end test for a building with an engineered smoke control system is required by some other governing laws, codes, standards, or the authority having jurisdiction, the test protocol would have unique criteria for the smoke control system design and a special inspector would be responsible for the overall operation and performance of the smoke control system in accordance with the appropriate standard (NFPA 92A and NFPA 101) during the testing including measuring pressure differentials and ensuring proper fan and damper operation. Extract from NFPA 101 on smoke control:

9.3.2 Acceptance testing shall be performed by a special inspector in accordance with Section 9.9. [101, 2012]

9.3.3 Acceptance testing shall be performed by a special inspector in accordance with Section 9.9. [101, 2012]

9.3.2 The engineer of record shall clearly identify the intent of the system, the design method used, the appropriateness of the method used, and the required means of inspecting, testing, and maintaining the system. [101, 2012]

9.3.3 Acceptance testing shall be performed by a special inspector in accordance with Section 9.9. [101, 2012]

“9.3.2 The engineer of record shall clearly identify the intent of the system, the design method used, the appropriateness of the method used, and the required means of inspecting, testing, and maintaining the system.”

9.3.3 Acceptance testing shall be performed by a special inspector in accordance with Section 9.9. [101, 2012]

Even though the fire alarm or signaling system initiating device may activate the smoke control system, the actual testing of the dampers and fan operation would be required by the smoke control design and not part of the fire alarm or signaling system acceptance testing. [ROP-214]

Other emergency control operation requirements may be as follows:

For fan shut down and smoke damper operation, the fan and damper operations should be in accordance with NFPA 90A and NFPA 105 respectively and those equipment operations should be verified by those responsible for HVAC systems in combination with the fire alarm system performance. 

NFPA 3 also includes guidance on test methods for integrated testing. For fire door and fire shutter release, it would be expected that the emergency control function operation of the doors/shutters would be verified in accordance with NFPA 80 and NFPA 101 during the test. In some cases, the door manufacturer representative may need to be present to reset the equipment. [ROP-214]

Other emergency control operation requirements may be as follows:

For fan shut down and smoke damper operation, the fan and damper operations should be in accordance with NFPA 90A and NFPA 105 respectively and those equipment operations should be verified by those responsible for HVAC systems in combination with the fire alarm system performance. 

NFPA 3 also includes guidance on test methods for integrated testing. For fire door and fire shutter release, it would be expected that the emergency control function operation of the doors/shutters would be verified in accordance with NFPA 80 and NFPA 101 during the test. In some cases, the door manufacturer representative may need to be present to reset the equipment. [ROP-214]

Other emergency control operation requirements may be as follows:

For fan shut down and smoke damper operation, the fan and damper operations should be in accordance with NFPA 90A and NFPA 105 respectively and those equipment operations should be verified by those responsible for HVAC systems in combination with the fire alarm system performance. 

NFPA 3 also includes guidance on test methods for integrated testing. For fire door and fire shutter release, it would be expected that the emergency control function operation of the doors/shutters would be verified in accordance with NFPA 80 and NFPA 101 during the test. In some cases, the door manufacturer representative may need to be present to reset the equipment. [ROP-214]
Guidance on documenting and handling or faults, failures and corrective action for integrated testing can be found in 7.4.5 of NFPA 3.

3) Reject portions of the material added by Proposal 72-177 as follows: 
   a) In proposed A.14.2.1.2 delete the last sentence of the second paragraph (Complete end to end testing of the integrated systems should then be performed as a final step to ensure that the systems are operating) and add “Refer to A.14.4.2.2, Table 14.4.2.2 Item 20.”
   b) In proposed A.14.2.1.3 delete the last two sentences of the second paragraph (However, the preferred method of testing is to perform an integrated end to end test of the combined systems. NFPA 72 requires that where any interfaced system or function is bypassed or disconnected to permit testing of the fire alarm or signaling system alone, a complete integrated end to end test or some other method of verification should be performed to ensure that the interfaced system or function is placed back in service at the end of testing of the fire alarm or signaling system.) and add “Refer to A.14.4.2.2, Table 14.4.2.2 Item 20.”

4) Revise the committee action on Proposal 72-179 as follows:

14.2.10 Test Plan. [ROP-179]

14.2.10.1 For those systems with emergency control functions, releasing systems, or interfaced equipment, a test plan shall be written to clearly establishing the scope of the testing for the fire alarm or signaling system emergency control functions, releasing systems, or interfaced equipment. [ROP-179]

14.2.10.2 The test plan and results shall be documented with the testing records. [ROP-179]

A.14.2.10 The test plan is intended to clarify exactly what is to be tested and how it is to be tested. Testing of fire alarm and signaling systems is often done in a segmented fashion to accommodate the availability of testing or other personnel, or to minimize the interruption of building operations. Building operations can be affected by testing of the fire alarm or signaling system itself and by the operation of emergency control functions activated by the fire alarm or signaling system. The boundary of the fire alarm or signaling system extends up to and includes the emergency control function interface device. The testing requirements described in NFPA 72 for fire alarm and signaling systems end at the emergency control function interface device. For emergency control functions, the fire alarm system boundary ends at the emergency control function interface device. However, fire alarm system testing often extends beyond the boundary of the fire alarm system and may verify the actual performance of an emergency control function, releasing system or interfaced equipment. The purpose of the test plan is to document what devices were and were not actually tested. [ROP-179]

The testing of emergency control functions, releasing systems, or interfaced equipment is outside the scope of NFPA 72. Requirements for testing other systems are found in other governing laws, codes or standards. Requirements for integrated testing of combined systems also fall under the authority of other governing laws, codes, standards or the authority having jurisdiction. NFPA 3, Recommended Practice for the Commissioning and Integrated Testing of Fire Protection and Life Safety Systems, provides guidance for such testing. NFPA 3 recognizes the importance of the development of an integrated testing plan.
Table 14.4.3.2 Testing [ROP-187b]

<table>
<thead>
<tr>
<th>Device</th>
<th>Initial Acceptance</th>
<th>Periodic Frequency</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All Equipment</td>
<td>X</td>
<td></td>
<td>See Table 14.3.1</td>
</tr>
<tr>
<td>2. Control Equipment and transponder [72-171]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Functions</td>
<td>X</td>
<td>Annually</td>
<td>Verify correct receipt of alarm, supervisory, and trouble signals (inputs); operation of evacuation signals and auxiliary functions (outputs); circuit supervision, including detection of open circuits and ground faults; and power supply supervision for detection of loss of ac power and disconnection of secondary batteries.</td>
</tr>
<tr>
<td>(b) Fuses</td>
<td>X</td>
<td>Annually</td>
<td>Verify rating and supervision.</td>
</tr>
<tr>
<td>(c) Interfaced equipment</td>
<td>X</td>
<td>Annually</td>
<td>Verify integrity of single or multiple circuits providing interface between two or more control units. Test interfaced equipment connections shall be tested by operating or simulating operation of the equipment being supervised. Verify signals required to be transmitted shall be verified at the control unit.</td>
</tr>
<tr>
<td>(d) Lamps and LEDs</td>
<td>X</td>
<td>Annually</td>
<td>Illuminate Lamps and LEDs shall be illuminated.</td>
</tr>
<tr>
<td>(e) Primary (main) power supply</td>
<td>X</td>
<td>Annually</td>
<td>Disconnect and test AAll secondary (standby) power shall be disconnected and tested under maximum load, including all alarm appliances requiring simultaneous operation. Reconnect AAll secondary (standby) power shall be reconnected at end of test. Test for redundant power supplies, each shall be tested separately.</td>
</tr>
</tbody>
</table>

- (f) Transponders | X | Annually [72-171] |

2-3. Fire Alarm Control Unit Trouble Signals

<table>
<thead>
<tr>
<th>Device</th>
<th>Initial Acceptance</th>
<th>Periodic Frequency</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Audible and visual</td>
<td>X</td>
<td>Annually</td>
<td>Verify operation of control unit trouble signals shall be verified; as well as Verify ring-back feature for systems using a trouble-silencing switch that requires resetting.</td>
</tr>
<tr>
<td>(b) Disconnect switches</td>
<td>X</td>
<td>Annually</td>
<td>If control unit has disconnect or isolating switches, verify performance of intended function of each switch. shall be verified and Verify receipt of trouble signal when a supervised function is disconnected shall also be verified.</td>
</tr>
<tr>
<td>(c) Ground-fault monitoring circuit</td>
<td>X</td>
<td>Annually</td>
<td>If the system has a ground detection feature, verify the occurrence of ground-fault indication shall be verified whenever any installation conductor is grounded.</td>
</tr>
</tbody>
</table>
| (d) Transmission of signals to off-premises location | X | Annually | Actuate An initiating device shall be actuated and verify receipt of alarm signal at the off-premises location shall be verified. Create A trouble condition shall be created and verify receipt of a trouble signal at the off-premises location shall be verified. Actuate A supervisory device shall be actuated and verify receipt of a supervisory signal at the off-premises location shall be verified. If a transmission carrier is capable of
operation under a single- or multiple-fault condition, activate an initiating device shall be activated during such fault condition and verify receipt of an alarm signal and a trouble signal at the off-premises location shall be verified, in addition to the alarm signal.

<table>
<thead>
<tr>
<th>1-4. Supervising Station Alarm Systems— Transmission Equipment*</th>
<th>X</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) All equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test shall be performed on all system functions and features in accordance with the equipment manufacturer’s published instructions for correct operation in conformance with the applicable sections of Chapter 26.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Except for DACT, [72-171]X initiates an initiating device shall be actuated, and, other than for DACT, verify receipt of the correct initiating device signal at the supervising station within 90 seconds shall be verified. Upon completion of the test, restore the system shall be restored to its functional operating condition.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If test jacks are used, conduct the first and last tests shall be made without the use of the test jack.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Digital alarm communicator transmitter (DACT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test DACT shall be tested for line seizure capability by initiating a signal while using the primary line for a telephone call. Ensure that the call is interrupted and that the communicator connects to the digital alarm receiver. Verify receipt of the correct signal at the supervising station shall be verified. Verify each transmission attempt is shall be completed within 90 seconds from going off-hook to on-hook.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disconnect the primary line from the DACT shall be disconnected. Verify indication of the DACT trouble signal occurs at the premises shall be verified at the fire alarm control unit within 4 minutes of detection of the fault. Verify receipt of the telephone line trouble signal at the supervising station. Restore the primary phone line, reset the fire alarm control unit and verify that the telephone line fault trouble signal returns to normal. Verify that the supervising station receives the restoral signal from the fire alarm communicator.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disconnect the secondary means of transmission from the DACT shall be disconnected. Verify indication of the DACT trouble signal occurs at the premises shall be verified at the fire alarm control unit within 4 minutes of detection of the fault. Verify receipt of the telephone line trouble signal at the supervising station. Restore the primary phone line, reset the fire alarm control unit and verify that the telephone line fault trouble signal returns to normal. Verify that the supervising station receives the restoral signal from the fire alarm communicator.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Related Proposal 72-187b to Comment 72-169c

Technical Committee on Testing and Maintenance of Fire Alarm and Signaling Systems

Final Action: Accept

(Table 14.4.2.2) Related Proposal 72-187b to Comment 72-169c

TCC Action: The TCC clarifies that Table 14.4.5 is deleted and is incorporated in new Table 14.4.2.2. The TCC also advises that the following items in the committee action need to be clarified or completed:

1. Table 10(e) appears to have a redundant entry with “N/A” in the initial field and “Annually” in the periodic field – compare to the first entry.
2. Table 10(e) - in two places (once for acceptance and once for periodic) the description in the test method uses “initiating device” and “notification appliance” and should read “initiating device circuit” and “notification appliance circuit”.
3. Table 12(d)(3) has “??????” in the test frequency field.
4. Table 12(d)(5) appears to have redundant test methods text.
5. Table 12(i) is missing periodic frequency and “X” for initial acceptance.
6. Section 14.4.5 and A.14.4.5 need to be updated to reflect the deletion of Table 14.4.5.
7. The TCC directs that the committee to reconsider the action on this proposal to clarify or complete the items noted above. This shall be considered as a public comment.

Recommendation: Revise and combine Tables 14.4.2.2 & 14.4.5. See table on pages 72-161 thru 2-173.

Submitter: Technical Committee on Testing and Maintenance of Fire Alarm and Signaling Systems.

Substantiation: The recommendation incorporates the committee actions on Proposals 72-187a (Log #583), 72-190 (Log #237), 72-191 (Log #251), 72-193 (Log #252), 72-196 (Log #253), 72-197 (Log #254), 72-198 (Log #275), 72-200 (Log #255), 72-201 (Log #256), 72-202 (Log #257), 72-203 (Log #276), 72-206 (Log #277), 72-208 (Log #444), 72-210 (Log #439), 72-211 (Log #440), 72-212 (Log #278), 72-214 (Log #274), 72-215 (Log #136), and 72-218 (Log #441), and meets the intent of the recommendations in Proposals 72-187b (Log #CP900), 72-188 (Log #258), 72-189 (Log #273), 72-209 (Log #438), 72-218 (Log #441), and 72-219 (Log #426). In addition revisions to the table format to specify testing frequency for each item have been made to increase clarity. Additional editorial and organizational revisions have been made to enhance usability. Revisions to terminology for correlation with other section of the Code have been made.

Committee Meeting Action: Accept

Number Eligible to Vote: 29

Ballot Results: Affirmative: 27

Ballot Not Returned: 2 Harrod, P., Sheets, R.

Comment on Affirmative:

CARTER, S.: For a few items where initial/reacceptance is required but partial is not required, the label “N/A” should be added for consistency (ex. Item 4 (c.) (d.) (e.) (f.)) For item 12(d)(3) the periodic frequency should be decided to remove the “?????” label. For item 12(5) it appears a requirement is repeated. I suggest that items 17(c) and 19 separate the initial/reacceptance methods from the partial methods to be consistent with the manner in which this is done in 17(a) and (b). For item 22(c)(1) and 22(c)(2) the method incorrectly references 8(a) and 8(b) respectively.

ELVOVE, J.: The proposal provides a much needed overhaul and consolidation of the testing frequency and methods table, but as one would expect with a major revision, it will need some additional cleaning up during ROC. For example, item 4 could use clarifying information that indicates that ECS equipment includes area of refuge two way communication systems (see ROP-183). Under item 10(e), new text from ROP 72-188 & 189 appears twice. Under item 12(c)(3), no test frequency has been provided. Under item 19, a reference to ASME A17.1 needs to be added since not all installation standards are NFPA standards. In this same section, language needs to be revised and clarified to distinguish between emergency control function operation and activation during acceptance, reacceptance and periodic testing, and also be consistent with terminology developed by SIG-PRO in ROP-43.

HURST, JR., H.: The revised wording of Table 14.4.2.2.3(b) is applicable to an onboard DACT. Testing of telephone line seizure and telephone line fault conditions of stand alone DACT will probably not involve the “fire alarm control panel.” Verification of trouble signals and resetting will occur on the DACT and not at the fire alarm control panel.

No test method listed in Table 14.4.2.2.1(f).

Table 14.4.2.2.8 uses the term “manufacturer” in several paragraphs and specifies a “specific manufacturer” in others. In some paragraphs, it is unclear what “specific manufacturer” is implied.
1. Control Equipment
   
   (a) Functions
      X Annually
      At a minimum, control equipment shall be tested to verify correct receipt of alarm, supervisory, and trouble signals (inputs); operation of evacuation signals and auxiliary functions (outputs); circuit supervision, including detection of open circuits and ground faults; and power supply supervision for detection of loss of ac power and disconnection of secondary batteries.

   (b) Fuses
      X Annually
      The Verify rating and supervision shall be verified.

   (c) Interfaced equipment
      X Annually
      Verify integrity of single or multiple circuits providing interface between two or more control units shall be verified. Interfaced equipment connections shall be tested by operating or simulating operation of the equipment being supervised. Signals required to be transmitted shall be verified at the control unit.

   (d) Lamps and LEDs
      X Annually
      Lamps and LEDs shall be illuminated.

   (e) Primary (main) power supply
      X Annually
      All secondary (standby) power shall be disconnected and tested under maximum load, including all alarm appliances requiring simultaneous operation. All secondary (standby) power shall be reconnected at end of test. For redundant power supplies, each shall be tested separately.

   (f) Transponders
      X Annually

2. Fire Alarm Control Unit Trouble Signals
   
   (a) Audible and visual
      X Annually
      Operation of control unit trouble signals shall be verified, as well as ring-back feature for systems using a trouble-silencing switch that requires resetting.

   (b) Disconnect switches
      X Annually
      If control unit has disconnect or isolating switches, performance of intended function of each switch shall be verified and receipt of trouble signal when a supervised function is disconnected shall also be verified.

   (c) Ground-fault monitoring circuit
      X Annually
      If the system has a ground detection feature, the occurrence of ground-fault indication shall be verified whenever any installation conductor is grounded.

   (d) Transmission of signals to off-premises location
      X Annually
      An initiating device shall be actuated and receipt of alarm signal at the off-premises location shall be verified. A trouble condition shall be created and receipt of a trouble signal at the off-premises location shall be verified. A supervisory device shall be actuated and receipt of a supervisory signal at the off-premises location shall be verified. If a transmission carrier is capable of operation under a single- or multiple-fault condition, an initiating device shall be activated during such fault condition and receipt of a trouble signal at the off-premises location shall be verified, in addition to the alarm signal.

3. Supervising Station Alarm Systems—Transmission Equipment
   
   (a) All equipment
      X Annually
      Test shall be performed on all system functions and features in accordance with the equipment manufacturer’s published instructions for correct operation in conformance with the applicable sections of Chapter 26. Initiating device shall be actuated. Other than for DACT, receipt of the correct initiating device signal at the supervising station within 90 seconds shall be verified. Upon completion of the test, the system shall be restored to its functional operating condition. If test jacks are used, the first and last tests shall be made without the use of the test jack.

   (b) Digital alarm communicator transmitter (DACT)
      X Annually
      Connection of the DACT to two separate means of transmission shall be ensured.

      Exception: DACTs that are connected to a telephone line (number) that is also supervised for adverse conditions by a derived local channel, DACT shall be tested for line seizure capability by initiating a signal while using the primary line for a telephone call. Ensure that the call is interrupted and that the communicator connects to the digital alarm receiver. Receipt of the correct signal at the supervising station shall be verified. Completion of the each transmission attempt shall be completed within 90 seconds from going off-hook to on-hook shall be verified. The primary line from the DACT shall be disconnected. Indication of the DACT trouble signal at the premises shall be verified, as well as transmission to the supervising station at the fire alarm control unit within 4 minutes of detection of the fault. Verify receipt of the telephone line trouble signal at the supervising station. Restore the primary phone line, reset the fire alarm control panel and verify that the
Move on to motion sequence 72-5. Microphone 5.

SHANE CLARY: Thank you, Mr. Chairman.
Shane M. Clary, Bay Alarm Company. And I move, my motion sequence 72-5, which is to reject identifiable part in Comment 72-169C, the identifiable part are the TCC actions listed under quote, council action, close quote.

PRESIDING OFFICER BELL: The motion on the floor is to reject an identifiable part of Comment 72-169C as noted in the motions committee report. Is there a second?

Thank you, proceed.

SHANE CLARY: Thank you, Mr. Chair.

It's kind of a unique motion I have here.

What this motion is attempting to do is to revert back to the language that the technical committee on testing and inspection and maintenance did prior to the TCC who were following the direction of the standards council in relation to integrated testing for a new document, NFPA 4, the standard for the testing of integrated fire protection systems.

However, NFPA 4 does not yet exist. It is still in a draft mode. The technical committee for this document still has three more meetings to go through, another preliminary meeting. And later on this year a first draft meeting. Next year a second draft meeting. And it will not be up for adoption until NFPA gathers the next time on the shores of Lake Mead here in Las Vegas.

All states right now adopt NFPA 72 which has right now some direction for the testing of integrated systems. No one yet has adopted NFPA 4. Again, it does exist.

And so I think that in deference to the standards council that the directive was a little premature. Let's wait until NFPA 4 is published and then at that time get the directive out there to segregate between what NFPA 72 does and NFPA 4 does. We still need to get states to adopt NFPA 4. So at that, I will step away from the mike.

PRESIDING OFFICER BELL: Thank you.
Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: The technical correlating committee is opposed to this motion. This CAM seeks to overturn changes put in place to comply with the standards council directive limiting the testing scope of NFPA 72.

The language resulting from the TCC action includes additional annex language addressing integrating testing and comments on a new requirement to establish a test plan that clearly addresses the scope of testing and what is tested and what is not being tested.

The language resulting from the TCC action also addresses a test method for emergency control function interface devices to assure that interface device connections are properly restored at the end of testing.

Further, the language resulting from the TCC action includes significant explanatory annex material discussing the importance of assuring the functionality of interconnected systems while making it clear that NFPA 72 does not require the testing of these interconnected systems, nor does it define the performance of those integrated systems.

The resulting explanatory annex material makes references to other codes and standards responsible for these interconnected systems as well as reference to the new NFPA 3 recommended practice for commissioning and integrated testing of fire protection and life safety systems.

It should be noted this CAM will reintroduce required testing of interconnected systems outside the scope of NFPA 72 with little or no guidance as to the extent of the testing or recognition of the jurisdiction of the other responsible codes and standards.

Acceptance of this CAM would undo the refinements put in place by the TCC action, including the clarified annex guidance, as well as the use of new standard terminology developed by one of the other technical committees, protected premises, and that is now used throughout the Chapter 21 on emergency control function interfaces.
If this CAM was accepted, the resulting language would be contrary to the standards council action of September 20, 2011, limiting the scope of testing requirements addressed in NFPA 72 to those addressed -- to those systems addressed in NFPA 72. For this reason, the technical correlating committee is opposed to the motion. And I also ask that Jeff Moore, chair of the inspection, testing and maintenance committee, be permitted to comment on this.

PRESIDING OFFICER BELL: Microphone 6.

JEFF MOORE: Jeff Moore, Hughes Associates.

I'm the chair of the inspection, testing and maintenance technical committee speaking basically just to explain the position of the technical committee.

The ITM technical committee made a number of changes during this cycle to comply with the standards council direction to not include inspection, testing and maintenance requirements for systems that were outside the scope of NFPA 72.

Comment 72-169C was a technical correlating committee comment that kind of expanded on our work to further clarify the intent of the standards council direction again to not include inspection, testing and maintenance requirements for interconnected systems which were outside the scope of NFPA 72.

But there was significant annex material added both by the technical committee and the correlating committee to explain that while these interconnected systems are not under the jurisdiction of NFPA 72, the best methods for testing are still an integrated testing approach.

So this is strictly to comply with the technical correlating committee -- excuse me -- the standards council instructions to not mess with the systems that are not under NFPA 72.

Just as a bit of history the whole thing arose with the standards council and a summit between a number of technical committees affected by inspection testing and maintenance over the issue of testing smoke dampers.

The way the code was written, if you had a
smoke damper that was actuated by a smoke detector, as
most smoke dampers are, you had to test the smoke damper
on the same frequency as the fire alarm code said you
had to test smoke detectors. Whereas, the standard
covering the smoke damper would allow a testing
frequency of two to five years depending on the
application. Thank you.

PRESIDING OFFICER BELL: Thank you,
gentlemen.
Further discussion. Microphone 5.
BOB BAIRD: Bob Baird, Independent
Electrical Contractors Association, chairman of the
electrical section. At our meeting on Tuesday, the
electrical section --
PRESIDING OFFICER BELL: You're speaking for
the motion?
BOB BAIRD: Speaking for the motion.
PRESIDING OFFICER BELL: Thank you.
BOB BAIRD: On Tuesday the electrical
section discussed this matter. Mr. Clary explained his
position. The electrical section voted to support this
CAM.
PRESIDING OFFICER BELL: Thank you.
Microphone 3.
TOM HAMMERBERG: Tom Hammerberg representing
the Automatic Fire Alarm Association.
While we're not opposed to the suggestions
by the standards council to get rid of the testing of
equipment that is outside of the scope of 72, we feel
that it's very premature.
This leaves a major loophole out there for
the next code cycle. NFPA 4 is not going to be
available for a couple of years. Even the reference to
NFPA 3, which is wills available now, is simply a
recommended practice. It's not going to be a standard.
And we feel that from the safety point, it's
much better off to leave it in 72 for one more cycle. I
have no problem with taking it out next cycle after we
had something to replace it, but there's nothing to
replace it right now.
To me it makes absolutely no sense to take
these requirements out at this particular point because
it's going to do is reduce life safety. Thank you very much.

PRESIDING OFFICER BELL: Thank you.

Microphone 6.

FRANK VAN OVERMEIREN: Frank Van Overmeiren, FP&C Consultants, member of the NFPA 72 technical committee and now the long term historian of the group speaking against the motion.

While I personally am not in favor of the direction that we have chosen, and as Mr. Hammerberg just mentioned, we're going to end up with a gap in the sequence of the code and the adoption of NFPA 4 when it does become available, I've long term believed this is a consensus process and we need to work towards acceptance of the direction we're given by the standards council and what we receive as instructions by the technical correlating committee.

We will have an integrated testing approach. The technical committee has adopted a test plan to try and address those gaps in that time point in time. Both Mr. Schifiliti and I are on the NFPA 4 technical committee to try and ensure we'll end up with the right configuration for performance when that new document is adopted.

So I think while we do have a gap in the time, following direction of the standards council at this point in time is the reasonable way to go.

PRESIDING OFFICER BELL: Thank you.

Any further discussion?

Mr. Schifiliti, any additional comments?

COMMITTEE CHAIR SCHIFILITI: The only comment I have is that technical correlating committee feels that the other standards do have test requirements in place. So the only gap is having it in one location, which eventually NFPA 4 will have.

So I would seek that you ask that you support the technical committee and the technical correlating committee by voting against this motion.

PRESIDING OFFICER BELL: Thank you.

With that, we'll move to the vote on the motion which is to reject an identifiable part of Comment 72-169C as noted in the motions committee.
21 report.
22 Please record your vote now, one if you're
23 in favor of the motion and two if you're opposed to the
24 motion.
25 Voting closes in five seconds. Voting is
1 closed. Motion passes.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE:  July 31, 2012

AMENDMENT (72-5)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Reject an Identifiable Part of Comment 72-169c

TCC PRELIMINARY FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment IS NOT achieving the necessary 3/4 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 10 [19 (eligible to vote) – 4 (ballots not returned) – 2 (abstentions) = 13 × 0.75 = 9.75]

19 Eligible to Vote
4 Not Returned (Aiken, Fannin, Klein, Wenzel)

4 Yes, Correlation Issues (Black, Boyer, Norton, Schifiliti w/comment)
9 No, Correlation Issues
2 Abstain (Fiore, Larrimer)

TCC Action: FAILING

SIG-TMS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 18 [28 (eligible to vote) – 1 (ballot not returned) – 0 (abstentions) = 27 × 0.66 = 17.82]

28 Eligible to Vote
1 Not Returned (Breen)

23 Agree (Van Overmeiren w/comment)
4 Do Not Agree (Elvove, Larrimer, Moore, Schifiliti)
0 Abstain

TC Action: PASS
Amendment: Reject and Identifiable Part of Comment 72-169c. The identifiable Parts are the Correlating Committee Actions listed under "Council Action"

With respect to this amendment, do you see any CORRELATION issues that will be caused as a result of this amendment being implemented into the document:

- [ ] Yes*
- [ ] No
- [ ] Abstain*

*Please give reasons for voting "Yes" or "Abstain":

ICC spent a lot of time complying with Standards Council and to overturn ICC action would cause problems between 72 and other standards.

Please return as soon as possible, but no later than Wednesday, July 18, 2012 to:

Kimberly Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
617-984-7953
617-984-7070
kshea@nfpa.org

Signature: [Signature]
Name - Please Print: [Aar Blake]
Date: [24/12/12]

Note: Please remember that the return of ballots and attendance at Committee Meetings is required in accordance with Section 3.1.3.1 of the Regulations Governing Committee Projects.
Amendment: Reject and Identifiable Part of Comment 72-169c. The identifiable Parts are the Correlating Committee Actions listed under “Council Action”

With respect to this amendment, do you see any CORRELATION issues that will be caused as a result of this amendment being implemented into the document:

- [ ] Yes*
- [ ] No
- [ ] Abstain*

*Please give reasons for voting “Yes” or “Abstain”:

Please see page 2 attached

Please return as soon as possible, but no later than Wednesday, July 18, 2012 to:

Kimberly Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
617-984-7953
617-984-7070
kshea@nfpa.org

Signature: [Signature]

Name - Please Print: J. Robert Boyer

Date: July 30, 2012

Note: Please remember that the return of ballots and attendance at Committee Meetings is required in accordance with Section 3.1.3.1 of the Regulations Governing Committee Projects.
The SIG-TMS TC did a good job removing requirements for testing of equipment and systems that are outside the scope of NFPA 72—as directed by the Standards Council. A few points were missed and were addressed by the TCC. This floor amendment, if validated, undoes those final clean-ups.

This floor amendment seeks to overturn changes put in place by the TCC Action on Comment 72-169c to comply with the Standards Council directive limiting the testing scope of NFPA 72. The language resulting from the TCC Action includes additional annex language addressing integrated system testing and comments on a new requirement to establish a test plan that clearly addresses the scope of testing and what is not being tested. The language resulting from the TCC Action also addresses a test method for emergency control function interface devices to assure that interface device connections are properly restored at the end of testing. Further, the language resulting from the TCC Action includes significant explanatory annex material discussing the importance of assuring the functionality of interconnected systems while making it clear that NFPA 72 does not require testing of these interconnected systems. The resulting explanatory annex material makes reference to other codes and standards responsible for these systems as well as reference to new NFPA 3, Recommended Practice for Commissioning and Integrated Testing of Fire Protection and Life Safety Systems. It should be noted that this floor amendment, if passed, will reintroduce required testing of interconnected systems outside the scope of NFPA 72 with little or no guidance as to the extent of testing or recognition of the jurisdiction of other responsible codes and standards. Acceptance of the floor amendment would undo the refinements put in place by TCC Action including clarified annex guidance, as well as the use of new standard terminology developed by the Technical Committee on Protected Premises and used throughout Ch. 21, Emergency Control Function Interfaces. If the floor amendment is accepted, the resulting language would be contrary the Standards Council action of September 20, 2011 limiting the scope of testing requirements addressed in NFPA 72 to those systems addressed in NFPA 72.
Amendment: Reject and Identifiable Part of Comment 72-169c. The identifiable Parts are the Correlating Committee Actions listed under “Council Action”

With respect to this amendment, do you see any CORRELATION issues that will be caused as a result of this amendment being implemented into the document:

☑ Yes*  ☐ No  ☐ Abstain*

*Please give reasons for voting “Yes” or “Abstain”:

There is a correlation issue between The Action Taken Right The Text Yes.

Please return as soon as possible, but no later than Wednesday, July 18, 2012 to:

Kimberly Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
617-984-7953
617-984-7070
kshea@nfpa.org

Signature: [Signature]

Name - Please Print: [Name]

Date: 7-28-12

Note: Please remember that the return of ballots and attendance at Committee Meetings is required in accordance with Section 3.1.3.1 of the Regulations Governing Committee Projects.
Amendment: Reject and Identifiable Part of Comment 72-169c. The identifiable Parts are the Correlating Committee Actions listed under “Council Action”

With respect to this amendment, do you see any CORRELATION issues that will be caused as a result of this amendment being implemented into the document:

☐ Yes* 
☐ No 
☐ Abstain*

*Please give reasons for voting “Yes” or “Abstain”:

The SIG-TMS TC did a good job removing requirements for testing of equipment and systems that are outside the scope of NFPA 72 – as directed by the Standards Council. A few points were missed and were addressed by the TCC. This floor amendment, if validated, undoes those final clean-ups.

This floor amendment seeks to overturn changes put in place by the TCC Action on Comment 72-169c to comply with the Standards Council directive limiting the testing scope of NFPA 72. The language resulting from the TCC Action includes additional annex language addressing integrated system testing and comments on a new requirement to establish a test plan that clearly addresses the scope of testing and what is not being tested. The language resulting from the TCC Action also addresses a test method for emergency control function interface devices to assure that interface device connections are properly restored at the end of testing. Further, the language resulting from the TCC Action includes significant explanatory annex material discussing the importance of assuring the functionality of interconnected systems while making it clear that NFPA 72 does not require testing of these interconnected systems. The resulting explanatory annex material makes reference to other codes and standards responsible for these systems as well as reference to new NFPA 3, Recommended Practice for Commissioning and Integrated Testing of Fire Protection and Life Safety Systems. It should be noted that this floor amendment, if passed, will reintroduce required testing of interconnected systems outside the scope of NFPA 72 with little or no guidance as to the extent of testing or recognition of the jurisdiction of other responsible codes and standards. Acceptance of the floor amendment would undo the refinements put in place by TCC Action including clarified annex guidance, as well as the use of new standard terminology developed by the Technical Committee on Protected Premises and used throughout Ch. 21, Emergency Control Function Interfaces. If the floor amendment is accepted, the resulting language would be contrary the Standards Council action of September 20, 2011 limiting the scope of testing requirements addressed in NFPA 72 to those systems addressed in NFPA 72. For these reasons the TCC is opposed to the motion.

Please return as soon as possible, but no later than Wednesday, July 18, 2012 to:

Kimberly Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
617-984-7953
617-984-7070
kshea@nfpa.org

Signature: 
Name - Please Print: Robert Schiffliti

Date: 2012 07 17

Note: Please remember that the return of ballots and attendance at Committee Meetings is required in accordance with Section 3.1.3.1 of the Regulations Governing Committee Projects.
After further review and careful consideration, I wish to maintain my initial ballot position. I believe that to reliably ascertain that the workflow switch operates as intended, water must flow to actuate the switch, not just jumping out terminals or manually actuating the switch arm. I have seen the switch arm go out of adjustment by trying to manually actuate it... it could introduce a problem that would go undetected. A simulator could solve the problem, but that is not required. I have also seen an apparatus that can circulate water to affect actuation of the paddle without actually flowing water through a test port. Until another standard addresses this issue, I believe there is no conflict or correlation problem.

Let me know if you have any questions.

Bruce

Bruce Fraser
8 Temple Street
Milford, MA 01757-1511
508-314-6177 cell
bruce@fraser-fps.com

From: Richardson, Lee [mailto:lrichardson@NFPA.org]
Sent: Monday, July 23, 2012 5:25 PM
To: Richardson, Lee
Cc: Shea, Kimberly; Walker, Nancy
Subject: NFPA 72 Ballot Extension

Dear TCC Members:

The deadline for circulation of Association Amendment Ballot 72-5 has been extended to July 31, 2012 since there appears to be some question about the responsibilities of the TCC with respect to correlation. Enclosed are copies of the original and circulation ballots for reference.

Section 3.4.3 of NFPA Regulations Governing Committee Projects (Regs) outlines the responsibilities of the TCC and includes the responsibility of resolving conflicts between documents as noted in the Regs at Section 3.4.3(a). This question of correlation goes beyond issues of correlation within NFPA 72 and includes any correlation issues created with other documents.

The TCC is responsible to assure that the requirements in NFPA 72 do not go beyond the document scope and that Council direction is followed. The direction of the NFPA Standards Council has indicated that requirements for testing systems and equipments that fall under the scope of other codes and standards is clearly outside the scope of NFPA 72.

Please be sure you have fully considered the ballot question for Amendment 72-5, especially with respect to the complete correlation responsibilities of the TCC. If you wish to change your ballot please do so by July 31, 2012.
Kim

I know today is the cutoff. I have been rather tied up of late and continue to be so. I am sorry to say that I have not properly followed this. So please enter my votes on all ballots as abstaining. My reason is that I am not available to properly follow the issues and cannot cast a meaningful vote on any of these ballots.

Thank you,
Lou
Sent from my Verizon Wireless BlackBerry

---

From: "Shea, Kimberly" <kshea@NFPA.org>
Date: Wed, 18 Jul 2012 08:59:16 -0400
To: Ltfiore@aol.com <Ltfiore@aol.com>
Subject: RE: NFPA 72 Amendment Ballots

Lou,

I have received your ballots and because the way the ballot is set up, I would like to verify that you voted "Yes" indicating that you believe there will be correlation issues if the amendment passes. Voting "No" would indicate that you do not see any correlation issues being caused if the amendment is implanted in the document. If you do believe that correlation issues will be created, please provide an explanation of vote and identify what the correlation issue(s) may be.

If you have any questions, feel free to call.

Kimberly Shea
Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
617-984-7953

---

From: Ltfiore@aol.com
Sent: Tuesday, July 17, 2012 7:10 PM
To: Shea, Kimberly
Cc: Walker, Nancy
Subject: Re: NFPA 72 Amendment Ballots

Kim,

Please see the attached ballots.

Lou
Amendment: Reject and Identifiable Part of Comment 72-169c. The identifiable Parts are the Correlating Committee Actions listed under “Council Action”

With respect to this amendment, do you see any CORRELATION issues that will be caused as a result of this amendment being implemented into the document:

☐ Yes* ☐ No ☒ Abstain*

*Please give reasons for voting “Yes” or “Abstain”:

While there may be no correlation issue within NFPA 72, I am abstaining from this vote because I believe that it is the responsibility of the Technical Correlating Committee to ensure that the requirements within NFPA 72 do not go outside the boundaries of the fire alarm signaling system. Requiring testing to include the operation of non-fire alarm systems outside the scope of NFPA 72.

Please return as soon as possible, but no later than Wednesday, July 18, 2012 to:

Kimberly Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
617-984-7955
617-984-7070
kshea@nfpa.org

Signature: ______________

Name - Please Print: Peter A. Larimer

Date: 7-17-12

Note: Please remember that the return of ballots and attendance at Committee Meetings is required in accordance with Section 3.1.3.1 of the Regulations Governing Committee Projects.
Amendment: Reject an Identifiable part of Comment 72-169c. The identifiable parts are the TCC Actions listed under “Council Action”

☐ Agree

If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under “Council Actions”) on Comment 72-169c which are summarize below:

1) Revise the “method” for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as “Table 14.4.3.2, Item 19” at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-179
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the “Interconnected Systems Supplementary Inspection and Testing” form
   b) Delete 6.6 of the “System Inspection and Testing Form”

The effect of reversing each of these five TCC actions is shown in Attachment A.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, refer to Attachment B for any previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Text as proposed by SIG-TMS during ROC, which would be in effect if this ballot were passed, would imply that end-to-end testing is part of the scope of NFPA 72 when in fact, it is not. The TCC’s subsequent revisions to ROC 72-169c were needed in order to ensure end-to-end testing was not part of the document scope, and to align the document with the decision made by the standards council. Therefore, we’re better off returning text to that of the previous edition, than adding provisions, even if some are reasonable, that would exceed what the document scope permits. Those “reasonable” provisions, such as describing what end-to-end testing is, the test plan and having the engineer of record document the intent of the design, could be added to the document as a TIA since I don’t believe these issues were contentious.

Signature: /s/ Joshua W. Elvove

Name - Please Print: Joshua W. Elvove

Date: 6/22/2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
Amendment: Reject an Identifiable part of Comment 72-169c. The identifiable parts are the TCC Actions listed under "Council Action".

☐ Agree If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under "Council Actions") on Comment 72-169c which are summarize below:
1) Revise the "method" for Item 30 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as "Table 14.4.3:2, Item 19" at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-179
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the "Interconnected Systems Supplementary Inspection and Testing" form
   b) Delete 6.6 of the "System Inspection and Testing Form"

The effect of reversing each of these five TCC actions is shown in Attachment A.

☐ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, refer to Attachment B for any previous edition text.

☐ Abstain* *Please give reasons for voting "Do Not Agree" or "Abstain":

End to end testing goes beyond the scope of NFPA 72.

Signature: [Signature]
Name - Please Print: [Name]
Date: [Date]

Ballots are due no later than Thursday, June 28, 2012 and may be returned to lshes@nfpa.org or via fax to 617-984-7070.
Amendment: Reject an Identifiable part of Comment 72-169c. The identifiable parts are the TCC Actions listed under “Council Action”

☐ Agree

If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under “Council Actions”) on Comment 72-169c which are summarized below:

1) Revise the “method” for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as “Table 14.4.3.2, Item 19” at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-179
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the “Interconnected Systems Supplementary Inspection and Testing” form.
   b) Delete 6.6 of the “System Inspection and Testing Form”

The effect of reversing each of these five TCC actions is shown in Attachment A.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text; if any. In this case, refer to Attachment B for any previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Reversal of the Technical Committee actions will directly conflict with the instructions provided by the Standards Council that the jurisdiction of NFPA 72 is limited to fire alarm system and that testing of interconnected systems is under the jurisdiction of the appropriate code or standard for the interconnected system. Returning to the previous text will result in NFPA 72 specifying the means and frequency of testing for systems and features that are not covered by NFPA 72. It will also continue to create the false impression that these interconnected systems have been “fully and completely” tested when the only test that is typically completed as part of the fire alarm system testing is a test of the fire alarm device.

Signature: [Signature]

Name - Please Print: Jeffrey Moore

Date: 6/21/2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
Amendment: **Reject an Identifiable part of Comment 72-169c**  
The identifiable parts are the TCC Actions listed under “Council Action”

☐ Agree  
If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under “Council Actions”) on Comment 72-169c which are summarize below:

1) Revise the “method” for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as “Table 14.4.3.2, Item 19” at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-179
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the “Interconnected Systems Supplementary Inspection and Testing” form
   b) Delete 6.6 of the “System Inspection and Testing Form”

The effect of reversing each of these five TCC actions is shown in Attachment A.

☐ Do Not Agree  
If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, refer to Attachment B for any previous edition text.

Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I agree with the committees original action

______________________________
Signature: Jimbo Schifiliti

Name - Please Print: Jimbo Schifiliti

Date: 6-27-2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
NFPA 72
TC Ballot for Testing and Maintenance of Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-5

Amendment: Reject an Identifiable part of Comment 72-169c. The identifiable parts are the TCC Actions listed under “Council Action”.

[ ] Agree (See Attached) If you agree with this amendment, the recommendation will reverse the five actions made by the Technical Correlating Committee as stated in the TCC Note (under “Council Actions”) on Comment 72-169c which are summarize below:
1) Revise the “method” for Item 20 (Emergency Control Functions) of Table 14.4.2.2 in the committee action on Comment 72-169c
2) Revise the Annex material identified as “Table 14.4.3.2, Item 19” at the end of the committee action on Comment 72-169c
3) Reject portions of the material added by Proposal 72-175
4) Revise the committee action on Proposal 72-179
5) Modify a portion of the material added by Proposal 72-229a and Comment 72-200b
   a) Delete the “Interconnected Systems Supplementary Inspection and Testing” form
   b) Delete 6.6 of the “System Inspection and Testing Form”

The effect of reversing each of these five TCC actions is shown in Attachment A.

[ ] Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, refer to Attachment B for any previous edition text.

[ ] Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

______________________________________________________________

Signature: 

Name - Please Print: 

Date: 06/28/2012

Ballots are due no later than Thursday, June 28, 2012 and may be returned to kshea@nfpa.org or via fax to 617-984-7070.
NFPA 72 - Association Amendment 72-5

Frank Van Overmeiren Agree with Comment

I am in strong support of this amendment.
I was and continue to be opposed to the action of the TCC for this issue.
Given that this was the direction of the NFPA Standards Council, my self and others on the TC developed code language that complied with the directive. The NFPA code adoption system is a consensus process and the membership has spoken against the Standards Council's directive. The original code language developed by the TC should be adopted until at least the time when NFPA 4 has been developed and adopted as a standard.

Frank Van Overmeiren
6/21/2012
Maynard, Mary

Subject: FW: CAM 72-5, 2012 ATM

.From: "Firecode13@aol.com" <Firecode13@aol.com>
Date: July 12, 2012 7:06:19 AM EDT
To: "Cronin, Amy" <acronin@nfpa.org>
Cc: "Klaus, Matthew" <MKlaus@nfpa.org>
Subject: CAM 72-5, 2012 ATM

Ms. Amy Cronin
Secretary
NFPA, Standards Council

Date: June 12, 2012

Subject: CAM 72-5, Certified Amending Motion, 2012 Association Technical Meeting

Dear Amy

Pursuant to section 1.6.1 of the Regulations Governing Committee Projects, which states, "Anyone can appeal to the Council concerning procedural or substantive matters related to the development, content, or issuance of any Document of the Association...", I would like to appeal the action taken on Certified Amending Motion(CAM) 72-5. I understand that appeals typically must be made within 20 days of the Association Technical Meeting, however I was not sure that an appeal would be necessary pending the results of the technical committee balloting. I now understand, after the 20 day limit, that CAM 72-5 passed ballot despite the explicit direction of Standards Council that the language in question be removed from the standard during the Report on Comments (ROC) phase.

I would like to appeal the acceptance of CAM 72-5 as the modifications made by the CAM are contrary to the directive made by the standards council in Standards Council Action 11-8-32. The Standards Council has approved a scope for NFPA 4, The Standard for Integrated Fire Protection and Life Safety System Testing, which includes requirements for integrated system testing of fire protection equipment. Standards Council Action 11-8-32 outlined the boundaries of the scope of NFPA 72 and NFPA 4 which both technical committees had been using the basis for the development of the respective standards until the recent balloting of CAM 72-5. By allowing CAM 72-5 to move forward, both NFPA 72 and NFPA 4 would both contain requirements addressing integrated system testing which not only contradicts the Standards Council directive but also creates confusion for users of NFPA 72 and NFPA 4. This information belongs in NFPA 4, and, as the Standards Council directed, this information should be sent to the NFPA 4 TC for review and potential inclusion in NFPA 4.

Should you require additional information please let me know.

Thank you.

Maurice
Chair, NFPA 4

Maurice Pilette, PE, CET-IV, CFPS
Mechanical Designs Ltd.
TO: Technical Committees on Signaling Systems

FROM: Linda Fuller

DATE: September 20, 2011

SUBJECT: Report of the Summit Task Group on Inspection Testing and Maintenance

I am transmitting to you herewith the following action of the Standards Council (August 8-11, 2011):

The Council heard a report from the Inspection, Testing and Maintenance Summit Task Group. This Task Group was made up of various NFPA Committee members that participated in the Inspection, Testing and Maintenance Summit held in May of 2010. The Report that was received by the Council requested the Council review and consider the following three areas:

1. A request for the Council to revise the scope of the NFPA 72 Technical Committee on Testing and Maintenance of Fire Alarm Systems (SIG-TMS) to include the authority to require limited testing of other interconnected fire protection or life safety systems in accordance with the requirements of standard(s) that have primary jurisdiction of these other systems in order to ensure the integrity of the systems interface.

2. A request for the Council to allow the Technical Committee on Testing and Maintenance of Fire Alarm Systems (SIG-TMS) to temporarily revise their scope to include the authority to require complete end-to-end testing of other interconnected fire protection or life safety systems, at the initial acceptance test, in accordance with the requirements of standard(s) that have primary jurisdiction of these other systems. This temporary scope shall be in force only until such time as a standard is available addressing mandatory requirements for complete testing of interconnected systems.

3. A request for the Council to issue a general directive for all committees that are involved with systems or components that interconnect with fire alarm and signaling systems to coordinate requirements for both limited and complete end-to-end integrated testing of interconnected systems. This coordination needs to specifically identify and address the interfaces between systems and provide a degree of consistency and overlap between standards sufficient to ensure that system interfaces are operational and remain intact.
In reviewing this Report, the Council acknowledges that integrated systems and maintenance is an important issue and should be addressed. After review of all the material before them, the Council voted not to take the actions requested in the Report. The Council determined that NFPA 72 Committees (TCs) should stay focused on their individual systems relating to fire alarms and signaling systems. The Council has approved the development of NFPA 4, Standard for Integrated Testing of Fire Protection Systems, which is intended to cover all testing of interconnected systems, including interface testing, integrated testing and end-to-end testing. The Council directs the NFPA 72 Committees to address issues of integrated testing related to its systems by providing input on the content of NFPA 4 through the submission of proposals and comments and through TC member representation that is anticipated will be appointed to the NFPA 4 Committee. During the Proposals stage of the A2012 cycle, the NFPA 72 TC’s accepted proposals addressing testing of interconnected systems, including testing at the interface with other systems. These revisions should be rejected by the NFPA 72 TCs during the Comment stage, as they address concepts outside of their scope. This proposed language, along with all of the supporting material, should then be submitted to the NFPA 4 TC, as appropriate, as proposals (public input) during the A2014 cycle.

The Council understands and appreciates the efforts that are being made to consider and address integrated testing. The Council believes, however, that the best and most effective approach to developing requirements on integrated testing is to work, through the process that is now beginning, to develop the new NFPA 4 as a dedicated document on the subject. To that end, the NFPA 4 Committee will require cooperation and input from the related systems Committees and the Council encourages all relevant Committees to participate to the fullest.

SIG-AAC, SIG-CAR, SIG-ECS, SIG-FUN, SIG-HOU, SIG-IDS, SIG-NAS, SIGPRO, SIG-PRS, SIG-SSS, SIG-TMS, CMF-AAA

11-8-32
Thank you Mary,

For what it is worth, as a member of the committee and as I was in attendance at the voting session, the reason that this issue stayed in the code was that since NFPA-4 is not developed in its entirety, we believed that it is necessary to keep this item in for one more cycle as the components connected to fire alarm systems as auxiliary functions are not verified by any entity currently, in many cases, including the functionality of smoke control systems and HVAC shutdown. I believe the committee would ask the individual submitting the requested appeal to wait for another cycle of NFPA-72 or reverse it with a TIA when NFPA -4 is finalized and accepted.

Jon Kapis
Operations Manager

Rolf Jensen & Associates, Inc.
19125 North Creek Parkway - Suite 120
Bothell, WA 98011 USA
Office: +1 425-329-2638
Cell: +1 925-766-0642
Fax: +1 425-483-7088
www.rjainc.com

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ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (72-6)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Reject an Identifiable Part of Comment 72-251

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS/HAS NOT achieved the necessary \( \frac{3}{4} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is \( 19 - \_ - \_ \times 0.75 = \_ \)

<table>
<thead>
<tr>
<th>Eligible to Vote</th>
<th>Not Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>___</td>
<td>___</td>
</tr>
</tbody>
</table>

___ Approve
___ Do Not Approve
___ Abstain

TCC Action: PASS/FAIL

SIG-PRO FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary \( \frac{2}{3} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is \( 28 - 6 - 1 = 21 \times 0.66 = 13.86 \)

28 Eligible to Vote
6 Not Returned (Kern, Kuhta, LeBlanc, Olenick, Shah, Waller)

21 Agree (Hopple w/comment)
0 Do Not Agree
1 Abstain (Burkhart)

TC Action: PASS
MEMORANDUM
(AMENDMENT)

TO: Technical Committee on Supervising Station Fire Alarm and Signaling Systems
FROM: Lee F. Richardson, Staff Liaison
DATE: July 10, 2012
SUBJECT: Final Results of Association Amendment Letter Ballot on Amendment 72-6 to the Proposed 2013 edition of NFPA 72, National Fire Alarm and Signaling Code

Amendment: Reject an Identifiable Part of Comment 72-251

According to 4.7 in the NFPA Regulations Governing Committee Projects, the final ballot results of the Technical Committee show this amendment HAS achieved the 2/3 affirmative vote needed to recommend approval of the Association Action.

28 Members Eligible to Vote
6 Ballots Not Returned (J. Kern, T. Kuhta, D. LeBlanc, J. Olenick, Y. Shah, B. Waller)

21 Agree (w/comment W. Hopple)
0 Do Not Agree
1 Abstentions (D. Burkhart)

There are two criteria necessary to pass ballot [(1) affirmative 2/3 vote and (2) simple majority] in order to recommend approval of the Association Action.

(1) The number of affirmative votes needed for the report to be published is 14.
   (28 eligible to vote –6 not returned - 1 abstentions = 21 × 0.66 = 13.86= 14)

(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:
   [28 eligible ÷ 2 = 14 + 1 = (15)]

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.
Standards Council Supplemental Agenda August 7-9, 2012

NFPA 72
TC BALLOT for Protected Premises Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-6

Amendment: Reject an Identifiable Part of Comment 72-251.

☐ Agree

If you agree with this amendment, the recommendation will be to revise 21.3.3 to read as follows:

21.3.3 Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.9 shall be used to recall elevators for fire fighters’ service.

Exception: A water flow switch shall be permitted to initiate elevator recall upon activation of a sprinkler installed at the bottom of the elevator hoistway (the elevator pit), provided the water flow switch and pit sprinkler are installed on a separately valved sprinkler line dedicated solely for protecting the elevator pit, and the water flow switch is provided without time-delay capacity.

[Exception unchanged]

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text as follows:

21.3.3 Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.7, and initiating devices used to initiate shutdown of elevator power in accordance with Section 21.4 shall be used to recall elevators for fire fighters’ service.

☒ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I do not agree with the reason for rejecting the identifiable part since fire officials should be enforcers not legislators. However, the revised language is better than reverting to the previous edition.

Signature: __________________________

Name - Please Print: David J. Burkhart

Date: June 21, 2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 – fax
617-984-7953 - phone
NFPA 72
TC BALLOT for Protected Premises Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-6

Amendment: Reject an Identifiable Part of Comment 72-251.

☐ Agree

If you agree with this amendment, the recommendation will be to revise 21.3.3 to read as follows:

21.3.3 Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.9 shall be used to recall elevators for fire fighters' service.

Exception: A water flow switch shall be permitted to initiate elevator recall upon activation of a sprinkler installed at the bottom of the elevator hoistway (the elevator pit), provided the water flow switch and pit sprinkler are installed on a separately valved sprinkler line dedicated solely for protecting the elevator pit, and the water flow switch is provided without time-delay capability.

[Exception unchanged]

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text as follows:

21.3.3 Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.7, and initiating devices used to initiate shutdown of elevator power in accordance with Section 21.4 shall be used to recall elevators for fire fighters' service.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

Kim - The last word in the exception should be capability.

Signature: WILLIAM HOPPLE

Name - Please Print: WILLIAM HOPPLE

Date: 06/25/2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 - fax
617-984-7953 - phone
Comment 72-251 Reject an Identifiable Part

72-251 Log #214 SIG-PRO

Final Action: Accept in Principle

(21.3.3)

TCC Action: The Technical Correlating Committee makes reference to the changes made in the committee action.

The Technical Correlating Committee advises that the modification at the beginning of 21.3.3, “Where required by ...” is not clear as to the intended subject (where what is required). Note that ASME A.17.1/CSA B44 does not specify the type of detection required.

With reference to the added Exception, the Technical Correlating Committee also advises that it may not be obvious to code users that the “pit” is part of the elevator hoistway. To provide clarity the Technical Correlating Committee directs the following actions:

1) Revise 21.3.3 (as modified by Proposal 72-279) as follows:

“21.3.3 Where other governing laws, codes, standards, or other parts of this Code require recall of elevators for firefighters’ service by fire alarm initiating devices, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.7, shall be used to recall elevators for firefighters’ service.”

2) Revise the proposed Exception as follows:

“Exception: A water flow switch shall be permitted to initiate elevator recall upon activation of a sprinkler installed at the bottom of the elevator hoistway (the elevator pit), provided the waterflow switch and pit sprinkler are installed on a separately valved sprinkler line dedicated solely for protecting the elevator pit, and the waterflow switch is provided without time-delay capability.”

Submitter: Joshua Elvove, U.S. General Services Administration

Comment on Proposal No: 72-279

Recommendation: Revise so 21.3.3 reads as follows:

21.3.3 Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.7.

Exception, a water flow switch is permitted to initiate elevator recall upon activation of a sprinkler installed in the pit, provided the waterflow switch and pit sprinkler are installed on a separately valved sprinkler line dedicated solely for protecting the elevator pit.

Substantiation: The action taken during ROP eliminated the option of using a waterflow switch to initiate elevator recall. Though waterflow switches are (rightfully) not permitted to initiate recall where sprinklers are installed at the top of the shaft, there’s no reason to prohibit using waterflow switches to initiate elevator recall where sprinklers are installed in the pit, since there’s no need to shunt trip power to the elevator (there’s no risk of water affecting the elevator brakes or controls when a pit sprinkler activates). This change is needed to correlate with the change made by ROP-281 which removed the requirement for a detector in the pit.

Committee Meeting Action: Accept in Principle

Revise the text resulting from the recommendation on Proposal 72-279 as follows:

21.3.3 Where required by other governing laws, codes, or standards, or by any other part of this code, the authority having jurisdiction only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.7 shall be used to recall elevators for firefighters’ service.

Exception: A water flow switch shall be permitted to initiate elevator recall upon activation of a sprinkler installed in the pit, provided the waterflow switch and pit sprinkler are installed on a separately valved sprinkler line dedicated solely for protecting the elevator pit, and the waterflow switch is provided without time-delay capability.

Committee Statement: The change to the exception was made in order to prevent undue delay in recalling the elevator. Additional minor changes were made for consistency with The Manual of Style (MOS). The technical committee understands that 21.3.3 remains unchanged without time-delay capability.

Number Eligible to Vote: 29

Ballot Results: Affirmative: 26

Ballot Not Returned: 3 Kuhta, T., MacGregor, F., Waller, B.
Next motion is sequence number 72-6.

Microphone 5.

BRUCE FRASER: I'm Bruce Fraser, Fraser Fire Protection, and I move to reject an identifiable part of Comment 72-251.

PRESIDING OFFICER BELL: The motion on the floor is to reject an identifiable part of Comment 72-251 as noted in the motions committee report and I heard a second.

Please proceed.

BRUCE FRASER: This should be a fairly quick one and a no brainer, but the identifiable part is the TCC action which modified the TC's action on the main paragraph of 21.3.3.

And in an effort to maintain consistency throughout NFPA 72, the technical committees were instructed to use the phrase, where other governing laws, code, standards or other parts of this code require, et cetera, et cetera, and replace the term where required. So universal changes were made in that regard. In attempting to use this terminology in 21.3.3 there was an unintended consequence that occurred and effectively it changed the intent of the paragraph. I can get into it.

Effectively elevator recall can only now be initiated by devices in elevator lobbies, machine rooms and hoistways and other devices would not be permitted to initiate elevator recall.

For years it's been in the code to allow other devices to the jurisdiction requires it. And we inadvertently took that out unfortunately. The intent of 21.3.3 has always been to permit other devices.

Now, if this motion is successful, it would restore the original intent as shown on the salmon colored sheet, Page 32 in the right-hand column. So I would recommend highly that the motion on the floor be supported.

PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti.

COMMITTEE CHAIR SCHIFILITI: The technical correlating committee agrees with the submitter and is
in favor of the motion because it restores an important provision that allows the authority having jurisdiction to permit or require the use of initiating devices for elevator recall different from the default of those that are specified in the code provisions.

This provision was inadvertently removed but is important in order to maintain the flexibility that is currently needed by enforcing authorities.

The motion retains the language accepted by the technical committee in Proposal 72-279 which was their main intent at adjusting that particular section.

And it also includes the exception that was added by Comment 72-251 which was in the comment phase some additional work they wanted to do on that section.

So the TCC asks that you support this CAM.

And I also ask that Burton Bunker, chair of the protected premises committee be permitted to address the committee’s position.

PRESIDING OFFICER BELL: Thank you.

Microphone 2.

BURTON BUNKER: Thank you, Mr. Chairman.

Burton Bunker, U.S. Department of State. I’m the chairman of the protected premises signaling committee.

The intent of the committee, as both Mr. Schifiliti and Mr. Fraser have stated, was to create consistency within the document on the terminology referring to other laws, codes or standards.

It’s always been our position on this committee in the past to remit other initiating devices to cause recall. Therefore, this was an unintended consequence. Thank you.

PRESIDING OFFICER BELL: Thank you, gentleman.

Further discussion. Microphone 5.

ROBERT BAIRD: Robert Baird, Independent Electrical Contractors Association, chairman of the electrical section. The electrical section supports this action.

PRESIDING OFFICER BELL: Thank you.

Any further discussion? Seeing none we'll move to the vote, which is to reject an identifiable part of the Comment 72-251 as noted in the motions
committee reports.
Please vote now, one if you're in favor of the motion, two if you're opposed to the motion. Voting closes in five seconds. Voting is closed. Motion passes.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 24, 2012

AMENDMENT (72-6)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Reject an Identifiable Part of Comment 72-251

TCC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment has achieved the necessary 3/4 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 10 \[19 \text{ (eligible to vote)} - 5 \text{ (ballots not returned)} - 1 \text{ (abstention)} = 13 \times 0.75 = 9.75\]

<table>
<thead>
<tr>
<th>Eligible to Vote</th>
<th>19</th>
</tr>
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<tr>
<td>Not Returned</td>
<td>5</td>
</tr>
<tr>
<td>Aiken, Black, Fannin, Klein, Wenzel</td>
<td></td>
</tr>
</tbody>
</table>

| Yes, Correlation Issues | 0 |
| No, Correlation Issues  | 13 |
| Abstain (Fiore)         | 1 |

TCC Action: PASS

SIG-PRO FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment has achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 14 \[28 \text{ (eligible to vote)} - 6 \text{ (ballots not returned)} - 1 \text{ (abstention)} = 21 \times 0.66 = 13.86\]

<table>
<thead>
<tr>
<th>Eligible to Vote</th>
<th>28</th>
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<tr>
<td>Not Returned</td>
<td>6</td>
</tr>
<tr>
<td>Kern, Kuhta, LeBlanc, Olenick, Shah, Waller</td>
<td></td>
</tr>
</tbody>
</table>

| Agree            | 21 |
| No, Correlation Issues | 0 |
| Abstain (Fiore)   | 1  |

TC Action: PASS
Kim

I know today is the cutoff. I have been rather tied up of late and continue to be so. I am sorry to say that I have not properly followed this. So please enter my votes on all ballots as abstaining. My reason is that I am not available to properly follow the issues and cannot cast a meaningful vote on any of these ballots.

Thank you,
Lou
Sent from my Verizon Wireless BlackBerry

From: "Shea, Kimberly" <kshea@NFPA.org>
Date: Wed, 18 Jul 2012 08:59:16 -0400
To: Ltfiore@aol.com<br>Ltfiore@aol.com>
Subject: RE: NFPA 72 Amendment Ballots

Lou,

I have received your ballots and because the way the ballot is set up, I would like to verify that you voted “Yes” indicating that you believe there will be correlation issues if the amendment passes. Voting “No” would indicate that you do not see any correlation issues being caused if the amendment is implanted in the document. If you do believe that correlation issues will be created, please provide an explanation of vote and identify what the correlation issue(s) may be.

If you have any questions, feel free to call.

Kimberly Shea
Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
617-984-7953

From: Ltfiore@aol.com [mailto:Ltfiore@aol.com]
Sent: Tuesday, July 17, 2012 7:10 PM
To: Shea, Kimberly
Cc: Walker, Nancy
Subject: Re: NFPA 72 Amendment Ballots

Kim,

Please see the attached ballots.

Lou
Supplemental Attachment 12-8-6-d
Page 3 of 4

NFPA 72
TC BALLOT for Protected Premises Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-6

Amendment: Reject an Identifiable Part of Comment 72-251.

☐ Agree

If you agree with this amendment, the recommendation will be to revise 21.3.3 to read as follows:

21.3.3 Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.9 shall be used to recall elevators for fire fighters’ service.

Exception: A waterflow switch shall be permitted to initiate elevator recall upon activation of a sprinkler installed at the bottom of the elevator hoistway (the elevator pit), provided the waterflow switch and pit sprinkler are installed on a separately valved sprinkler line dedicated solely for protecting the elevator pit, and the waterflow switch is provided without time-delay capacity.

[Exception unchanged]

☐ Do Not Agree

If you do not agree with this amendment, the recommendation is to return to previous edition text as follows:

21.3.3 Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.7, and initiating devices used to initiate shutdown of elevator power in accordance with Section 21.4 shall be used to recall elevators for fire fighters’ service.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I do not agree with the reason for rejecting the identifiable part since fire officials should be enforcers not legislators. However, the revised language is better than reverting to the previous edition.

Signature: __________________________

Name – Please Print: David J. Burkhart

Date: June 21, 2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 – fax
617-984-7953 - phone
NFPA 72
TC BALLOT for Protected Premises Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-6

Amendment: Reject an Identifiable Part of Comment 72-251.

- Agree
  If you agree with this amendment, the recommendation will be to revise 21.3.3 to read as follows:

  21.3.3 Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.9 shall be used to recall elevators for fire fighters' service.

  Exception: A water flow switch shall be permitted to initiate elevator recall upon activation of a sprinkler installed at the bottom of the elevator hoistway (the elevator pit), provided the water flow switch and pit sprinkler are installed on a separately valved sprinkler line dedicated solely for protecting the elevator pit, and the water flow switch is provided without time-delay capability. [Exception unchanged]

- Do Not Agree*
  If you do not agree with this amendment, the recommendation is to return to previous edition text as follows:

  21.3.3 Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and elevator machine room smoke detectors, or other automatic fire detection as permitted by 21.3.7, and initiating devices used to initiate shutdown of elevator power in accordance with Section 21.4 shall be used to recall elevators for fire fighters' service.

- Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

**Kim - The last word in the exception should be capability.**

Signature: WILLIAM HOPPLE

Name - Please Print: WILLIAM HOPPLE

Date: 06/25/2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617- 984-7110 – fax
617-984-7953 – phone
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE:  July 10, 2012

AMENDMENT (72-11)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Reject an Identifiable Part of Comment 72-352

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS/HAS NOT achieved the necessary 3/4 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is

\[
\text{Eligible to Vote} - \text{Not Returned} - \text{Abstentions} = \text{Total} \times 0.75 = \text{Total}
\]

____ Eligible to Vote
____ Not Returned

___ Approve
___ Do Not Approve
___ Abstain

TCC Action: PASS/FAIL

SIG-SSS FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 18

\[
\text{Eligible to Vote} - \text{Not Returned} - \text{Abstentions} = \text{Total} \times 0.66 = \text{Total}
\]

26 Eligible to Vote
0 Not Returned

23  Agree
  3  Do Not Agree (Black, Blanken, Olsen)
  0  Abstain

TC Action: PASS
NFPA 72
TC Ballot Supervising Station Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-11

Amendment: Reject an Identifiable Part of Comment 72-352. The Rejected Identifiable Part is "and every 24 hours thereafter until restored."

☐ Agree

If you agree with this amendment, the recommendation will modify subsection 26.2.3.2* as follows:

26.2.3.2* Effective January 1, 2014, any signal received by the supervising station that has not restored to normal condition within 24 hours of initial receipt, and every 24 hours thereafter until restored, shall be redisplayed to an operator as a nonrestored signal and shall be reported to the subscriber.

Exception: This provision shall not apply to scheduled impairments.

A.26.2.3.2 Scheduled impairments include interruptions caused by construction or building damage. In addition natural disasters can result in long term system impairments that are not intended to require 24-hour reminders.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, there was no previous edition text, therefore, Section 26.2.3.2 and A.26.2.3.2 are deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The requirement as proposed before the TCR action requires notification to the subscriber every twenty-four hours of a non-restored condition. This was fully discussed at the TC meetings, and it is important so that the subscriber knows of an on-going problem with the fire alarm system. It is not intended, as some of the floor discussion insinuated, that this notification be by phone. All the requirement says is “reported to the subscriber.” In addition, again as the floor discussion insinuated, this requirement DOES NOT apply to scheduled impairments; therefore, when the system is down for some known reason (such as remodeling), daily notification would not be required. I am voting as not agreeing with the floor action since I believe that by eliminating the “every twenty-four hours thereafter” clause we weaken the code.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Signature: ____________________________

Name - Please Print: Art Black

Date: 18 June 2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 – fax
617-984-7953 – phone

July 31, 2012
Standards Council Supplemental Agenda August 7-9, 2012
Page 464 of 2025
NFPA-72
TC Ballot Supervising Station Fire Alarm and Signaling Systems
June 2012 ASSOCIATION AMENDMENT 72-11

Amendment: Reject an Identifiable Part of Comment 72-352. The Rejected Identifiable Part is "and every 24 hours thereafter until restored."

☐ Agree

If you agree with this amendment, the recommendation will modify subsection 26.2.3.2.* as follows:

26.2.3.2* Effective January 1, 2014, any signal received by the supervising station that has not restored to normal condition within 24 hours of initial receipt and every-24 hours thereafter until restored, shall be redisplayed to an operator as a non-restored signal and shall be reported to the subscriber.

Exception: This provision shall not apply to scheduled impairments.
A.26.2.3.2 Scheduled impairments include interruptions caused by construction or building damage. In addition, natural disasters can result in long term system impairments that are not intended to require 24-hour reminders.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, there was no previous edition text, therefore, Section 26.2.3.2 and A.26.2.3.2 are deleted.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

The section is intended to address problem systems, but as written it will apply to all signals. Problem systems are already required to retransmit non-restored trouble signals to the supervising station every 24 hours. These "reminders" will unnecessarily duplicate those transmitted signals, while increasing the burden on supervising station resources dealing with non-life threatening conditions. If intended to protect against systems that don't retransmit their trouble signals, then it should be on an opt-in basis for use only with those systems.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Signature: 

Name - Please Print: 

Date: 

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shen, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169

kshey@nfpa.org
617-984-7110 - fax
617-984-7958 - phone
Amendment: Reject an Identifiable Part of Comment 72-152. TheRejected Identifiable Part is “and every 24 hours thereafter until restored.”

☐ Agree

If you agree with this amendment, the recommendation will modify subsection 26.2.2.3 as follows:

26.2.3.2* Effective January 1, 2014, any signal received by the supervising station that has not restored to normal condition within 24 hours of initial receipt, and every 24 hours thereafter until restored, shall be redisplayed to an operator as a non-restored signal and shall be reported to the subscriber.

Exception: This provision shall not apply to scheduled impairments.

A.26.2.3.2 Scheduled impairments include interruptions caused by construction or building damage. In addition, natural disasters can result in long term system impairments that are not intended to require 24-hour reminders.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case there was no previous edition text, therefore, Section 26.2.3.2 and A.26.3.3.2 are deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The action before the TCR resulted in a vote of the narrowest of margins to accept the proponent’s request to remove an identifiable part of 26.2.3.2 which would have strengthened the code by constantly reminding the subscriber of supervising service alarm system that their alarm system was not in full service. In making a negative TCR ROC vote (the only one) the proponent explained that these signals are “non-life threatening” and notifying the subscriber of these non-restored signals is of no benefit and a detriment to the supervising station. The presence of these signals could represent closed sprinkler valves, fire pump issues, loss of A/C power or any one of several other conditions which are “life threatening” situations. The subscriber should be constantly reminded that his system is not in full service even if the supervising station has to provide the extra effort of a daily reminder (subject to the permitted exception). Simply contacting the owner once (or even a second time in writing/alternate method) does not keep the problem in front of the subscriber and has historically resulted in systems being out of service for long periods of time before the status of the system is noticed during the annual inspection or following a fire in the building.

____________________________________________________________________

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Signature: [Signature]
Name - Please Print: [Name]

July 31, 2012
Standards Council Supplemental Agenda August 7-9, 2012
Page 466 of 2025
The committee rejects 26.2.3.2. The concept proposed in 26.2.3.1 is accepted but there is no need to include a specific compliance date. Refer to the committee action on Proposal 72-465 (Log #344).

26.2.3.2 is rejected because it adds unnecessary repetitive dispatch by the supervising station.

**Number Eligible to Vote:** 26  
**Ballot Results:** Affirmative: 25  
**Ballot Not Returned:** 1 Colby, S.

---

**Related Proposal 72-465 to Proposal 72-466**

**Recommendation:** Add new 26.2.3.2 to read as follows:

26.2.3.2 Effective January 1, 2014 Any signal received by the supervising station that has not restored to normal condition within 24 hours shall be flagged and shall result in the responsible parties being contacted and informed of the discrepancy.

**Committee Meeting Action:** Accept

Add new 26.2.3.2 and A.26.2.3.2 to read as follows:

26.2.3.2 Effective January 1, 2014 Any signal received by the supervising station that has not restored to normal condition within 24 hours of initial receipt, and every 24 hours thereafter until restored, shall be redisplayed to an operator as a non-restored signal flagged and shall be reported to the subscriber result in the responsible parties being contacted and informed of the discrepancy.

**Exception.** This provision shall not apply to scheduled impairments. A 26.2.3.2 Scheduled impairments include interusions caused by construction or building damage. In addition natural disasters can result in long term system impairments that are not intended to require 24-hour reminders.

**Committee Statement:**

The revised text more precisely prescribed the intended requirement.

**Number Eligible to Vote:** 27  
**Ballot Results:** Affirmative: 25 Negative: 1  
**Ballot Not Returned:** 1 Colby, S.

---

**Explanation of Negative:**

MUCCI, A.: Modify the TC comments that were accepted in principle. The requirement does not consider the burden placed on the supervising station where resources will be used for an undetermined period of time to report a non-life threatening situation to the subscriber. The repeated notifications could continue for days and weeks with no apparent benefit to the subscriber, but at a detriment to the resources of a supervising station. A limit must be placed on the subsequent notifications with a number that does not distract the supervising station from other events, but places the burden on the subscriber to take action. A more reasonable approach is one notification via telephone call within 24 hours of the initial receipt, followed with a notification by an alternate method such as a letter or e-mail 24 hours after the first notification for the non-restored condition.

Using the Committee revised text as an example:

Effective January 1, 2014, any signal received by the supervising station that has not restored to normal condition within 24 hours of the initial receipt shall be redisplayed to an operator as a non-restored signal and shall be reported to the subscriber. If the signal has not restored to normal within 24 hours after it was reported to the subscriber, it shall be redisplayed to an operator as a non-restored signal and shall be reported to the subscriber using an alternate method of communication such as in writing or by e-mail.

---

**Backup Proposal 72-466**

72-466 Log #538 SIG-SSS (26.2.3 (New))  **Final Action:** Accept in Principle in Part

**Submitter:** Robert P. Schifiliti, R. P. Schifiliti Associates, Inc.

**Recommendation:** Add new Section 26.2.3 to read as follows:

26.2.3 Signal transmitters to a supervising station shall send restoral signals for conditions that have returned to normal.

26.2.3.1 Effective January 1, 2013 all signaling systems transmitting to a supervising station shall send restoral signals for conditions that have returned to normal.

26.2.3.2 Effective January 1, 2014 Any signal received by the supervising station that has not restored to normal within 24 hours shall be reprocessed as a new signal.

**Substantiation:** Signals at a supervising station should be required to “resound” just as they must at a control unit. See 10.12.8.3. Reprocessing a signal within the supervising station system protects against the situation where a resound at the protected premises does not transmit to the supervising station. The two different effective dates allow time for software and operating procedure revisions.

**Committee Meeting Action:** Accept in Principle in Part

**Committee Statement:** The committee accepts in principle the concept introduced in 26.2.3.1.

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**Related Proposals 72-460, 72-461, and 72-462 to Proposal 72-465**

72-460 Log #211 SIG-SSS (26.1.2 (New))  **Final Action:** Accept in Principle

**Submitter:** Jack Parow, International Association of Fire Chiefs (IAFC) / Rep. FLSS of the IAFC and the CSAA

**Recommendation:** Add new text to read as follows:

26.1.2 Signals transmitted to a supervising station shall be by point ID.

**Substantiation:** A number of proposals have been submitted to the NFPA 72® project for this cycle to assist in decreasing the number of unwanted or nuisance alarms. A key component of these proposals is the allowance of the supervising station to verify the alarm prior to the notification of emergency forces.

In order to assist in the alarm verification process, all new installation should have signals that are transmitted to the supervising station as individual points. The majority of fire alarm systems that are being installed today are addressable and all control units that transmit signals have the ability to transmit their events via Ademco Contact ID® or other addressable formats. A similar proposal has sent to SIG-FUN regarding the use of Point ID for alarm annunciation.

The reduction of unwanted or nuisance alarms are a central point of the International Association of Fire Chiefs (IAFC) position statement on Eliminating Unwanted and Nuisance Fire Alarm Activations. A copy of this paper may be found at http://www.iafc.org/associations/4685/files/IAFCposition_EliminatingUnwantedandNuisanceFireAlarmActivations.pdf

**Committee Meeting Action:** Accept in Principle

Add new 26.2.1 to read as follow:

26.2.1 Signal Content. Where required by the enforcing authority, governing laws, codes or standards, signals transmitted to a supervising station shall be addressable device or zone identification.

Also see Proposal 72-462 (Log #348) Committee Statement.

**Committee Statement:** The committee action text meets the submitter’s intent for more detailed transmission of signals and maintains flexibility for continued allowance of conventional systems. The term “addressable device” is defined in the Code and meets the intent of the submitter. The placement of this text in 26.2.1 allows for these provisions to apply to all types of supervising station alarm systems.

**Number Eligible to Vote:** 26  
**Ballot Results:** Affirmative: 25  
**Ballot Not Returned:** 1 Colby, S.
Add the following new text to read as follows: 26.1.4 IT equipment listed to ANSI / UL 60950 and used for computer-aided alarm and supervisory signal processing installed and operated within a controlled environment conforming to ANSI / UL1981 Second Edition, Central-Station Automation Systems, need not comply with 10.14.1.

**Substantiation:** Considering today’s IT equipment, building “hardware” receivers whose only purpose is to receive signals and be able to operate in an environment described in 10.14.1 has become antiquated and unnecessary.

The potential demise of DACT and the growth of other communication methods based on Internet Protocol (IP) are driving the need to use IT equipment in the way intended to be used with these modern methods.

Considering a situation that could quickly become critical is the future of PSTN (POTS) networks and the potential that POTS providers will no longer be required to maintain them. This could occur during the time of this or next NFPA 72 cycles. This will drive the demand for other communication technologies that in turn will require capabilities for handling increasing numbers of connections and volumes of data that can only be achieved with the use of current IT computer equipment.

The concept of IT “automation” equipment being housed in a facility that meets the environmental requirements of UL 1981 & 827 and “listed for this purpose” (see 10.13.1), does not need to meet the rigors of 10.14.1, and has been in place in UL1981 since 2003. This proposal extends that to “software” receivers using software and hardware within the same environmental conditions listed for the purpose just as “automation” is. Manufacturers have introduced software receiver products into the market that have been listed under the ANSI/UL 1076 Standard for Proprietary Burglar Alarm Systems, and have been recognized by UL Standard Technical Panels to soon be listed Under ANSI/UL 827 Standard for Central-Station Alarm Services, ANSI/UL 1610 Central Station Burglar Alarm Units, and ANSI/UL 1981 Central-Station Automation Systems for use with UL Central Station Burglary Service. Allowing UL 60950 listed computer equipment running software receiver will permit alarm monitoring companies to provide Central, Remote, and Auxiliary Station Fire Alarm service while utilizing current communication technologies in an efficient way that if applied as proposed in 26.1.4 above will be compliant to NFPA72. It is anticipated that once this changed is accepted, ANSI/UL-864 will be modified to complement this change also.

**Committee Meeting Action:** Accept in Principle

Add new 26.2.5 to read as follows: 26.2.5 Supervising Station Signal Processing Equipment. Signal processing equipment located at the supervising station, listed to ANSI / UL 60950, used for computer-aided alarm and supervisory signal processing shall not be required to comply with 10.14.1 provided it is installed and operated within a controlled environment conforming to ANSI / UL1981 Second Edition, Central-Station Automation Systems.

(Also see Proposal 72-462 (Log #348) Committee Statement)

**Committee Statement:** Revisions are made to clarify the requirement and to comply with the Manual of Style. The requirement was relocated to a more appropriate location.

**Number Eligible to Vote:** 26

**Ballot Results:** Affirmative: 25

**Ballot Not Returned:** 1 Colby, S.

**Comment on Affirmative:**

BOYER, J.: This relaxes the temperature, voltage and humidity requirements for the receiving equipment which I agree with, however there is no reference definition for a controlled environment defined in UL 1981. I would recommend that the current voltage requirement stand as is 120VAC +10/-15%, the minimum temperature requirements be reduced to a range of 0 to +40°C, and the minimum humidity requirement reduced to 80%.

PAPIER, I.: Add the words “and equipment redundancy” to the 3rd line of 26.2.5 between the words “controlled environment” and “conforming to ANSI.
Next motion sequence is 72-11.

6 ANTHONY MUCCI: Anthony Mucci, ADT Security Services, member of the supervising station technical committee.

7 I make a motion to reject an identifiable part of Comment 72-352.

8 PRESIDING OFFICER BELL: The motion on the floor is to an identifiable part of Comment 72-352 as noted in the motions committee report. Is there a second? I hear a second.

9 Please proceed.

10 ANTHONY MUCCI: As written, effective January 1, 2014 any signal received by the supervising station that has not restored to normal within 24 hours of initial receipt and every 24 hours thereafter until restored, shall be redisplayed to an operator as a non-restored signal and shall be reported to the subscriber.

11 The requirement does not consider the burden placed on supervising station. The resources will be used for undetermined period of time to report a non-life threatening situation to the subscriber.

12 Repeated notifications could continue for days and weeks with no apparent benefit to the subscriber, but to detriment to the resources of the supervising station.

13 The building could be out of service without a known subscriber.

14 A limit must be placed on the subsequent notifications with the number that does not distract the supervising station from other events but places the burden on the subscriber to take action. An open ended requirement for this with situation is not appropriate.

15 A more reasonable approach would be one telephone call notification within 24 hours of initial receipt followed by notification of an alternate method such as a letter or e-mail.

16 The code is a minimum standard. So it tell us that we need to notify the subscriber, but it shouldn’t do so where we have to do it every 24 hours thereafter.

17 I urge you to support in favor of the motion. Thank you.
PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: The correlating committee has no comment on this and as the original preparer of the motion or proposal I have no comment and defer to the committee chair.

PRESIDING OFFICER BELL: Microphone 2.

WARREN OLSON: Good afternoon. Warren Olson, Fire Safety Consultants and chairman of supervising station alarm systems. The committee voted 25 affirmative to one negative to accept in principal the comments that came to us. And just clarify some wording, our intent entity was to have the recontacting of the subscriber every 24 hours if signalling conditions were still present, alarm trouble or supervisory. We did make it rather, I don't want to use the word vague, but that's what it is, we didn't specify the method in which to notify the subscriber, so we did leave that open. But we felt it was important to constantly bring to the attention of the subscriber that his alarm system was not in full service.

PRESIDING OFFICER BELL: Thank you, gentlemen.

Any further discussion on this motion?

Microphone 3.

LOUIS FIORE: Speaking in favor of the motion, this is Lou Fiore, L.T. Fiore, Inc. I just want to say that the Central Station Alarm Association is in support of this motion.

PRESIDING OFFICER BELL: Thank you.

Any further discussion? Seeing no one at the microphone, we'll move to the vote on the motion which is to reject an identifiable part of Comment 72-352 as noted in the motions committee report. Please vote now, one if you're in favor of the motion and two if you're against. Voting closes in five seconds. Voting is now closed. Motion passes.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 24, 2012

AMENDMENT (72-11)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Reject an Identifiable Part of Comment 72-352

TCC FINAL Ballot Results
According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary \( \frac{3}{4} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is \( 10 \) \[ \left( 19 \text{ (eligible to vote)} - 5 \text{ (ballots not returned)} - 1 \text{ (abstention)} \right) = 13 \times 0.75 = 9.75 \] 19 Eligible to Vote
5 Not Returned (Aiken, Black, Fannin, Klein, Wenzel)

1 Yes, Correlation Issues (Mundy w/comment)
12 No, Correlation Issues
1 Abstain (Fiore)

TCC Action: PASS

SIG-SSS FINAL Ballot Results
According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary \( \frac{2}{3} \) majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is \( 18 \) \[ \left( 26 \text{ (eligible to vote)} - 0 \text{ (ballots not returned)} - 0 \text{ (abstentions)} \right) = 26 \times 0.66 = 17.16 \] 26 Eligible to Vote
0 Not Returned

23 Agree
3 Do Not Agree (Black, Blanken, Olsen)
0 Abstain

TC Action: PASS
Amendment: Reject an Identifiable Part of Comment 72-352. The Rejected Identifiable Part is “and every 24 hours thereafter until restored.”

With respect to this amendment, do you see any CORRELATION issues that will be caused as a result of this amendment being implemented into the document:

☐ Yes* ☐ No ☐ Abstain*

*Please give reasons for voting “Yes” or “Abstain”:

Currently 10.12.8.3 in NFPA 72, 2010 edition requires reporting of trouble every twenty four hours and each subsequent twenty four hours until the condition is corrected. New requirements alter this requirement and create conflict.

________________________________________________________________________

________________________________________________________________________

Please return as soon as possible, but no later than Wednesday, July 18, 2012 to:

Kimberly Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
617-984-7953
617-984-7070
kshea@nfpa.org

Signature:  

Name - Please Print:  James M. Mundy, Jr.

Date:  18 July 2012

Note: Please remember that the return of ballots and attendance at Committee Meetings is required in accordance with Section 3.1.3.1 of the Regulations Governing Committee Projects.
Supplemental Attachment 12-8-6-e
Page 3 of 6

Shea, Kimberly

From: ltfiore@aol.com
Sent: Wednesday, July 18, 2012 9:20 AM
To: Shea, Kimberly
Subject: Re: NFPA 72 Amendment Ballots

Kim

I know today is the cutoff. I have been rather tied up of late and continue to be so. I am sorry to say that I have not properly followed this. So please enter my votes on all ballots as abstaining. My reason is that I am not available to properly follow the issues and cannot cast a meaningful vote on any of these ballots.

Thank you,
Lou
Sent from my Verizon Wireless BlackBerry

From: "Shea, Kimberly" <kshea@NFPA.org>
Date: Wed, 18 Jul 2012 08:59:16 -0400
To: ltfiore@aol.com <Ltfiore@aol.com>
Subject: RE: NFPA 72 Amendment Ballots

Lou,

I have received your ballots and because the way the ballot is set up, I would like to verify that you voted “Yes” indicating that you believe there will be correlation issues if the amendment passes. Voting “No” would indicate that you do not see any correlation issues being caused if the amendment is implanted in the document. If you do believe that correlation issues will be created, please provide an explanation of vote and identify what the correlation issue(s) may be.

If you have any questions, feel free to call.

Kimberly Shea
Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
617-984-7953

From: ltfiore@aol.com [mailto:ltfiore@aol.com]
Sent: Tuesday, July 17, 2012 7:10 PM
To: Shea, Kimberly
Cc: Walker, Nancy
Subject: Re: NFPA 72 Amendment Ballots

Kim,

Please see the attached ballots.

Lou
**NFPA 72**

**TC Ballot Supervising Station Fire Alarm and Signaling Systems**

**June 2012 ASSOCIATION AMENDMENT 72-11**

**Amendment:** Reject an Identifiable Part of Comment 72-352. The Rejected Identifiable Part is “and every 24 hours thereafter until restored.”

☐ Agree

If you agree with this amendment, the recommendation will modify subsection 26.2.3.2* as follows:

26.2.3.2* Effective January 1, 2014, any signal received by the supervising station that has not restored to normal condition within 24 hours of initial receipt, and every 24 hours thereafter until restored, shall be redisplayed to an operator as a non-restored signal and shall be reported to the subscriber.

**Exception:** This provision shall not apply to scheduled impairments.

A.26.2.3.2 Scheduled impairments include interruptions caused by construction or building damage. In addition natural disasters can result in long term system impairments that are not intended to require 24-hour reminders.

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, there was no previous edition text, therefore, Section 26.2.3.2 and A.26.2.3.2 are deleted.

☐ Do Not Agree

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The requirement as proposed before the TCR action requires notification to the subscriber every twenty-four hours of a non-restored condition. This was fully discussed at the TC meetings, and it is important so that the subscriber knows of an on-going problem with the fire alarm system. It is not intended, as some of the floor discussion insinuated, that this notification be by phone. All the requirement says is “reported to the subscriber.” In addition, again as the floor discussion insinuated, this requirement DOES NOT apply to scheduled impairments; therefore, when the system is down for some known reason (such as remodeling), daily notification would not be required. I am voting as not agreeing with the floor action since I believe that by eliminating the “every twenty-four hours thereafter” clause we weaken the code.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Signature: ______________

Name - Please Print: Art Black

Date: 18 June 2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 – fax
617-984-7953 - phone

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 474 of 2025
Amendment: Reject an Identifiable Part of Comment 72-352. The Rejected Identifiable Part is “and every 24 hours thereafter until restored.”

☐ Agree

If you agree with this amendment, the recommendation will modify subsection 26.2.3.2* as follows:

26.2.3.2* Effective January 1, 2014, any signal received by the supervising station that has not restored to normal condition within 24 hours of initial receipt, and every 24 hours thereafter until restored, shall be redisplayed to an operator as a nonrestored signal and shall be reported to the subscriber.

Exception: This provision shall not apply to scheduled impairments.
A. 26.2.3.2 Scheduled impairments include interruptions caused by construction or building damage. In addition, natural disasters can result in long term system impairments that are not intended to require 24-hour reminders.

☒ Do Not Agree

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, there was no previous edition text, therefore, Section 26.2.3.2 and A.26.2.3.2 are deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The section is intended to address problem systems, but as written it will apply to all signals. Problem systems are already required to retransmit non-restored trouble signals to the supervising station every 24 hours. These “reminders” will unnecessarily duplicate those transmitted signals, while increasing the burden on supervising station resources dealing with non-life threatening conditions. If intended to protect against systems that don’t retransmit their trouble signals, then it should be on an opt-in basis for use only with those systems.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Signature: [Signature]

Name - Please Print: David Blankenh

Date: June 21, 2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shen, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshen@nfpa.org
617-984-7110 – fax
617-984-7953 – phone
Amendment: Reject an Identifiable Part of Comment 72-152. The Rejected Identifiable Part is “and every 24 hours thereafter until restored.”

☐ Agree

If you agree with this amendment, the recommendation will modify subsection 26.2.2.3* as follows:

26.2.3.2* Effective January 1, 2014, any signal received by the supervising station that has not restored to normal condition within 24 hours of initial receipt, and every 24 hours thereafter until restored, shall be redisplayed to an operator as a non-restored signal and shall be reported to the subscriber.
Exception: This provision shall not apply to scheduled impairments.

A.26.2.3.2 Scheduled impairments include interruptions caused by construction or building damage. In addition natural disasters can result in long term system impairments that are not intended to require 24-hour reminders.

X Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text, if any. In this case, there was no previous edition text, therefore, Section 26.2.3.2 and A.26.3.3.2 are deleted.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The action before the TCR resulted in a vote of the narrowest of margins to accept the proponent’s request to remove an Identifiable part of 26.2.3.2 which would have strengthened the code by constantly reminding the subscriber of supervising service alarm system that their alarm system was not in full service. In making a negative TC ROC vote (the only one) the proponent explained that these signals are “non-life threatening” and notifying the subscriber of these non-restored signals is of no benefit and a detriment to the supervising station. The presence of these signals could represent closed sprinkler valves, fire pump issues, loss of A/C, power or any one of several other conditions which are “life threatening” situations. The subscriber should be constantly reminded that his system is not in full service even if the supervising station has to provide the extra effort of a daily reminder (subject to the permitted exception). Simply contacting the owner once (or even a second time in writing/alternate method) does not keep the problem in front of the subscriber and has historically resulted in systems being out of service for long periods of time before the status of the system is noticed during the annual inspection or following a fire in the building.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Signature: [Signature]

Name - Please Print: [Name]

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 476 of 2025
ASSOCIATION AMENDMENT BALLOT RESULTS

AMENDMENT (72-15)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Accept Comment 72-441

TCC PRELIMINARY Ballots due by July 18, 2012

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS/HAS NOT achieved the necessary 3/4 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is ___ [19 (eligible to vote) – ___ (ballots not returned) – ___ (abstentions) = ___ × 0.75 = ____]

_____ Eligible to Vote
_____ Not Returned

___ Approve
___ Do Not Approve
___ Abstain

TCC Action: PASS/FAIL

SIG-PRO FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 14 [28 (eligible to vote) – 6 (ballots not returned) – 1 (abstention) = 21 × 0.66 = 13.86]

28 Eligible to Vote
6 Not Returned (Kern, Kuhta, LeBlanc, Olenick, Shah, Waller)

20 Agree (Hammerberg w/comment)
1 Does Not Agree (Bisker)
1 Abstain (Elvove)

TC Action: PASS
NFPA 72
TC Ballot for Protected Premises Fire Alarm Systems
June 2012 ASSOCIATION AMENDMENT 72-15

Amendment: Accept Comment 72-441

☐ Agree

If you agree with this amendment, the recommendation is to modify A.21.4.2 to read as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there can be a delay in the activation of the power shunt trip. When such a delay is used, it is recommended that the delay should be approximately the time that it takes the elevator car to travel from the top of the hoistway to the lowest recall level. The purpose of the delay of the shunt trip is to increase the potential for elevators to complete their travel to the recall level. It is important to be aware that the requirements of A17.1/B44 Safety Code for Elevators and Escalators relative to sprinkler water release and power shut-down would still apply.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text that reads as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. This delay should be the time that it takes the elevator cab to travel from the top of the hoistway to the lowest recall level.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

I DO NOT AGREE WITH THE TECHNICAL SECTION'S ACTION AND

WOULD RATHER SEE THIS AMENDMENT COORDINATED WITH THE ACTION

OF THE SIG-PRO TECHNICAL COMMITTEE.

Signature: [Signature]

Name - Please Print: James Bicker

Date: June 20, 2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 - fax
617-984-7953 - phone
NFPA 72
TC Ballot for Protected Premises Fire Alarm Systems
June 2012 ASSOCIATION AMENDMENT 72-15

Amendment: Accept Comment 72-441

☐ Agree

If you agree with this amendment, the recommendation is to modify A.21.4.2 to read as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there can be a delay in the activation of the power shunt trip. When such a delay is used, it is recommended that the delay should be approximately the time that it takes the elevator car to travel from the top of the hoistway to the lowest recall level. The purpose of the delay of the shunt trip is to increase the potential for elevators to complete their travel to the recall level. It is important to be aware that the requirements of A17.1/B44 Safety Code for Elevators and Escalators relative to sprinkler water release and power shut-down would still apply.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text that reads as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. This delay should be the time that it takes the elevator cab to travel from the top of the hoistway to the lowest recall level.

☒ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Regardless of how committee ballot, because Comment 72-259 was overturned by the TCC during their ROC meeting, there still could be unintended consequences for the elevator occupants should the sprinklers in the machine room operate prior to the elevators recalling to the lowest floor (during the time delay period offered by the heat detectors). SIG-PRO recognized when they accepted ROC 72-259 in principle during ROC and added language to send the elevator to the nearest floor instead of the lowest recall level, upon operation of a heat detector. However, the problem will now remain, based upon the subsequent TCC action (to reject 72-259). An additional flaw with both the existing text and the text from RO 72-441 (Motion 72-15) is that no guidance has been provided on what the maximum time delay should be for the elevator to travel to the lowest recall floor, should travel be initiated by a heat detector equipped with a time delay feature.

Note: actions taken by the TCC during ROC are not shared with the affected TCs, hence, TC members better starting reading the ROC to see if any items of interest are changed by the TCC after the TC ROC meeting.

Signature:  [s/ Joshua W. Elvove]

Name - Please Print: Joshua W. Elvove

Date: 6/22/2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 – fax
617-984-7953 - phone
NFPA 72
TC Ballot for Protected Premises Fire Alarm Systems
June 2012 ASSOCIATION AMENDMENT 72-15

Amendment: Accept Comment 72-441

☐ Agree

If you agree with this amendment, the recommendation is to modify A.214.2 to read as follows:

A.214.2 Upon activation of the heat detector used for elevator power shutdown, there can be a delay in the activation of the power shunt trip. When such a delay is used, it is recommended that the delay should be approximately the time that it takes the elevator car to travel from the top of the hoistway to the lowest recall level. The purpose of the delay of the shunt trip is to increase the potential for elevators to complete their travel to the recall level. It is important to be aware that the requirements of A17.1B44 Safety Code for Elevators and Escalators relative to sprinkler water release and power shut-down would still apply.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text that reads as follows:

A.214.2 Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. This delay should be the time that it takes the elevator cab to travel from the top of the hoistway to the lowest recall level.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

This comment was originally rejected to avoid a conflict with comment 72-259, but the TC overturned the committee vote on 72-259, making this appropriate.

Signature: [Signature]

Name - Please Print: Thomas P. Hammer

Date: 7-18-2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 - fax
617-984-7953 - phone

July 31, 2012
Comment 72-441 Accept

72-441 Log #173 SIG-PRO Final Action: Reject

(A.21.4.2)

Submitter: Thomas P. Hammerberg, Automatic Fire Alarm Association

Comment on Proposal No: 72-587

Recommendation: Modify the original A.21.4.2 to read as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. When such a delay is used, it is recommended that the time delay should be approximately the time that it takes the elevator car to travel from the top of the hoistway to the lowest recall level. The purpose of the delay of the shunt trip is to increase the potential for elevators to complete their travel to the recall level. It is important to be aware that the requirements of A17.1/B44 Safety Code for Elevators and Escalators relative to sprinkler water release and power shut-down would still apply.

Substantiation:

This wording more clearly reflects the original intent of this Annex. The original language in the original proposal and TC action appear to be questionable. The “delay strategy” has been used for years and often the delay is initiated and controlled by the fire alarm system. Many systems are already utilizing the delay function. Additionally, there are products specifically designed for the delay application. The delay is initiated by the actuation of the first fire alarm initiating device that initiates recall.

Committee Meeting Action: Reject

Committee Statement: The submitter’s recommendation would create a conflict in NFPA 72 and contradicts with the committee action taken on Comment 72-259 (Log #83).

Number Eligible to Vote: 29

Ballot Results: Affirmative: 23 Negative: 6

Ballot Not Returned: 3 Kuhta, T., MacGregor, F., Waller, B.

Explanation of Negative:

HAMMERMERG, T: A17.1 has jurisdiction over the operation, not NFPA 72, so this is outside of SIG-PRO. The problem is that if the elevator only goes to the closest floor and opens the door, it is possible that could be the fire floor. Allowing a time delay to go to the recall floors is more appropriate. Since we don’t agree with the action on 72-259, we feel that the committee statement is incorrect.

HOPPLE, W: A17.1 has jurisdiction over the operation, not NFPA 72, so this is outside the scope of SIG-PRO. The problem is that if the elevator only goes to the closest floor and opens the door, it is possible that could be the fire floor. Allowing a time delay to go to the recall floors is more appropriate. Since we do not agree with the action on 72-259, we feel that this statement is incorrect.

Backup Comment 72-259 to Comment 72-441

72-259 Log #383 SIG-PRO Final Action: Reject

(21.4 and A.21.4)

TCC Action: The Technical Correlating Committee makes reference to the committee action and advises that the language proposed in the submitter’s recommendation and in the committee action is not within the scope of the committee. Requirements on the operation and performance of elevators are covered by the safety code of ASME A17.1/CSA B44.

Accordingly, the Technical Correlating Committee directs that this comment be reported as “Reject”.

Submitter: David W. Fable, US General Services Administration

Comment on Proposal No: 72-282

Recommendation: Revise text to read as follows:

21.4.3* Where heat detectors are used to shut down elevator power prior to sprinkler operation, the detector shall have both a lower temperature rating and a higher sensitivity as compared to the sprinkler.

A21.4.4 When determining desired performance, consideration should be given to the time delay and temperature characteristics of both the sprinkler and the heat detector to ensure as much as possible that the heat detector will operate prior to the sprinkler, because a lower temperature rating alone might not provide earlier response. The listed spacing rating of the heat detector should be 25 ft (7.6 m) or greater.

A21.4.5 Each heat detector should have both a lower temperature rating and a higher sensitivity as compared to the sprinkler.

A21.4.2 When determining desired performance, consideration should be given to the time delay and temperature characteristics of both the sprinkler and the heat detector to ensure as much as possible that the heat detector will operate prior to the sprinkler, because a lower temperature rating alone might not provide earlier response. The listed spacing rating of the heat detector should be 25 ft (7.6 m) or greater.

A21.4.3* Activation of the heat detector(s) shall meet the criteria stated either in 21.4.3.1 or 21.4.2.3.2.

A21.4.3.1* Activation of the heat detector(s) shall disconnect the main line power supply to the affected elevator(s) immediately upon, or prior to, the discharge of water from sprinklers.

A21.4.3.2* Activation of the heat detector(s) shall provide a signal to the elevator controller and the following sequence of events shall occur:

1. The elevator controller shall automatically signal the elevator cars to proceed to the next closest landing.

2. The elevator cars SHALL park with the doors open.

3. Main power to the affected elevator(s) is disconnected.

A21.4.3.2(1) Upon activation of the heat detector used for elevator power shutdown, there should be no time delay. The use of devices and time delay switches or a time-delay capability shall not be permitted. Any delay disconnecting the power supply until the elevator is recalled to the lowest recall level may result in unintended consequences to the occupants or fire fighters. When the elevator cars should the automatic sprinklers operate prior to the elevators returning to the lowest recall level.

21.4.3.2 Activation of the heat detector(s) shall provide a signal to the elevator controller and the following sequence of events shall occur:

1. The elevator controller shall automatically signal the elevator cars to proceed to the next closest landing.

2. The elevator cars SHALL park with the doors open.

3. Main power to the affected elevator(s) is disconnected.

A21.4.3.2(1) Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. This delay should be the time that it takes the elevator car to travel from the top of the hoistway to the lowest recall level.
A.21.4.4 The initiating devices described in 21.4.2 shall be monitored for integrity by the fire alarm control unit required in 21.3.1 and 21.3.2.

**Substantiation:** The intent of this code change is to revise this Section to ensure that the main power supply to the affected elevators is disconnected prior to the discharge of water from the automatic sprinkler system installed in the machine room. The current language permits the use of a heat detector utilizing a device having the capability to delay disconnecting the power supply until the elevator is recalled to the lowest recall level; however, this may result in unintended consequences to the occupants or fire fighters within the elevator cars should the automatic sprinklers operate prior to the elevators returning to the lowest recall level. In addition, currently the Code does not provide any guidance regarding what the maximum timeframe for the time delay is acceptable.

In addition, I have proposed annex material when using a pressure switch and water flow switch as the sole method to disconnect power, since it is not reasonable to expect system designers and building maintenance personnel to take all required actions necessary to eliminate unwanted alarms resulting from pressure surges in a majority of sprinkler systems.

The new language proposes a safe and effective means to disconnect the main power supply to the affected elevators by using heat detectors. If the heat detectors activate prior to the elevators being recalled to the lowest floor level, the new proposed text still permits a short time-delay for the affected elevators to travel to the next closest landing prior to disconnect the main power (e.g., earthquake mode software concept). The subject short time delay for elevator car travel should not be considered a major factor for occupant entrapment in the affected elevator cars, since the affected elevator cars should only a short distance prior to being parked with doors open for the occupants to leave. This action should occur well in advance of sprinkler operation.

**Committee Meeting Action: Accept in Principle**

Delete section A.21.4.2 and add new section 21.4.2.1 to read as follows:

**A.21.4.2 Activation of the heat detector shall result in a signal being transmitted to the elevator controller and shall cause the following sequence of events to occur:**

1. The elevator controller will automatically signal the elevator cars to stop at the next closest landing.
2. The elevator car(s) will park with the doors open.
3. Main power to the affected elevator(s) is disconnected.

**Committee Statement:** The submitter’s comments provide revised wording that clarified the intent and complies with the NFPA Manual of Style.

The additional text proposed provides a safe and effective means to disconnect the main power supply to the affected elevators by using heat detectors. If the heat detectors activate prior to the elevators being recalled to the lowest floor level, the new proposed text still permits the affected elevators to travel to the next closest landing prior to disconnect the main power (i.e., utilizing the elevator seismic switch as described in ASME A17.1:2010, Section 8.4.10.1.3(a), Elevator Operation). This action should occur well in advance of sprinkler operation.

**Number Eligible to Vote:** 29

**Ballot Results:** Affirmative: 23 Negative: 3

**Ballot Not Returned:** 3 Kuhta, T., MacGregor, F., Waller, B.

**Explanation of Negative:**

BELLIVEAU, JR., L.: The committee has to be careful when dictating code requirements for elevator functions as a result of the activation of a fire alarm system device. It might be better to refer to action in the ASME A17.1:2012 code, than repeat it here. The specifics of this section could be placed in the Annex material instead of a code section.

HAMMERBERG, T.: A17.1 has jurisdiction over the operation, not NFPA 72; so this is outside the scope of SIG-PRO. The problem is that if the elevator only goes to the closest floor and opens the door, it is possible that could be the fire floor. Allowing a time delay to go to the recall floors is more appropriate.

HOLLE, W.: A17.1 has jurisdiction of the operation, not NFPA 72, so this is outside the scope of SIG-PRO. The problem is that if the elevator only goes to the closest floor and opens the door, it is possible that could be the fire floor. Allowing a time delay to go to the recall floors is more appropriate.

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**Backup Proposal 72-282 to Comment 72-259**

72-282 Log #565 SIG-PRO Final Action: Reject

**Submitter:** Dave Frable, U.S. General Services Administration

**Recommendation:** Revise text to read as follows:

A.21.4.4 Where heat detectors are used to shut down elevator power prior to sprinkler operation, the detector shall have both a lower temperature rating and a higher sensitivity as compared to the sprinkler. A.21.4.1 When determining desired performance, consideration should be given to the temperature and time characteristics of both the sprinkler head and the heat detector to ensure as much as possible that the heat detector will operate prior to the sprinkler head, because a lower temperature rating alone might not provide earlier response. The listed spacing rating of the heat detector should be 25 ft (7.6 m) or greater.

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. This delay should be the time that takes the elevator cab to travel from the top of the hoistway to the lowest recall level. A.21.4.3 If pressure or water flow switches are used to shut down elevator power immediately upon, or prior to, the discharge of water from sprinklers, the use of devices with time delay switches or time delay capability shall not be permitted. A.21.4.4 Care should be taken to ensure that elevator power cannot be interrupted due to water pressure surges in the sprinkler system. The intent of the Code is to ensure that the switch and the system as a whole do not have the capability to interrupt the power supply to the elevator system.

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**Backup Proposal 72-587 to Comment 72-441**

72-587 Log #13 SIG-PRO Final Action: Accept in Principle

**Submitter:** Daniel L. Anderson, Jr., Coastal Empire Fire & Security, Inc.

**Recommendation:** Revise text to read as follows:

A.21.4.2.2 Upon activation of the heat detector used for elevator power shutdown, the relay activation must be immediate to establish a beginning timeline for any jurisdiction, elevator vendor or code requiring delay.

**Substantiation:**

The object of NFPA 72 2010 this has not been passed in the ASME 17.1 code. Therefore, this auxiliary information is premature and should not be required due to the following assumptions. The process and time required to delay shutdown is dependent on the elevator car travel distance and the assumption that no one is holding the car door open delaying the recall. Using a specific delay timer or requiring fire alarms to control this delay could still result in people being trapped in the car between floors, or worse yet being trapped in a moving car with water sprinkling over live high voltage power until the delay is complete. It should be incumbent upon the elevator provider and elevator code experts to determine the shunt trip delay and shunt trip mechanisms that interface with their control equipment to be assured that they reach the proper floors and that the door position is confirmed and that “they meet their intent”, which is to not entrap people. The liability would then rest with the elevator industry for any loss of life and property and to control their delay if desired or required. This would provide for a client code for fire alarm installers and AHJs.

**Committee Meeting Action: Accept in Principle**

Revise proposed text to read as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, the emergency function interface device activation should be immediate. This presumes that the elevator control sequence is best determined by the elevator system installer. When the elevator control has an elevator shutdown sequence, the emergency function interface device can be connected to the elevator controller to establish a beginning timeline where a delay is required.

**Committee Statement:** Some changes are editorial to reflect the NFPA Manual of Style and current terminology used in the code.

Further explanation is required to justify the reason for immediate actuation of the emergency function interface device.

**Number Eligible to Vote:** 30

**Ballot Results:** Affirmative: 28

**Ballot Not Returned:** 2 Waller, B., Wenzel, Jr., F.

**Comment on Affirmative:**

ELVOYE, J.: To be consistent with other actions taken to address terminology pertaining to new Figure A.3.127.3 and emergency control interface devices (ROP-43 et al), three revisions are necessary to the proposed new text. In two places, insert “control” between “emergency” and “function” so it reads “emergency control interface device”. In the last sentence, replace “elevator controller” with “component operating the elevator”. With these changes, the new text would read as follows: “A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, the emergency control function interface device activation should be immediate. This presumes that the elevator control sequence is best determined by the elevator system installer. When the elevator control has an elevator shutdown sequence, the emergency control function interface device can be connected to the component operating the elevator to establish a beginning timeline where a delay is required.”

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**Backup Proposal 72-282 to Comment 72-259**

**Submitter:** Dave Frable, U.S. General Services Administration

**Recommendation:** Revise text to read as follows:

A.21.4.4 Where heat detectors are used to shut down elevator power prior to sprinkler operation, the detector shall have both a lower temperature rating and a higher sensitivity as compared to the sprinkler. A.21.4.1 When determining desired performance, consideration should be given to the temperature and time characteristics of both the sprinkler head and the heat detector to ensure as much as possible that the heat detector will operate prior to the sprinkler head, because a lower temperature rating alone might not provide earlier response. The listed spacing rating of the heat detector should be 25 ft (7.6 m) or greater.

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. This delay should be the time that takes the elevator car to travel from the top of the hoistway to the lowest recall level. A.21.4.3 If pressure or water flow switches are used to shut down elevator power immediately upon, or prior to, the discharge of water from sprinklers, the use of devices with time delay switches or time delay capability shall not be permitted. A.21.4.4 Care should be taken to ensure that elevator power cannot be interrupted due to water pressure surges in the sprinkler system. The intent of the Code is to ensure that the switch and the system as a whole do not have the capability to interrupt the power supply to the elevator system.
capability of introducing a time delay into the sequence. The use of a switch with a time delay mechanism set to zero does not meet the intent of the Code because it is possible to introduce a time delay after the system has been accepted. This might occur in response to unwanted alarms caused by surges or water movement, rather than addressing the underlying cause of the surges or water movement (often due to air in the piping). Permanently disabling the delay in accordance with the manufacturer’s printed instructions should be considered unacceptable. Systems that have software that can introduce a delay in the sequence should be programmed to require a security password to make such a change.

21.4.4 Control circuits to shut down elevator shall be monitored for the presence of operating voltage. Loss of voltage to the control circuit for the disconnecting means shall cause a supervisory signal to be indicated at the control unit and required remote annunciators.

A.21.4.1 Figure A.21.4 illustrates one method of monitoring elevator shunt control power for integrity.

21.4.5 The initiating devices described in 21.4.2 shall be monitored for integrity by the fire alarm control unit required in 21.3.1 and 21.3.2.

21.4.1 The provisions of Section 21.4 shall apply where elevator equipment is located such that the application of water from automatic fire sprinklers could cause unsafe elevator operation. The method described below shall disconnect the main line power supply to the affected elevator and any other power supplies used to move the elevator prior to the application of water.

21.4.2 Heat detectors shall be configured to initiate the shut down elevator power prior to sprinkler operation.

21.4.2.1 Each heat detector shall have both a lower temperature rating and a higher sensitivity as compared to the sprinkler.

21.4.2.2 When determining desired performance, consideration should be given to the temperature and time lag characteristics of both the sprinkler and the heat detector to ensure as much as possible that the heat detector will operate prior to the sprinkler, because a lower temperature rating alone might not provide earlier response. The listed spacing rating of the heat detector should be 25 ft (7.6 m) or greater.

21.4.2.3 Activation of the heat detector(s) shall provide a signal to the elevator controller and the following sequence of events shall occur:

1. The elevator controller shall automatically signal the elevator cars to proceed to the next closest landing.
2. The elevator car(s) SHALL park with the doors open
3. Main power to the affected elevator(s) is disconnected.

A.21.4.2.3(1) Upon activation of the heat detector used for elevator power shutoff, there should be a delay in the activation of the power shunt trip. This delay should be the time that it takes the elevator cab to travel to the next closest landing.

21.4.3 Pressure switches and water flow switches used for disconnecting the main line power supply to the affected elevator(s) immediately upon, or prior to, the discharge of water from sprinklers shall not be permitted.

21.4.4 Control circuits to shut down elevator power shall be monitored for the presence of operating voltage. Loss of voltage to the control circuit for the disconnecting means shall cause a supervisory signal to be indicated at the control unit and required remote annunciators.

A.21.4.4 Figure A.21.4.4 illustrates one method of monitoring elevator shunt trip control power for integrity.

21.4.5 The initiating devices described in 21.4.2 shall be monitored for integrity by the fire alarm control unit required in 21.3.1 and 21.3.2.

Substantiation: The intent of this code change is to revise this Section to ensure that the main power supply to the affected elevators is disconnected prior to the discharge of water from the automatic sprinkler system installed in the machine room. The current language permits the use of a heat detector utilizing a device having the capability to delay disconnecting the power supply until the elevator is recalled to the lowest recall level; however, it is my opinion that this may result in unintended consequences to the occupants or fire fighters within the elevator cars should the automatic sprinklers operate prior to the elevators returning to the lowest recall level. In addition, currently the Code does not provide any guidance regarding what the maximum timeframe for the time delay is acceptable.

In addition, I have proposed to delete the use of a pressure switch and water flow switch as the sole method to disconnect power, because in my opinion, it is not reasonable to expect system designers and building maintenance personnel to take all required actions necessary to eliminate unwanted alarms resulting from pressure surges in a majority of sprinkler systems. Therefore, it is my opinion that the use of this method of initiating shunt-trip of elevator power should not be permitted.

Committee Meeting Action: Rejected

Committee Statement: No technical justification has been provided to disallow flow and pressure switches. These methods are currently in use in certain applications. The proposed change in Section 21.4.2 as the sole means of shunt trip is outside the scope of this committee. Elevator operation is covered by ASME A17.1.

Number Eligible to Vote: 30
Balot Results: Affirmative: 27 Negative: 1
Ballot Not Returned: 2 Weller, B., Wenzel, Jr., F.

Explanations of Negative:

ELVOVE, J.: I concur with the Technical Committee that the proponent has not provided any technical justification to prohibit the use of pressure switches and water flow to disconnect the main line power supply. However, the proponent did raise an issue concerning unwanted alarms resulting from pressure surges in sprinkler systems when pressure switches and water flow alarms are used, which the TC did not address in their committee statement. It should also be noted that this issue may also be relevant to several proposals made by representatives of the International Association of Fire Chiefs in which they encouraged the fire alarm industry to try to reduce the number of unwanted fire alarms. In addition, the proponent also noted another problem that the TC did not address in their committee statement concerning annex section A.21.4.2, which permits a time delay for elevator power shutdown when utilizing a heat detector. The proponent pointed out that the subject time delay may result in unintended consequences and that currently the Code does not provide any guidance to designers regarding what the maximum timeframe for the time delay is acceptable. Therefore, in order to provide due process to the proponent, so that rebuttal, if desired, may be submitted during the Comment period; I contend that the TC’s committee statement needs to be revised to address the subject concerns the proponent has raised.
TOM HAMMERBERG: Thank you. Tom Hammerberg representing the Automatic Fire Alarm Association and I move to accept Comment 72-441.

PRESIDING OFFICER BELL: The motion on the floor is to accept Comment 72-441. Is there a second?

I hear a second.

TOM HAMMERBERG: Thank you. I'm going to make this short and sweet because I know I'm the last thing between everybody in this room and the door. And this should be fairly straightforward.

I had put in a Comment 72-441 that was rejected by the committee saying that if it was accepted, it would have been in conflict with Comment 72-259. Well, in 72-259, the technical correlating committee overturned the committee's action and rejected that. So the committee's response to mine no longer matter. So those comments should have been accepted.

Thank you.

PRESIDING OFFICER BELL: Thank you.

Mr. Schifiliti?

COMMITTEE CHAIR SCHIFILITI: Correlating committee has no comment on this motion and I defer to the chair of protected premises committee Burton Bunker.

PRESIDING OFFICER BELL: Microphone 2.

BURTON BUNKER: Thank you, Mr. Chair.

Burton Bunker, U.S. Department of State, chairman of protected premises signalling committee.

This one got a little bit messy, but essentially Mr. Hammerberg is correct. The original proposal, which was 72-587, was accepted in principal. And it essentially did what Mr. Hammerberg is proposing. Then along comes Comment 259 which was accepted in principal and modified the text. And the correlating committee rejected that based on the fact that the technical committee had created a problem with scope with respect to A 17.1, elevator and escalator safety codes. So that was rejected.

And then as Mr. Hammerberg correctly points out, we at that point in time during the ROC thought that the proposal -- I'm sorry -- Comment 259 was
accepted and said that accepting 441 would create a
ccontradiction or a problem, a conflict with accepting
259. So 259 was rejected by the TCC and Mr. Hammerberg
is correct.
PRESIDING OFFICER BELL: Thank you,
gentlemen.
Further discussion? Microphone 5.

BRUCE FRASER: Bruce Fraser, Fraser Fire Protection, and I'm speaking in favor of the motion. I'm a liaison between NFPA 72 and the ASME A17.1 emergency operations committee. And if this motion is not approved, it will leave erroneous and confusing information as a result of reverting back to the TC action on Proposal 72-587.

So accepting Comment 72-441 would now more clearly explain the intent of the delay of power shut down which is to allow completion of elevator recall. And also now there will be no conflict with A17.1. So I strongly urge acceptance of Comment 72-441 is and ask support of the motion on the floor.

BOB BAIRD: Bob Baird, Independent Electrical Contractors Association, chair of the electrical section. On Tuesday the electrical section voted to support this action.

PRESIDING OFFICER BELL: Thank you. Any further discussion?

COMMITTEE CHAIR SCHIFILITI: No, sir.

PRESIDING OFFICER BELL: With that we'll move to the motion on the floor which is to accept Comment 72-441.

Please vote now, one if you're in favor of the motion and two if you're opposed.

Voting closes in five seconds. Voting is now closed. Motion passes.
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 24, 2012

AMENDMENT (72-15)

Document: NFPA 72, National Fire Alarm and Signaling Code

Motion: To Accept Comment 72-441

TCC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary 3/4 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 10 [19 (eligible to vote) – 5 (ballots not returned) – 1 (abstention) = 13 × 0.75 = 9.75]

19 Eligible to Vote
5 Not Returned (Aiken, Black, Fannin, Klein, Wenzel)

1 Yes, Correlation Issues (Schifiliti w/comment)
12 No, Correlation Issues
1 Abstain (Fiore)

TCC Action: PASS

SIG-PRO FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 14 [28 (eligible to vote) – 6 (ballots not returned) – 1 (abstention) = 21 × 0.66 = 13.86]

28 Eligible to Vote
6 Not Returned (Kern, Kuhta, LeBlanc, Olenick, Shah, Waller)

20 Agree (Hammerberg w/comment)
1 Does Not Agree (Bisker)
1 Abstain (Elvove)

TC Action: PASS
Amendment: Accept Comment 72-441

With respect to this amendment, do you see any CORRELATION issues that will be caused as a result of this amendment being implemented into the document:

☐ Yes* ☐ No ☐ Abstain*

*Please give reasons for voting “Yes” or “Abstain”:

It is my opinion that even though this is only annex text that it is in conflict with the scope and intent of ASME/ANSI A17.1. It is suggesting how an elevator should be controlled. The requirements for recall and power shutdown have been carefully coordinated amongst several codes and standards to enhance safety for occupants and firefighters and to reduce overall risk. Risk reduction includes reduced risk that the system and/or sequence will fail. Adding time delays, pre-action systems, etc. has been debated and the group with scope has debated and settled on a strategy that is simple and has very low probability of failure. More complex systems increase the probability of failure while trying to address a situation that has an extremely low probability of occurrence. Complex systems might actually increase failure rates and decrease safety.

Please return as soon as possible, but no later than Wednesday, July 18, 2012 to:

Kimberly Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
617-984-7953
617-984-7070
kshea@nfpa.org

Signature: 

Name - Please Print: Robert Schifiliti

Date: 2012 07 17

Note: Please remember that the return of ballots and attendance at Committee Meetings is required in accordance with Section 3.1.3.1 of the Regulations Governing Committee Projects.
Shea, Kimberly

From: ltfiore@aol.com
Sent: Wednesday, July 18, 2012 9:20 AM
To: Shea, Kimberly
Subject: Re: NFPA 72 Amendment Ballots

Kim

I know today is the cutoff. I have been rather tied up of late and continue to be so. I am sorry to say that I have not properly followed this. So please enter my votes on all ballots as abstaining. My reason is that I am not available to properly follow the issues and cannot cast a meaningful vote on any of these ballots.

Thank you,
Lou
Sent from my Verizon Wireless BlackBerry

From: "Shea, Kimberly" <kshea@NFPA.org>
Date: Wed, 18 Jul 2012 08:59:16 -0400
To: ltfiore@aol.com<ltfiore@aol.com>
Subject: RE: NFPA 72 Amendment Ballots

Lou,

I have received your ballots and because the way the ballot is set up, I would like to verify that you voted “Yes” indicating that you believe there will be correlation issues if the amendment passes. Voting “No” would indicate that you do not see any correlation issues being caused if the amendment is implanted in the document. If you do believe that correlation issues will be created, please provide an explanation of vote and identify what the correlation issue(s) may be.

If you have any questions, feel free to call.

Kimberly Shea
Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
617-984-7953

From: ltfiore@aol.com [mailto:ltfiore@aol.com]
Sent: Tuesday, July 17, 2012 7:10 PM
To: Shea, Kimberly
Cc: Walker, Nancy
Subject: Re: NFPA 72 Amendment Ballots

Kim,

Please see the attached ballots.

Lou
NFPA 72
TC Ballot for Protected Premises Fire Alarm Systems
June 2012 ASSOCIATION AMENDMENT 72-15

Amendment: Accept Comment 72-441

☐ Agree

If you agree with this amendment, the recommendation is to modify A.21.4.2 to read as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there can be a delay in the activation of the power shunt trip. When such a delay is used, it is recommended that the delay should be approximately the time that it takes the elevator car to travel from the top of the hoistway to the lowest recall level. The purpose of the delay of the shunt trip is to increase the potential for elevators to complete their travel to the recall level. It is important to be aware that the requirements of A17.1/844 Safety Code for Elevators and Escalators relative to sprinkler water release and power shut-down would still apply.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text that reads as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. This delay should be the time that it takes the elevator cab to travel from the top of the hoistway to the lowest recall level.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I DO NOT AGREE WITH THE TECHNICAL SECTION’S ACTION AND WOULD RATHER SEE THIS AMENDMENTCoORDINATED WITH THE ACTION OF THE SIG-PRO TECHNICAL COMMITTEE.

Signature: ____________________________

Name - Please Print: James Bisker

Date: August 20, 2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 - fax
617-984-7953 - phone

July 31, 2012
Standards Council Supplemental Agenda August 7-9, 2012
Page 490 of 2025
Amendment: Accept Comment 72-441

☐ Agree

If you agree with this amendment, the recommendation is to modify A.21.4.2 to read as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there can be a delay in the activation of the power shunt trip. When such a delay is used, it is recommended that the delay should be approximately the time that it takes the elevator car to travel from the top of the hoistway to the lowest recall level. The purpose of the delay of the shunt trip is to increase the potential for elevators to complete their travel to the recall level. It is important to be aware that the requirements of A17.1/B44 Safety Code for Elevators and Escalators relative to sprinkler water release and power shut-down would still apply.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text that reads as follows:

A.21.4.2 Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. This delay should be the time that it takes the elevator cab to travel from the top of the hoistway to the lowest recall level.

☒ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Regardless of how committee ballot, because Comment 72-259 was overturned by the TCC during their ROC meeting, there still could be unintended consequences for the elevator occupants should the sprinklers in the machine room operate prior to the elevators recalling to the lowest floor (during the time delay period offered by the heat detectors). SIG-PRO recognized when they accepted ROC 72-259 in principle during ROC and added language to send the elevator to the nearest floor instead of the lowest recall level, upon operation of a heat detector. However, the problem will now remain, based upon the subsequent TCC action (to reject 72-259). An additional flaw with both the existing text and the text from RO 72-441 (Motion 72-15) is that no guidance has been provided on what the maximum delay should be for the elevator to travel to the lowest recall floor, should travel be initiated by a heat detector equipped with a time delay feature.

Note: actions taken by the TCC during ROC are not shared with the affected TCs; hence, TC members better start reading the ROC to see if any items of interest are changed by the TCC after the TC ROC meeting.

Signature: /s/ Joshua W. Elvove

Name - Please Print: Joshua W. Elvove

Date: 6/22/2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617-984-7110 – fax
617-984-7953 - phone
NFPA 72
TC Ballot for Protected Premises Fire Alarm Systems
June 2012 ASSOCIATION AMENDMENT 72-15

Amendment: Accept Comment 72-441

[ ] Agree

If you agree with this amendment, the recommendation is to modify A.214.2 to read as follows:

A.214.2 Upon activation of the heat detector used for elevator power shutdown, there can be a delay in the activation of the power shunt trip. When such a delay is used, it is recommended that the delay should be approximately the time that it takes the elevator car to travel from the top of the hoistway to the lowest recall level. The purpose of the delay of the shunt trip is to increase the potential for elevators to complete their travel to the recall level. It is important to be aware that the requirements of A17.1:B44 Safety Code for Elevators and Escalators relative to sprinkler water release and power shut-down would still apply.

[ ] Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text that reads as follows:

A.214.2 Upon activation of the heat detector used for elevator power shutdown, there should be a delay in the activation of the power shunt trip. This delay should be the time that it takes the elevator cab to travel from the top of the hoistway to the lowest recall level.

[ ] Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

THIS COMMENT WAS ORIGINALLY REJECTED TO AVOID A CONFLICT WITH COMMENT 72-259, BUT THE TCC OVERTURNED THE COMMITTEE VOTE ON 72-259, MAKING THIS APPROPRIATE

Signature: ____________________________

Name - Please Print: THOMAS P. HAMMERSCHLICHER

Date: 6-18-2012

Ballots are due back no later than Thursday, June 28, 2012. Please return to:

Kim Shea, Technical Projects Administrator
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169
kshea@nfpa.org
617- 984-7110 – fax
617-984-7953 - phone

March 12, 2011 12:04p PFA
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ASSOCIATION AMENDMENT BALLOT RESULTS

DATE:    July 10, 2012

AMENDMENT (150-1)


Motion: To Accept Proposals 150-11, 150-13, 150-14, and 150-15

**TC FINAL Ballot Results**

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment *HAS NOT* achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 14 [26 (eligible to vote) – 5 (ballots not returned) – 0 (abstentions) = 21 × 0.66 = 13.86]

<table>
<thead>
<tr>
<th>Eligible to Vote</th>
<th>26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Returned</td>
<td>5</td>
</tr>
</tbody>
</table>

9 Agree
12 Do Not Agree (Aler, Cohen, Cronin, Crowley, Filippi, Gulati, Heckman, Loveman, Manley, Rosenberger, Staniland, Sullivan)
0 Abstain

**TC Action: FAIL**
Amendment: Accept Proposal 150-11, Accept Proposal 150-13, Accept Proposal 150-14, and Accept Proposal 150-15

☐ Agree

If you agree with this amendment, the recommendation will be to accept the proposed language to read as follows:

9.8 Special Requirements for Category A Animals
9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1.
9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.

11.3.7 Special Requirements for Category A Animals.
Class 1 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

12.3.7 Special Requirements for Category A Animals.
Class 2 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

13.3.7 Special Requirements for Category A Animals.
Class 3 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to the previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Requiring sprinkler protection in all facilities housing animals will make adoption of this document on a national or state level virtually impossible. Significant changes have been made to the proposed document to coordinate this document with the International Building Code and NFPA 5000 to make it more palatable for municipalities to consider adopting. Until there is national agreement to require sprinkler protection of all new human occupied dwellings, I foresee no adoption of this document if it will require sprinkler protection in all animal housing facilities. Our focus should be to get NFPA 150 included as a referenced standard in the International Building Code (IBC) and International Fire Code (IFC), since NFPA 1 is not universally enforced in the United States. It should be noted that the IBC has very little requirements for agricultural buildings and the majority of that is located in Appendix C, so unless that appendix is adopted by a municipality, there is little to no fire protection or life safety requirements required for the majority of animal housing facilities. Getting IBC to reference NFPA 150 (even without the proposed universal sprinkler requirement) as a standard would result in much safer facilities because of the requirements on interior finish, proper storage of combustible materials, egress, electrical systems and heating equipment, etc.

Signature: Clay...
NFPA 150
TC BALLOT FOR ANIMAL HOUSING FACILITIES
JUNE 2012 ASSOCIATION AMENDMENT 150-1

Amendment: Accept Proposal 150-11, Accept Proposal 150-13, Accept Proposal 150-14, and Accept Proposal 150-15

☐ Agree

If you agree with this amendment, the recommendation will be to accept the proposed language to read as follows:

9.8 Special Requirements for Category A Animals
9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1.
9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.

11.3.7 Special Requirements for Category A Animals.
Class 1 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

12.3.7 Special Requirements for Category A Animals.
Class 2 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

13.3.7 Special Requirements for Category A Animals.
Class 3 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to the previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:


Signature: [Signature]

Name - Please Print: [Name]

Date: [Date]

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:
Jenny Depew, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
EMAIL: jdepew@nfpa.org

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 496 of 2025
Jenny,

Can you write down, “Providing sprinkler protection for these animal groups should be a risk-based decision and not a mandatory requirement.”

Also, can you explain the process. I thought we voted this down outright during our meeting. Why is this issue reappearing as an amendment. Thanks,

HCC & Associates, Inc.
Hal Cohen
302.369.6901 (t)
302.369.6902 (f)
3 Mill Park Court
Newark, DE 19713

----- Original Message ----- 
From: Depew, Jenny 
To: hcohen@hccassoc.com 
Sent: Monday, June 18, 2012 8:28 AM 
Subject: Amendment Ballot 150-1 

Good Morning Hal,

I have received your Amendment ballot for NFPA 150. The ballot makes note that when voting “Do Not Agree” or “Abstain” a reason must accompany your vote. Please provide a reason for voting “Do Not Agree” at your earliest convenience.

Thank you!

Jenny Depew
Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
jdepew@nfpa.org
Tel: 617-984-7505
Fax: 617-984-7110

Check out NFPA on social media…
www.nfpa.org/socialmedia
Amendment: Accept Proposal 150-11, Accept Proposal 150-13, Accept Proposal 150-14, and Accept Proposal 150-15

☐ Agree

If you agree with this amendment, the recommendation will be to accept the proposed language to read as follows:

9.8 Special Requirements for Category A Animals

9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1.

9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.

11.3.7 Special Requirements for Category A Animals.

Class 1 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

12.3.7 Special Requirements for Category A Animals.

Class 2 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

13.3.7 Special Requirements for Category A Animals.

Class 3 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to the previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The committee heard and addressed the arguments made by the submitter during the ROP & ROC phase. This is an area that needs further study and input from the industries that will be affected.

Acceptance would result in difficulty in getting NFPA 150 adopted in jurisdictions.

Signature: ____________________________

Name - Please Print: Bradford T. Cronin

Date: June 17, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Jenny DePew, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
EMAIL: jdepew@nfpa.org
Amendment: Accept Proposal 150-11, Accept Proposal 150-13, Accept Proposal 150-14, and Accept Proposal 150-15

☐ Agree

If you agree with this amendment, the recommendation will be to accept the proposed language to read as follows:

9.8 Special Requirements for Category A Animals

9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1.

9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.

11.3.7 Special Requirements for Category A Animals.
Class 1 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

12.3.7 Special Requirements for Category A Animals.
Class 2 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

13.3.7 Special Requirements for Category A Animals.
Class 3 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to the previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Mandating automatic sprinklers for every Category B animal location will make this an unenforceable document. There are too many Category B configurations that are extremely expensive or technically difficult to provide NFPA 13 compliant automatic sprinkler protection. There are other risk mitigations methods available to the animal owners that are no longer allowed if this change is adopted.

____________________________
Signature: Michael A Crowley

Name - Please Print: Michael A Crowley P.E.

Date: 6/18/12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Jenny Depew, Administrator, Technical Projects
NFPA 150
TC BALLOT FOR ANIMAL HOUSING FACILITIES
JUNE 2012 ASSOCIATION AMENDMENT 150-1

Amendment: Accept Proposal 150-11, Accept Proposal 150-13, Accept Proposal 150-14, and Accept Proposal 150-15

☐ Agree

If you agree with this amendment, the recommendation will be to accept the proposed language to read as follows:

9.8 Special Requirements for Category A Animals
9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1.
9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.

11.3.7 Special Requirements for Category A Animals.
Class 1 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

12.3.7 Special Requirements for Category A Animals.
Class 2 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

13.3.7 Special Requirements for Category A Animals.
Class 3 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to the previous edition text.

☐ Abstain*

*Please give reasons for voting "Do Not Agree" or "Abstain":

While an advocate for Sprinkler Systems, I feel that at this time
the requirement for Sprinkler protection in all Animal Housing
facilities is too great a leap. The positive requirements included
in NFPA 150 would be negated. Progress is made incrementally and
at this point more parties need to be on board for successful adoption.

Signature: [Signature]

Name - Please Print: Marion C. Filippi

Date: 7/9/2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Jenny Depew, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110
EMAIL: jdepew@nfpa.org

July 31, 2012 Standards Council Supplemental Agenda August 7-9, 2012 Page 500 of 2025
Hi Jenny,

The reason I decided to reject the vote is because of a backlash from the animal industry. If we accept the change, this document may never get accepted by the local jurisdiction because of pressure from the animal groups involved with category B animals. That is why it is important to collect more information before any steps are taken.

Thanks
Ajay
Standards Council Supplemental Agenda August 7-9, 2012

July 31, 2012

Amendment: Accept Proposal 150-11, Accept Proposal 150-13, Accept Proposal 150-14, and Accept Proposal 150-15

☐ Agree

If you agree with this amendment, the recommendation will be to accept the proposed language to read as follows:

9.8 Special Requirements for Category A Animals
9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1.
9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.

11.3.7 Special Requirements for Category A Animals.
Class 1 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

12.3.7 Special Requirements for Category A Animals.
Class 2 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

13.3.7 Special Requirements for Category A Animals.
Class 3 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to the previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The committee had previously rejected this proposal. Although a proponent of sprinkler systems, I believe that this requirement becomes too broad in scope and would cause undue hardship to those housing category B animals. Moreover I would suggest to the submitter that any “special requirements” sub-headings for category B animals be broken out into its own “Special Requirements for Category B Animals” section. Installation of fire sprinklers and smoke control systems for “category B animals” would only be a requirement if certain construction and or life-safety conditions were not met, and those conditions must be broken out and listed separately. This would provide the AHJ with a broader spectrum of options.

Signature: [Signature] 6/28/2012

Name - Please Print: Steven J. Heckman, Jr.

Date: 6/28/2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Jenny Depew, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110

EMAIL: jdepew@nfpa.org

July 31, 2012

Standards Council Supplemental Agenda August 7-9, 2012

Page 9 of 25
Dear Jenny,

After considering the ramifications of our mandatory sprinkler requirement, I wish to change my vote to "reject."

Laurie Loveman

Have a barn? Keep it safe from fire. Visit www.firesafetyinbarns.com

NFPA Technical Committee Member - NFPA 150 Fire & Life Safety in Animal Housing Facilities

Meet the firefighters and other folks in 1930s Woodhill, Ohio, all featured in my Firehouse Family Novels

MEMORIES, 2011 Global eBook Awards Winner (Mystery/Suspense)

THE QUARRY, 2011 Global eBook Awards Finalist (Mystery/Amateur Sleuth)

THE FARM FIRES and DEMISE OF THE HORSE FAIRY, 2011 Global eBook Awards Nominees

Read the first chapters at Firehouse Family Novels
Depew, Jenny

From: Bonnie Manley [bmanley@steel.org]
Sent: Tuesday, July 03, 2012 1:22 PM
To: Depew, Jenny
Cc: Golinveaux, Tracy L.; Foley, Patrick; Walker, Nancy; Brad Cronin
Subject: RE: NFPA 150 Ballot Circulation on Amendment 150-1

Jenny,

Please amend my vote from “Agree” to “Do Not Agree”. My reason is as follows: Mandating automatic sprinklers for all animal housing facilities with Category B animals is simply too broad and will greatly limit the adoption of NFPA 150. Rather, it should be fully considered by the committee in the next cycle to ensure that there are no unintended consequences.

Thanks,
Bonnie

From: Depew, Jenny [mailto:JDepew@nfpa.org]
Sent: Friday, June 29, 2012 9:38 AM
To: Depew, Jenny
Cc: Golinveaux, Tracy L.; Foley, Patrick; Walker, Nancy
Subject: NFPA 150 Ballot Circulation on Amendment 150-1

To Technical Committee on Animal Housing Facilities:

Attached please find the Ballot Circulation on NFPA 150, Amendment 150-1. This information has also been posted onto the Document Information page which you may view by going to http://www.nfpa.org/150, signing in and clicking the “Next Edition” tab.

If you wish to submit your ballot or change your vote, please do so no later than Monday, July 9, 2012. Ballots or changes may be submitted to jdepew@nfpa.org or fax to 617-984-7110. If you do not wish to change your vote, no response is necessary.

Thank you.

Jenny Depew
Administrator, Technical Projects
NFPA
1 Batterymarch Park
Quincy, MA 02169
jdepew@nfpa.org
Tel: 617-984-7505
Fax: 617-984-7110

Each Fourth of July, thousands of people are injured while using consumer fireworks. Leave fireworks to the professionals.
www.nfpa.org/fireworks

Check out NFPA on social media…
www.nfpa.org/socialmedia
NFPA 150
TC BALLOT FOR ANIMAL HOUSING FACILITIES
JUNE 2012 ASSOCIATION AMENDMENT 150-1

Amendment: Accept Proposal 150-11, Accept Proposal 150-13, Accept Proposal 150-14, and Accept Proposal 150-15

☐ Agree

If you agree with this amendment, the recommendation will be to accept the proposed language to read as follows:

9.8 Special Requirements for Category A Animals
9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1.
9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.

11.3.7 Special Requirements for Category A Animals.
Class 1 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

12.3.7 Special Requirements for Category A Animals.
Class 2 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

13.3.7 Special Requirements for Category A Animals.
Class 3 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to the previous edition text.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Loss of life, animal or human, is always tragic, but including Category B Animals as indicated above would place an unrealistic burden on businesses that have large quantities of animals in large (and multiple) housing facilities. The animals and facilities would be easily be replaced in the event of a fire loss. The incidence of losses for these types of facilities seems to be minimal which does not warrant the additional cost of providing the suppression. The decision to install fire suppression or smoke control should be a risk based assessment by the owner of the facility.

I do not believe of Sections 11.3.7, 12.3.7, 13.3.7 should include Category B animals, as the majority of these facilities are not subject to occupancy by humans in the same sense that Category A animals are.

Signature: ____________________________

Name - Please Print: MARK S. ROSENBERGER

Date: 7/31/12

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

July 31, 2012
Standards Council Supplemental Agenda August 7-9, 2012
Page 505 of 2025
Jenny,

After review and consideration of additional information, I wish to change my previous vote on the June 2012 Association Amendment 150-1 to reject the proposal (Do Not Agree).

Rich Staniland

Follow us:

www.chubb.com
Hi Jenny,

The reasons for changing my vote to REJECT is based on the impracticality to fully implement the auto sprinkler requirement for (some) animal housing facilities. Sourcing of water and mandated State Laws relating to water can make this revised standard an undue hardship for some. Specifically, I do not agree with the Poultry Federation's opinion that we should abandon updating the code with auto sprinkler implementation as I feel this direction is necessary and should be further pursued.

Regards,
Andrew K. Sullivan
Technical Committee member of NFPA 150

Andrew K. Sullivan, President
THE PROTECTOWIRE CO., INC.
60 Washington Street,
Pembroke, MA 02359 USA
PH:781-826-3878
FX:781-826-2045
Email: asullivan@protectowire.com
WEB: www.protectowire.com

The first name in linear heat detection.
Proposal 150-13 Accept

150-13 Log #15 (11.3.7)

Final Action: Reject

Submitter: Joe Scibetta, BuildingReports

Recommendation: Revise text to read as follows:

11.3.7 Special Requirements for Category A Animals. Class I animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.

Substantiation: In keeping with the proposed changes to Section 9 Paragraph 8, special requirements for Class I Animal Housing Facilities incorporate both animal categories.

Committee Meeting Action: Reject
Committee Statement: See committee action and statement on 150-11 (Log #14).
Number Eligible to Vote: 24
Ballot Results: Affirmative: 20
Ballot Not Returned: 4

Backup Proposal for Committee Statement 150-13

150-11 Log #14 (9.8)

Final Action: Reject

Submitter: Joe Scibetta, BuildingReports

Recommendation: Revise text to read as follows:

9.8 Special Requirements for Category A Animals

9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1.

9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.

Substantiation: In 2009, horse stable fires in Chesapeake City, Maryland and Lebanon, Ohio resulted in a combined death toll of two humans and fifty horses and a property loss value in the millions of dollars. Those tragic losses reveal that, 30 years after NFPA 150 was first published, animal housing fire disasters remain a very real threat to both animals and the humans who care for them. One problem that currently needs to be addressed in NFPA 150 in order to further mitigate loss of life and property is that sprinkler and smoke control system requirements are limited to Category A animals only. While it is true that Category B animals have more mobility than Category A animals and do not pose the same risk to rescuers, and, as such, these animals are not deemed to a safer location, Category B animals are still helpless in the event of a fire. It should not be assumed that Category B animals are attended to constantly and, therefore, do not need the added protection of sprinkler and smoke control systems. In both cases cited above, the fires ignited at an hour of the day when no humans were on the premises to facilitate animal rescue.

According to 4.1.3.1.1 (2), one of the Safety-from-Fire Goals of NFPA 150 is to “provide an environment for animal occupants inside or adjacent to a structure that is reasonably safe from fire...” (italics added). And one of the objectives of the standard, according to 4.1.3.1.2.1, is that facilities be “designed and constructed to protect human and animal occupants not intimate with the initial fire development...”. The goals and objectives in Section 4 do not exclude either animal category and yet limiting sprinkler and smoke control systems to Category A animals does, in fact, exclude Category B animals from being fully embraced by those same goals and objectives. Extending the requirement for sprinkler systems and smoke control systems to Category B animals not only provides a “reasonably safe” environment, but would both address the standard’s goals and objectives and incorporate both animal categories more fully. An environment for Category B animals that can potentially expose them to death-dealing smoke and flame in the absence of sprinkler and smoke control systems, cannot be deemed reasonably safe. The fire that broke out at Plainridge Racetrack in Massachusetts on May 9, 2010 is proof positive of the value of a sprinkler system. All 40 horses intimate with the fire were saved because sprinklers not only activated but the sprinkler system initiated an alarm as well. According to media reports, the fire at Plainridge had the potential to put at risk 200 horses and, fortunately, the sprinkler system had been installed even though it was not required. By requiring sprinkler and smoke control systems in housing for both animal categories, animals and the humans on whom they depend stand a greater chance of rescue from fire and, as a result, NFPA 150 will more closely adhere to the fundamental principles on which it is based, principles which apply to all animal occupants: “Animals are sentient beings with a value greater than that of simple property” and “lack the ability of self-preservation when housed in buildings or other structures” (A.1.1.1)

Committee Meeting Action: Reject
Committee Statement: The committee is seeking public input on the recommendation to require sprinklers for both Category A and B animals.
Number Eligible to Vote: 24
Ballot Results: Affirmative: 19 Abstain: 1
Ballot Not Returned: 4

Explanation of Abstention:
SCIBETTA, J.: Given my strong feelings on the issue that this proposal addresses, I’m unable to vote affirmatively to reject this proposal. However, as I respect and understand the reasoning behind the committee’s decision to reject this proposal and seek public input, I do not wish to vote negatively. As such, I feel that an abstention would be the best action to take at this time.

Comment on Affirmative:
LOVEMAN, L.: Sprinkler systems and smoke control systems should be required in all structures housing a certain number of oxygen-breathing animals, especially where there are not enough employees available at all hours to evacuate the animals.
Proposal 150-14 Accept

150-14 Log #16  Final Action: Reject
(12.3.7)

Submitter: Joe Scibetta, BuildingReports
Recommendation: Revise text to read as follows:
12.3.7 Special Requirements for Category A Animals. Class 2 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.
Substantiation: In keeping with the proposed changes to Section 9 Paragraph 8, special requirements for Class 2 Animal Housing Facilities should incorporate both animal categories.
Committee Meeting Action: Reject
Committee Statement: See committee action and statement on 150-11 (Log #14).
Number Eligible to Vote: 24
Ballot Results: Affirmative: 20
Ballot Not Returned: 4 Biel, M., Filippi, M., Hohbein, T., Nappo, T.

Backup Proposal for Committee Statement 150-14

150-11 Log #14  Final Action: Reject
(9.8)

Submitter: Joe Scibetta, BuildingReports
Recommendation: Revise text to read as follows:
9.8 Special Requirements for Category A Animals
9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1
9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.
Substantiation: In 2009, horse stable fires in Chesapeake City, Maryland and Lebanon, Ohio resulted in a combined death toll of two humans and fifty horses and a property loss value in the millions of dollars. Those tragic losses reveal that, 30 years after NFPA 150 was first published, animal housing fire disasters remain a very real threat to both animals and the humans who care for them. One problem that currently needs to be addressed in NFPA 150 in order to further mitigate loss of life and property is that sprinkler and smoke control system requirements are limited to Category A animals only. While it is true that Category B animals have more mobility than Category A animals and do not pose the same risk potential to rescuers, and, as such, can more easily be moved to a safer location, Category B animals are still helpless in the event of a fire. It should not be assumed that Category B animals are attended to constantly and, therefore, do not need the added protection of sprinkler and smoke control systems. In both cases cited above, the fires ignited at an hour of the day when no humans were on the premises to facilitate animal rescue. According to 4.1.3.1.1. (2), one of the Safety-from-Fire Goals of NFPA 150 is to provide an environment for animal occupants not intimate with a structure that is reasonably safe from fire... “ (italics added). And one of the objectives of the standard, according to 4.1.3.1.2.1, is that facilities be “designed and constructed to protect human and animal occupants not intimate with the initial fire development... “. The goals and objectives in Section 4 do not exclude either animal category and yet limiting sprinkler and smoke control systems to Category A animals does, in fact, exclude Category B animals from being fully embraced by those same goals and objectives. Extending the requirement for sprinkler systems and smoke control systems to Category B animals not only provides a “reasonably safe” environment, but would both address the standard’s goals and objectives and incorporate both animal categories more fully. An environment for Category B animals that can potentially expose them to death-dealing smoke and flame in the absence of sprinkler and smoke control systems, cannot be deemed reasonably safe. The fire that broke out at Plainridge Racetrack in Massachusetts on May 9, 2010 is proof positive of the value of a sprinkler system. All 40 horses intimate with the fire were saved because sprinklers not only activated but the sprinkler system initiated an alarm as well. According to media reports, the fire at Plainridge had the potential to put at risk 200 horses and, fortunately, the sprinkler system had been installed even though it was not required. By requiring sprinkler and smoke control systems in housing for both animal categories, animals and the humans on whom they depend stand a greater chance of rescue from fire and, as a result, NFPA 150 will more closely adhere to the fundamental principles on which it is based, principles which apply to all animal occupants: “Animals are sentient beings with a value greater than that of simple property” and “lack the ability of self-preservation when housed in buildings or other structures” (A.1.1.1)
Committee Meeting Action: Reject
Committee Statement: The committee is seeking public input on the recommendation to require sprinklers for both Category A and B animals.
Number Eligible to Vote: 24
Ballot Results: Affirmative: 19 Abstain: 1
Ballot Not Returned: 4 Biel, M., Filippi, M., Hohbein, T., Nappo, T.
Explanation of Abstention: SCIBETTA, J.: Given my strong feelings on the issue that this proposal addresses, I’m unable to vote affirmatively to reject this proposal. However, as I respect and understand the reasoning behind the committee’s decision to reject this proposal and seek public input, I do not wish to vote negatively. As such, I feel that an abstention would be the best action to take at this time.
Comment on Affirmative: LOVEMAN, L.: Sprinkler systems and smoke control systems should be required in all structures housing a certain number of oxygen-breathing animals, especially where there are not enough employees available at all hours to evacuate the animals.
Proposal 150-11 Accept

150-11 Log #14 Final Action: Reject (9.8)

Submitter: Joe Scibetta, BuildingReports

Recommendation: Revise text to read as follows:

9.8 Special Requirements for Category A Animals

9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1.

9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.

Substantiation: In 2009, horse stable fires in Chesapeake City, Maryland and Lebanon, Ohio resulted in a combined death toll of two humans and fifty horses and a property loss value in the millions of dollars. Those tragic losses reveal that, 30 years after NFPA 150 was first published, animal housing fire disasters remain a very real threat to both animals and the humans who care for them. One problem that currently needs to be addressed in NFPA 150 in order to further mitigate loss of life and property is that sprinkler and smoke control system requirements are limited to Category A animals only. While it is true that Category B animals have more mobility than Category A animals and do not pose the same risk potential to rescuers, and, as such, can more easily be moved to a safer location, Category B animals are still helpless in the event of a fire. It should not be assumed that Category B animals are attended to constantly and, therefore, do not need the added protection of sprinkler and smoke control systems. In both cases cited above, the fires ignited at an hour of the day when no humans were on the premises to facilitate animal rescue. According to 4.1.3.1.1. (2), one of the Safety-from-Fire Goals of NFPA 150 is to “provide an environment for animal occupants inside or adjacent to a structure that is reasonably safe from fire...” (italics added). And one of the objectives of the standard, according to 4.1.3.1.2.1, is that facilities be “designed and constructed to protect human and animal occupants not intimate with the initial fire development... “. The goals and objectives in Section 4 do not exclude either animal category and yet limiting sprinkler and smoke control systems to Category A animals does, in fact, exclude Category B animals from being fully embraced by those same goals and objectives. Extending the requirement for sprinkler systems and smoke control systems to Category B animals would fulfill the “reasonably safe” environment, but would both address the standard’s goals and objectives and incorporate both animal categories more fully. An environment for Category B animals that can potentially expose them to death-dealing smoke and flame in the absence of sprinkler and smoke control systems, cannot be deemed reasonably safe. The fire that broke out at Plainridge Racetrack in Massachusetts on May 9, 2010 is proof positive of the value of a sprinkler system. All 40 horses intimate with the fire were saved because sprinklers not only activated but the sprinkler system initiated an alarm as well. According to media reports, the fire at Plainridge had the potential to put at risk 200 horses and, fortunately, the sprinkler system had been installed even though it was not required. By requiring sprinkler and smoke control systems in housing for both animal categories, animals and the humans on whom they depend stand a greater chance of rescue from fire and, as a result, NFPA 150 will more closely adhere to the fundamental principles on which it is based, principles which apply to all animal occupants: “Animals are sentient beings with a value greater than that of simple property” and “lack the ability of self-preservation when housed in buildings or other structures” (A.1.1.1).

Committee Meeting Action: Reject

Committee Statement: The committee is seeking public input on the recommendation to require sprinklers for both Category A and B animals.

Number Eligible to Vote: 24

Ballot Results: Affirmative: 19 Abstain: 1

Ballot Not Returned: 4 Biel, M., Filippi, M., Hohbein, T., Nappo, T.

Explanation of Abstention:

SCIBETTA, J.: Given my strong feelings on the issue that this proposal addresses, I’m unable to vote affirmatively to reject this proposal. However, as I respect and understand the reasoning behind the committee’s decision to reject this proposal and seek public input, I do not wish to vote negatively. As such, I feel that an abstention would be the best action to take at this time.

Comment on Affirmative:

LOVEMAN, L.: Sprinkler systems and smoke control systems should be required in all structures housing a certain number of oxygen-breathing animals, especially where there are not enough employees available at all hours to evacuate the animals.
Proposition 150-15 Accept [Note: The section at the start of the Recommendation is a typo it should be 13.3.7]

150-15 Log #17 Final Action: Reject (13.3.7)

Submitter: Joe Scibetta, BuildingReports
Recommendation: Revise text to read as follows:
3.3.7 Special Requirements for Category A Animals. Class 3 animal housing facilities with Category A animals or Category B animals shall be in accordance with Section 9.8.
Substantiation: In keeping with the proposed changes to Section 9 Paragraph 8, special requirements for Class 3 Animal Housing Facilities should incorporate both animal categories.
Committee Meeting Action: Reject
Committee Statement: See committee action and statement on 150-11 (Log #14).
Number Eligible to Vote: 24
Ballot Results: Affirmative: 20
Ballot Not Returned: 4 Biel, M., Filippi, M., Hohbein, T., Nappo, T.

Backup Proposal for Committee Statement 150-15

150-11 Log #14 Final Action: Reject (9.8)

Submitter: Joe Scibetta, BuildingReports
Recommendation: Revise text to read as follows: 9.8 Special Requirements for Category A Animals
9.8.1 Sprinkler Systems. Animal housing facilities with Category A animals or Category B animals shall be sprinklered throughout in accordance with Section 9.2.1
9.8.2 Smoke Control Systems. Animal housing facilities with Category A animals or Category B animals shall have a smoke control system unless modified as approved by the AHJ.
Substantiation: In 2009, horse stable fires in Chesapeake City, Maryland and Lebanon, Ohio resulted in a combined death toll of two humans and fifty horses and a property loss value in the millions of dollars. Those tragic losses reveal that, 30 years after NFPA 150 was first published, animal housing fire disasters remain a very real threat to both animals and the humans who care for them. One problem that currently needs to be addressed in NFPA 150 in order to further mitigate loss of life and property is that sprinkler and smoke control system requirements are limited to Category A animals only. While it is true that Category B animals have more mobility than Category A animals and do not pose the same risk potential to rescuers and, as such, can more easily be moved to a safer location, Category B animals are still at risk, given the onset of a fire. It should not be assumed that Category B animals are attended to constantly and, therefore, do not need the added protection of sprinkler and smoke control systems. In both cases cited above, the fires ignited at an hour of the day when no humans were on premises to facilitate animal rescue. According to 4.1.3.1.1 (2), one of the Safety-from-Fire Goals of NFPA 150 is to “provide an environment for animal occupants inside or adjacent to a structure that is reasonably safe from fire...” (italics added). And one of the objectives of the standard, according to 4.1.3.1.2.1, is that facilities be “designed and constructed to protect human and animal occupants not intimate with the initial fire development...”. The goals and objectives in Section 4 do not exclude either animal category and yet limiting sprinkler and smoke control systems to Category A animals does, in fact, exclude Category B animals from being fully embraced by those same goals and objectives. Extending the requirement for sprinkler systems and smoke control systems to Category B animals only not only provides a “reasonably safe” environment, but would both address the standard’s goals and objectives and incorporate both animal categories more fully. An environment for Category B animals that can potentially expose them to death-dealing smoke and flame in the absence of sprinkler and smoke control systems, cannot be deemed reasonably safe. The fire that broke out at Plainridge Racetrack in Massachusetts on May 9, 2010 is proof positive of the value of a sprinkler system. All 40 horses intimate with the fire were saved because sprinklers not only activated but the sprinkler system initiated an alarm as well. According to media reports, the fire at Plainridge had the potential to put at risk 200 horses and, fortunately, the sprinkler system had been installed even though it was not required. By requiring sprinkler and smoke control systems in housing for both animal categories, animals and the humans on whom they depend stand a greater chance of rescue from fire, and flame in the absence of sprinkler and smoke control systems, cannot be deemed reasonably safe. The fire that broke out at Plainridge and initiated an alarm as well...

Number Eligible to Vote: 24
Ballot Results: Affirmative: 19 Abstain: 1
Ballot Not Returned: 4 Biel, M., Filippi, M., Hohbein, T., Nappo, T.
Explaination of Abstention:
SCIBETTA, J.: Given my strong feelings on the issue that this proposal addresses, I’m unable to vote affirmatively to reject this proposal. However, as I respect and understand the reasoning behind the committee’s decision to reject this proposal and seek public input, I do not wish to vote negatively. As such, I feel that an abstention would be the best action to take at this time.

Comment on Affirmative:
LOVEMAN, L.: Sprinkler systems and smoke control systems should be required in all structures housing a certain number of oxygen-breathing animals, especially where there are not enough employees available at all hours to evacuate the animals.
MR. SCIBETTA: My name is Joe Scibetta. I'm a principal member on the technical committee for NFPA 150. I rise to call for the acceptance of Group Amending Motion 150-1.

PRESIDING OFFICER HARRINGTON: Do I have a second?

UNKNOWN SPEAKER: Second.

PRESIDING OFFICER HARRINGTON: Please proceed.

MR. SCIBETTA: NFPA 150 separates animals into two categories, Category A and Category B. Category A animals or those that, one, pose a potential risk in the health and safety rescuers; two, cannot be removed without risk to their health or the health of other animals; three, are impossible or impractical to move; four, are not mobile or within a mobile enclosure. Given that wording, facilities such as zoos, animal research labs, veterinarian clinics contain Category A animals; therefore, this motion does not apply to those facilities.

In Chapter 9 of NFPA 150, Section 8 it reads, "Animal housing facilities with Category A animals shall be sprinklers throughout and shall have a smoke control system."

You'll note that Category B animals are not included in that statement. That is because NFPA 150 does not mandate sprinkler protection or smoke control for Category B animals, defined simply as those animals not in Category A.

A prime example of a Category B animal is the horses in a commercial stable. In most cases, horse do not pose a potential risk to the health and safety of rescuers. They can be removed without risk to their health or the health of other animals are both possible and practical to move and are mobile, able to be led with the use of a halter.

NFPA 150 was created as a response to a series of tragic racetrack stable fires in the
15 1970s. In fact, the first version of NFPA 150 was
titled "Fire Safety in Racetrack Stables."
16 With tragic irony, NFPA 150 now includes
17 the very animals that document set out to protect
18 when it was first formulated by excluding horses in
19 commercial stables and all other animals in
20 Category B for sprinkler and smoke control
21 protection.
22 The purpose of this motion, therefore, is
23 to extend the protection of sprinklers and smoke
24 controls already afforded to Category A animals to
25 Category B animals as well.
26 I'll pause for the one-minute warning,
27 Mr. Chairman.
28 PRESIDING OFFICER HARRINGTON: Yes. You
do have one minute remaining. Thank you.
29 MR. SCIBETTA: This addition to this
30 standard will only affect newly constructed
31 commercial animal housing facilities that contain
32 Category B animals. Existing facilities with
33 Category B animals will only be affected if there
34 were changes in occupancy or use or if there was a
35 renovation modification reconstruction or addition.
36 Each class of facility will also be protected for
37 both animal categories. That is, facilities with
38 no access to animals or with limited access to
39 animals or with general access to animals.
40 To my fellow NFPA members, I thank you in
41 advance for considering this important motion.
42 PRESIDING OFFICER HARRINGTON: Thank you,
43 Mr. Scibetta.
44 I just want to clarify that the motion on
45 the floor is a group amending motion. So,
46 actually, the motion is to accept proposal 150-11,
47 150-13, 150-14, and 150-15 as a group.
48 Mr. Cronen, do you have any comments from
49 the committee?
50 MR. CRONEN: Yes. Of the 24 voting
51 members, 20 returned votes. And out of those 20,
with the exception of one of the proposals, it was 19 in favor. With one extension, they were all unanimously in favor of this change -- or excuse me -- this remaining the same.

And the reason for that is the committee is not against sprinklers, not against sprinklers in these types of facilities. In fact, in our substantiation, we put forth that we're going to look at this in between revision cycles and that we are bringing it up again in the next revision cycle.

I know many of you out there are probably passionate about sprinkler systems. Maybe you sell them, install them, design them; or you've just seen their benefit over the years; and these committee members on this committee are no different.

And what we wanted to do is to simply get more input from the associations that are going to be affected by the industries that are going to be affected by this sweeping change in facilities. As Mr. Scibetta said, the document started out as racetrack stables; and it has only changed in scope in the last two revision cycles to include all animal housing facilities.

Because of that change and because of its adoption in 2009 into the Uniform Fire Code by reference, we now have a multitude of facilities that are included under the scope of this document. Because it was just recent and these changes were just recently made, we haven't had the input from the industries that are going to be affected by this thing; and we think that they deserve that input.

Thank you.

PRESIDING OFFICER HARRINGTON: Thank you, Mr. Cronen.

So with that, we'll open up the floor for debate on the motion. Please provide your name and affiliation and whether you're speaking in support
Okay. Seeing nobody rise to speak on this motion, we're going move on to a vote. Sorry.

Microphone 7.

MR. SCIBETTA: Joe Scibetta, technical committee for NFPA 150 speaking in favor of the motion on the floor.

Next year will mark the 100th anniversary of Ms. Francis Perkins' address to NFPA in 1913, which was a plea for changes to be made to the existing fire codes in her day. Regarding those who work in factories, she made this remark.

"They cannot secure fire protection for themselves. It is because they are not their own masters, that it is necessary for organizations like yours to insist upon safety for them," end quote.

Those words apply with equal, if not greater force, to confined animals who most certainly are not their own masters and are powerless to secure protection for themselves.

NFPA 150 defines animals as "sentient beings." The word "sentient" is no longer common use today, but it is defined as having the power of perception by the census -- conscious.

When caught in a fire, animals don't understand why they can't breathe or why they are in such agony. They do, however, perceive and are conscious of the sheer terror of their situation and the terrible sensations of burning, suffocation, and pain.

To quote Ms. Perkins again with regard to this issue, we must insist upon safety for them.

In commercial animal housing facilities, when we confine animals to suit human purposes, we have an obligation to secure fire protection for them, especially due to the fact that in most of the recent fire -- animal housing fire cases, humans were not on hand to effect rescue.

This motion does not introduce some new...
revolution concept or speaking change to the
standard or to our industry. I feel that very
strongly. On the contrary, this motion calls for
the extension of known and proven fire protection
technology to all animals in newly-constructed
facilities.

Thank you.
PRESIDING OFFICER HARRINGTON: Thank you.
Seeing no one else rise, Mr. Chair, do you have any
final remarks?
MR. CRONEN: Okay. Thank you.
I will just say, in response to
Mr. Scibetta, it was absolutely the Committee's
feeling that that protection of animals as sentient
beings is what drove us to rejecting this proposal.
It is an adopted standard by reference in the
Uniform Fire Code, and as now, we have protection
for some groups in some areas; and our fear was
that it will certain -- it will be removed by
reference in jurisdictions if it was given this
blanket sprinkler requirement.
Thank you.
PRESIDING OFFICER HARRINGTON: Thank you,
Mr. Chair.
So before we vote, let me restate the
motion that's in front of you -- well, he's back.
MR. SCIBETTA: Joe Scibetta, technical
committee member for NFPA 150, speaking in favor of
the motion on the floor.
Two recent incidents underscore the
difference the sprinkler protections make in an
animal housing fire.
A fire broke out at 3:00 a.m. at the
Plainville Racetrack in Plainridge, Massachusetts
on May 9, 2010. The racetrack had sprinkler
protection in each barn, and the sprinkler system
was tied into the fire alarm. The signal was sent.
The fire department was dispatched while the
sprinklers, according to the fire chief on
location, were essential for knocking down the blaze. All 42 horses were rescued without injury.

In contrast, just two months ago on April 11, a fire broke out at 5:00 p.m. at the unsprinklered Black Tie Stable in McHenry County. Were there people on hand to assist? Most definitely. But the fire was too powerful too intense. More than 100,000 gallons of water had to be tanked in by 21 departments to put out the blaze, which had a long and deadly head start, killing 18 horses.

As an industry, we are faced with far more technical and costly challenges than what this motion is calling for. We do not need more research, more time than money spent to discover what we already know to be true -- sprinkler and smoke technology work.

An interesting comment was made in the most recently edition of the NFPA Journal regarding sprinkler protection. The context was detention facilities, but the words can be applied equally to animal housing facilities.

Here's the quote: "In a building without readily access, life safety must be provided by managing the fire in place. Automatic fire sprinklers give us that capability," end quote.

There are no readily accessible access for a confined animal. In most cases, when fire breaks out, there are no humans on hand to get them safely to the access before they are engulfed in smoking flames.

Please pass this motion so that NFPA 150 will be able to actually stand by one of its fundamental goals; namely, to provide an environment for animal occupants inside or adjacent to a structure that is reasonably safe from fire.

I'll pause for the one-minute warning, Mr. Chairman.

PRESIDING OFFICER HARRINGTON: You do have one minute remaining.
MR. SCIBETTA: Leaving animals to the ravages of fire confined unable to escape without sprinkler protection or smoke control placed, is not an environment that can be deemed reasonably safe from fire. Our industry is unique in its intelligence, flexibility, and ingenuity. When we add to that willingness to apply those attributes, then nothing can stop us from moving forward in achieving whatever we set out to do. I hope that our votes today indicate that we are ready to bring that intelligence, flexibility, and ingenuity to this issue; and coupled with technology we already possessed with the willingness to apply it.

PRESIDING OFFICER HARRINGTON: Thank you. Do you have any final comments? Are you all set?

MR. CRONEN: No.

PRESIDING OFFICER HARRINGTON: Okay.

Thank you, Mr. Chair.

Before we vote, we're ready now to vote. Let me restate the motion so it's clear what we're voting on. The motion on the floor is to accept the group proposals 150-11, 150-13, 150-14 and 150-15. So please record your vote one in favor of the motion, two opposed to the motion. The ballot is closing in five seconds. Balloting closed. And the motion passes.
July 9, 2012

Re: NFPA 150 Standard on Fire and Life Safety in Animal Housing Facilities
Appeal of Technical Committee Amendment

Secretary Cronin:

The undersigned organizations hereby submit this appeal of the recent June 14, 2012 decision of the National Fire Protection Association (NFPA) Technical Committee to amend its 150 Standard for Fire and Life Safety in Animal Housing Facilities by requiring the installation of sprinkler and smoke control systems in animal housing facilities for Category B animals. These organizations – or their members – own and operate the overwhelming majority of animal housing facilities in the United States that produce or contribute to the production of the livestock and poultry in the United States. These farmers and ranchers are committed to the practice of good animal husbandry, the welfare of the animals in their care, and they take great pride in providing this country with abundant, safe, affordable, and high quality meat, milk and eggs. No one feels the loss of their animals more acutely than them, and no one understands the devastating implications of major fires on their operations. No one has more incentive than they do to protect the health and safety of their animals and in the process their businesses and livelihoods. These producers will be directly affected and harmed by the amended NFPA 150 standard.

The adoption of the amended NFPA standard for livestock and poultry operations would result in enormous costs and significant technical and operational disruptions, with what appears to be little actual or observable benefit to the welfare, health, and safety of the animals. Should NFPA fail to engage fully and properly with agricultural producers like those represented by our organizations, NFPA will be violating its own and other applicable standards for process and will damage the credibility of the NFPA standards setting process for the agricultural community as a whole. For these and other reasons discussed in more detail below we encourage the Standards Council to revoke and remand the amendment to the NFPA 150 standard back to the Technical Committee. The provision merits further investigation, development and work with the agricultural community on reducing and properly managing the risk of fire in animal housing facilities, and we would be happy to engage with the Technical Committee in that work.

The National Pork Producers Council (NPPC) is an association of 43 state pork producer organizations and the voice in Washington for the nation’s 67,000 pork producers. The U.S. pork industry represents a significant value-added activity in the agriculture economy and the overall U.S. economy. Nationwide, more than 67,000 pork producers marketed more than 110

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1 In addition to this appeal, on July 2, 2012, the undersigned organizations filed notice of their intent to appeal and requested an opportunity to present this appeal, in person, before the Standard Council during its scheduled meeting over August 7 through August 9, 2012 when this appeal will be heard.
million hogs in 2005, and those animals provided total gross receipts of $15 billion. Overall, an estimated $20.7 billion of personal income and $34.5 billion of gross national product are supported by the U.S. hog industry.

The U.S. Poultry & Egg Association (USPOULTRY) is the world’s largest poultry organization, whose membership includes producers of broilers, turkeys, ducks, eggs and breeding stock, as well as allied companies. The Association focuses on research, education and technical services, as well as communications to keep members of the poultry industry current on important issues.

The United Egg Producers (UEP) is a farmer cooperative representing over 80 percent of egg operations nationwide. Our industry is important to national, state, and local economies, supplying approximately 245 eggs per year to each of the nation's 300 million people. The industry produces 77 Billion eggs per year, with nearly 100,000 jobs and nearly $15 Billion demand in the U.S. economy. Most of our producer members own their flocks and do not contract production as is the practice in other sectors of the poultry industry. Most egg production operations are integrated from the point of production through the final marketing of the eggs.

The National Chicken Council (NCC) is a nonprofit member organization representing companies that produce and process over 95 percent of the broiler/fryer chickens marketed in the United States. NCC promotes the production, marketing, and consumption of safe, wholesome, and nutritious chicken products both domestically and internationally. NCC serves as an advocate on behalf of its members with regard to the development and implementation of federal and state programs and regulations that affect the chicken industry.

The National Council of Farmer Cooperatives (NCFC) has been the voice of America's farmer cooperatives since 1929. Its members are regional and national farmer cooperatives, which are in turn composed of over 2,500 local farmer cooperatives across the country. NCFC members also include 21 state and regional councils of cooperatives. NCFC's farmer cooperative members are engaged in every stage of food production and the entire agricultural system, from the inputs that make farming possible to processing or manufacture of wholesale and retail food and consumer products. NCFC values farmer ownership and control in the production and distribution chain, the economic viability of farmers and the businesses they own, and vibrant rural communities.

The National Turkey Federation is the national advocate for all segments of the turkey industry, providing services and conducting activities which increase demand for its members' products by protecting and enhancing their ability to profitably provide wholesome, high-quality, nutritious products.

The American Farm Bureau Federation (Farm Bureau) is the country’s largest general farm organization with more than 6.2 million member families nationwide who grow, produce and raise the food, fiber and energy sources that feed, clothe and fuel the U.S. and the world. With farms and ranches in all 50 states as well as Puerto Rico, Farm Bureau represents producers of every size and scale of operation.
The National Milk Producers Federation (NMPF), based in Arlington, VA, develops and carries out policies that advance the well-being of dairy producers and the cooperatives they own, some of whom have also separately signed on to this appeal. The members of NMPF’s 31 cooperatives, a number of whom are also directly appealing the amended NFPA 150 standard, produce the majority of the U.S. milk supply, making NMPF the voice of more than 32,000 dairy producers on Capitol Hill and with government agencies.

The National Cattlemen’s Beef Association (NCBA) is the marketing organization and trade association for America’s cattle farmers and ranchers. With offices in Denver and Washington, D.C., NCBA is a consumer-focused, producer-directed organization representing the largest segment of the nation’s food and fiber industry. NCBA represents tens of thousands of America’s farmers, ranchers and cattlemen who provide much of the nation’s supply of food. Its members are proud of their tradition as stewards and conservators of America’s land, and good neighbors to their communities.

The farms and ranches owned by the members of these organizations include the overwhelming majority of those that meet the definition of both NFPA Class 1 Facilities, such as livestock, poultry and dairy barns, and the corresponding Category B animal housing facility as defined by NFPA 150. They seek to appeal the decision to amend the NFPA 150 standard and focus on the following five major areas of concern:

I. The failure to properly and fully meet applicable NFPA and American National Standards Institute (ANSI) due process standards in several critical areas;
II. The lack of an applicable, substantively rigorous documented record of fire issues at livestock and poultry operations capable of supporting the decision to call for the sector-wide adoption of sprinklers;
III. The estimated billions of dollars for the installation and maintenance costs of these sprinkler systems, and the fact that these costs are not balanced by any meaningful fire risk management benefits for the animals and the producers’ operations;
IV. The apparent physical and technical impracticability, for significant majorities of livestock and poultry producers, of complying with the amended NFPA 150; and
V. The tremendous risk of real harm to the health and biosecurity of their animals, particularly in light of the corresponding NFPA 25 inspection standards.

Background on Action

NFPA 150 defines two classes of animals:

6.3.1.1. Category A. Category A animals shall include any of the following types of animals:
(1) Animal(s) that pose a potential risk to the health or safety of rescuers or the general public
(2) Animal(s) that cannot be removed without potential risk to the health and welfare of the animal or other animals
(3) Animal(s) that are impossible or impractical to move
(4) Animal(s) that are not mobile or within a mobile enclosure.
6.3.1.2 Category B. Category B animals shall include all animals not in Category A, as specified in 6.3.1.1.

On June 14, 2012 at the NFPA Association Technical Meeting, NFPA’s Technical Committee adopted a floor motion, by an apparent vote of 126-46, to amend the NFPA 150 standard. This expands the requirement for sprinkler and smoke control systems in animal housing facilities from just those holding Category A animals, to also include facilities housing Category B animals which includes every single facility that houses an animal. This substantial expansion, therefore covers far more animal housing facilities than had been previously covered, including expanding NFPA 150 to cover nearly every single livestock farm in the United States.

Prior to its floor vote, the NFPA Technical Committee on Animal Housing Facilities also considered the amendment. In that action, following a submission that focused on the damage caused by a number of fires at horse stables, the Technical Committee on Animal Housing Facilities unanimously rejected (with one member abstaining) the proposal stating the need to seek “public input on the recommendation to require sprinklers for both Category A and B animals.”

It is our understanding that following the June 14, 2012 floor approval by the full NFPA Technical Committee, two actions took place. First, the amendment was referred back to the Technical Committee on Animal Housing for further consideration. Second, a 20 day calendar for filing notice of the intent to appeal the June 14, 2012 Technical Committee approval to the NFPA Standard Council began running, with the deadline for filing notice of the intent to appeal expiring on July 4, 2012. NFPA staff has indicated to us a deadline of July 9, 2012 for filing this actual written appeal, which will be addressed at the Standards Council meeting on August 7th through 9th, 2012.

Farmers and Ranchers and Fire

Farmers and ranchers can only succeed in their chosen life’s work and as business people if their cattle, pigs, chickens, turkeys and other livestock are healthy and productive. No one has more incentive than a farmer or rancher to ensure that effective, sensible fire safety measures and procedures are in place on their operations. Farmers and ranchers and their families invest a great deal of themselves into raising and maintaining their animals, and they love to see them thrive. No one feels their loss due to accident, operational errors, disease or fire more acutely than them. Furthermore, put simply, fire is very bad for business. When animals perish, the meat, milk, or egg production from them ceases, customers become dissatisfied and must look for other suppliers, and businesses and livelihoods that have taken many decades and often many generations to build are put at risk. This hard reality helps ensure that the health, welfare and safety of our members’ herds or flocks, including protecting them from the risk of fire, is always foremost in their minds.

This reality has implications, we feel, for how NFPA should best work with farmers and ranchers. It bears stating the obvious; most every member of the undersigned organizations has been engaged in raising and caring for animals, and sustaining, growing and caring for successful agricultural businesses. It is highly disconcerting for many producers when outside parties come to them and say that “you are not raising your animals or managing your businesses correctly and we are going to dictate to you how to do it right.” Unfortunately, if NFPA does adopt this new
fire sprinkler standard, given the lack of open and constructive engagement with farmers and ranchers to this point, it is almost unavoidable that farmers and ranchers will be highly offended by your actions. This is not to say that farmers’ and ranchers’ fire risk management strategies and programs cannot be improved. Fires do happen, and animals are lost, and it is likely that fire safety practices can be improved in many instances. The fact is that producers are generally very open to learning from experienced professionals such as those in the fire protection industry about how they can do better and be more successful. Were NFPA to approach producers’ with open minds about their operations, an offer to share your expertise to see if fire risk management might improve their animal husbandry practices, and a willingness to learn from the producers themselves, something very positive and useful could be the result.

We ask that you bring this perspective to the issues we discuss below.

Discussion of Six Major Concerns

1. The amendment process to this point has failed to meet proper and applicable NFPA and American National Standards Institute (ANSI) due process standards in at least six of seven critical areas.

   The essential principal of due process is fairness. In order to satisfy the basic elements of due process, an entity must be given adequate notice and an opportunity to be heard. It is not a guarantee of an outcome, but instead a basic requirement that a proceeding be conducted in a fundamentally fair manner. While satisfying these elements is always important, from our perspective it is critical in this particular instance that NFPA exert special efforts to meet these requirements. These sprinkler measures would be pervasive in their applicability, have major and daunting technical problems for the entire sector that are as yet not properly understood or resolved, involve staggering costs in the billions of dollars, entail significant ancillary but direct health and welfare risks to the animals, and are clearly novel to animal agriculture sector. Looked at from the perspective of national policy, NFPA is considering an action that could have enormous negative effects on more than half of the Nation’s food production system that is helping to feed a half a billion people or more today and will be called upon to help feed approximately a billion or more people by 2050. Only through an exceptionally well-informed and thoughtful process can NFPA be sure that it has adopted the correct standard in this instance. As a matter of fairness and good policy-making, there simply are **no** acceptable reasons for short-cuts or half measures in due process.

   We recognize that we are not telling the NFPA something that it does not already fully understand as a matter of general policy. NFPA’s “Guide for the Conduct of Participants in the NFPA Codes and Standards Development Process” states that “[p]articipants should encourage full participation in the Codes and Standards Development Process by _all interested persons_, and they should encourage and facilitate the full and open dissemination of _all_ information necessary to enable full and fair consideration of _all points of view._” Only when all interested and affected parties are present and can participate will NFPA be able to properly judge the proposed changes and develop the best possible fire safety standards. Additionally, NFPA recognizes in its “Introduction to the BFPA Codes and Standards Process” that due process and fairness are of upmost importance throughout the codes and standard development process.
Finally, Step 4 of the NFPA standards development process includes the ability of stakeholders and other interested parties to appeal decisions to, amongst other reasons, assure that “all NFPA rules have been followed and that due process and fairness have been upheld throughout the standards development process.”2 This isn’t surprising, because in order to develop the best standards possible, NFPA must have all the relevant and important information before it. And, as this appeal will demonstrate, when vital information is lacking, the NFPA is at risk of developing inappropriate standards.

Furthermore, NFPA is a member of ANSI and plays leadership roles in that organization. As expected, NFPA’s due process standards mirrors ANSI’s, which state that it means “any person (organization, company, government agency, individual, etc.) with a direct and material interest has a right to participate by: a) expressing a position and its basis, b) having that position considered, and c) having the right to appeal. Due process allows for equity and fair play.”3 ANSI establishes seven minimum acceptable due process requirements for the development of consensus: openness, lack of dominance, balance, coordination and harmonization, notification, consideration of views and objections, consensus vote, and appeals. The NFPA process on this amendment to date has failed with respect to the notification standard, which in turn and by and large means that the minimum elements dealing with openness, consideration of views, and balance could not be met. Lastly, we have serious issues with the schedule of this appeals process itself.

**Notification**—None of the national animal agricultural organizations were aware of the multi-year process in which the NFPA 150 Technical Committee was engaged on this matter, and it was only a few days before the June 2012 Association Technical Meeting in Las Vegas before the first of us learned of the motion to be entertained there. The ANSI standard says that “standards activity shall be announced in suitable media as appropriate to demonstrate an opportunity for participation by all directly and materially affected persons” We are unaware of any suitable notification having been given in the print or electronic media commonly read by members of the animal agriculture community. Neither was there any direct outreach to any of the national agricultural organizations.

As a result, it is clear that the farmers and ranchers who operate and maintain livestock housing facilities were neither informed of the NFPA’s action nor provided an opportunity to participate. While a 2011 meeting of the NFPA 150 Technical Committee included a representative from the Rhode Island Farm Bureau, and the comments offered by the farm bureau representative appear to have been thoughtful and accurate, there is no way that person could fully and properly represent wide-ranging and complicated fire management interests of the producers in the states where animal agricultural production takes place.

**Openness and Consideration of Views**—One of the results of the lack of notification was to make it impossible for this process to effectively conform to the “openness” element of the ANSI due process standard (“Participation shall be open to all persons who are directly and materially affected by the activity in question.”). Similarly, the lack of notification means that there was no effective mechanism for the consideration of animal agriculture’s views, as they

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2 See generally [www.nfpa.org](http://www.nfpa.org)/ Step 4: Council Appeals and Issuance of Standard

3 See “ANSI Essential Requirements: Due process requirements for American National Standards,” January, 2012, page 2. Each of the subsequent references to the ANSI due process standards are found in this same document and location.
could not participate (“Prompt consideration shall be given to the written views and objections of all participants…”). While we have learned that this process, including the voting at the June 2012 Association Technical Meeting, was open to non-NFPA members, this openness is meaningless if essentially the entire body of the stakeholders most affected by the decision has no idea that the process is underway.

Furthermore, much of the internal documents prepared for the NFPA’s deliberations, and therefore necessary to the effective participation in the NFPA 150 amendment process (as well as in this appeal), simply are not open to stakeholder review. For instance, in preparing this appeal we learned that the NFPA staff prepared and issued a report in June presenting what appears to be a narrow snapshot of fire incidents in animal agriculture. But that report is only available to NFPA members and cannot be reviewed by us or any other NFPA non-member. This lack of openness means that we cannot provide you with comments or views on this record. Lastly, when we made our initial phone calls to the NFPA national office to seek information about this process, we were told that unless we were current, dues paying, NFPA members we would not be able to speak with technical staff about the matter. Fortunately, we persisted and found staff contact information that didn’t involve going through the switchboard. That staff, when contacted, was more than willing to share information with us and provide assistance in understanding the complex NFPA rules and procedures. But certainly, the initial reaction we received from the NFPA front office was deeply troubling and automatically raises concerns about the openness of this process.

Balance—ANSI’s standard says that “Participants from diverse interest categories shall be sought with the objective of achieving balance. If a consensus body lacks balance in accordance with the historical criteria for balance, and no specific alternative formulation of balance was approved by the ANSI Executive Standards Council, outreach to achieve balance shall be undertaken.” It is our understanding that NFPA conducted no active outreach to any of the national animal agriculture organizations or their producer members in the major agricultural states. Certainly, the composition of the Technical Committee itself reflects a total lack of balance, lacking participants from commercially sized animal agriculture facilities. Instead the committee is made up of fire safety professionals, engineers, consultants, advocates, equipment and materials manufacturers, installers, inspectors, academics, medical and research lab operators, insurance specialists, marshals, and equestrian center operators. We do not mean to imply that the committee make-up led it to an incorrect decision, as the opposite is what occurred. The committee appears to have had a very thoughtful consideration of the merits and demerits of requiring sprinklers in animal houses and properly tabled the proposal for further study and fact finding. The point is, this lack of balance resulting from the failure to conduct outreach to the major animal agricultural interests prevented the NFPA 150 Technical Committee from being able to gather an even more accurate, extensive base of information, data and analysis that animal agriculture would have provided had it been involved. Without that record, the NFPA Association Technical Meeting did not have before it all of the relevant facts and analysis that could help ensure their vote on the floor was as informed as possible.

Appeals—ANSI calls for “an identifiable, realistic, and readily available appeals mechanism” and that procedural appeals “include whether a technical issue was afforded due process.” We note and object to the fact that we are forced to submit to you this appeal without knowing the outcome of the final procedural disposition of this matter. This process is illogical and confusing and simply not conducive to thoughtful consideration of the matters before you.
The NFPA procedures require notice of an intent (NOI) to appeal, if any, within 20 days of the outcome of the floor vote of the Annual Technical Meeting. In this instance, that appeal needed to be sent to you, the Standards Council, on or before July 4, 2012 (a national holiday). Yet the floor vote does not really represent an appealable decision until the applicable technical committee approves or disapproves of the amendment. We also understand that, according to the NFPA procedures, should the NFPA 150 Technical Committee vote to disapprove the amendment, the NFPA members would have 20 days from that date to file their appeal with you. But should the NFPA 150 vote to approve the amendment, our NOI has to have already been submitted by July 4, 2012 and our appeals document by July 9, 2012. Yet, to our knowledge, the NFPA 150 Technical Committee’s voting procedure has not yet even completed as of today (July 9, 2012), and so we do not really know at this point whether our appeal is even needed! Of course, above and beyond all of this is the highly problematic situation where our organizations have been aware of these developments for only approximately 30 days and are now having to engage with NFPA at the last minute with an incomplete record. This is unacceptable.

II. The NFPA does not have an applicable, substantively rigorous documented record of fire issues at livestock and poultry operations capable of supporting the decision to call for the sector-wide adoption of sprinklers.

In so far as the NFPA 150 Technical Committee deliberations are concerned, the focus appears to have been primarily on the record of risk to horse stables. Indeed, the “Report on Comments” presents three specific examples that call for the need for more vigilance within the horse racing industry, two separate incidents in 2009 at stables in Chesapeake City, Maryland and Lebanon, Ohio, which resulted in the tragic loss of two humans and 50 animals. The substantiation further explores a May 10, 2010 fire that broke out at a racetrack stable where 40 animals were seemingly saved because of the presence of fire sprinklers. While that record may indicate a need to consider the use of sprinklers for horse barns and stables, what it fails to do is justify the need for the same standard to be applied to the nation’s supply of livestock and poultry raised for food.

Yet, by its nature and express wording, the amended NFPA 150 will indeed cover not just horse stables but also swine and dairy barns, cattle feedlots, and poultry housing without any evidence of the necessity of undertaking those actions. These operations, raising livestock and poultry for food purposes, are not unsurprisingly, operated in a much different fashion than a horse stable. As explained more fully below, by failing to narrowly tailor the amended NFPA 150 language to just cover horse stables and other facilities that actually remain at risk, the amended standard not only imposes substantial costs with little evidence of actually addressing a real risk but it also imposes a requirement that risks causing substantial harm to the health and biosecurity of these farm animals, and that in much of the country will be difficult to achieve due to the scarcity of water resources.

This was a situation that the Technical Committee on Animal Housing Facilities obviously understood, as it clearly stated in its initial rejection of the NFPA 150 Amendment that the Committee needed to seek public input, in the form of further data and information on its need, prior to making a final decision. We fully agree with the sentiment expressed by the Technical Committee on Animal Housing Facilities, and are eager to work with the NFPA, its

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Technical Committees and the Standards Council on fully exploring the options for reducing and eliminating the risk of fire in animal housing facilities.

As we noted above, NFPA issued a report in June 2012 (Structure Fires in Barns, by Ben Evarts) almost 12 months after the NFPA 150 Technical Committee had completed its Report on Comments and voted on its recommendations. That report is not available to non-NFPA members and so it is impossible at this time to properly review and comment on it. We note with some concern, though, that as a matter of due process and NFPA procedures for the consideration of amendments, the timing of this report is irregular. We would ask the Standards Council that if the report is going to somehow figure into your deliberations that we be given a copy and a fair and sufficient amount of time to review and assess it and prepare comments for your consideration.

Among the signatories to this appeal, the egg producers have been able to prepare a good, preliminary start of a record of fire incidents at layer facilities in the US. Their data indicates that significant fire incidents involving laying hens are exceedingly rare in light of the number of laying hens in production over the analysis period and the number of egg laying farms across the US.

The egg laying hen data were gathered from one of the primary property insurance companies working with egg producers. Approximately 65% of the egg-laying hens in the US are insured by this firm, and so their dataset is reasonably representative of the egg laying industry as a whole. The data are from 2000 to the present. From this data, we estimate that for the industry as a whole there were approximately 45 incidents over that period, or about four hen house fires a year. More than half of these fire incidents did not result in any bird fatalities, and of those incidents that did, they involved the loss of about .01% of the 12 billion hens and pullets under management over this period. This is in an industry that is managing several thousand hen houses at some 240 locations and at which 290 million layers and more than 700 million pullets are being housed at any one time.

We do not yet have comparable figures for the other species. It is our hope and intention to be able to present to you at your meeting in August additional fire incident data from other species as there simply was not the time to do so before this appeal was to be filed. Fires at animal agriculture facilities clearly are happening, but not all of these involve animal houses and not all of the animal house fires involve animal fatalities. But based on the anecdotal and expert opinions and views we have gathered, we do not expect the number or relative effects of fire to be all that different from that reported for the egg industry. There are literally hundreds of thousands of animal houses in this country, and billions of animals of various ages and stages of production being managed at any one time at these farms and ranches. Fire happens, but it appears to be rare and involves only a very small fraction of the animals and houses. This should not be surprising, for as we noted above no one feels the loss of these animals more acutely, or has as much incentive and reason to keep fire from happening, than the producer.

For example, after noting an increasing in the incidence of explosions and flash fires at deep pit barns (animal housing facilities where the manure passes through slots in the floor and is stored in deep pits under the barns) the U.S. Pork industry conducted a scientific and literature review to identify the cause of the problem and suggest best management practices designed to
eliminate it. The report, issued December 21, 2009 by the National Pork Board\(^5\), found that “methane was the only one of the three combustible gases that was reported as being measured at concentrations high enough to combust. Additionally, the lower explosive limit for both Hydrogen Sulfide and Phosphine are far above the toxic level of these gases for both swine and humans. As such, animal death would occur before either Hydrogen Sulfide or Phosphine reaches combustible levels within swine facilities.” Indeed, the report also found that “the majority of the reported flash fires and explosions were noted to have occurred during periods when pit-fans were not being operated” and that “many of the reported flash fires and explosions have been reported to have occurred when no animals were in the barns and ventilation was at minimal levels.” It went on to suggest common sense best management practices at deep pit barns, including to continue to operate ventilation fans even when animals were not present.

The fact is, though, that NFPA has not itself considered this kind of record in its deliberations over amendments to NFPA 150, and that must be done. Certainly, at a minimum this data indicates that more detailed information must be gathered, assessed and analyzed before any decision is made to require sprinklers in these houses, particularly in light of their significant costs and ancillary problems that could be expected from their operation. Requiring fire sprinklers in these facilities may be entirely the wrong course of action.

III. The installation and maintenance of these sprinkler systems could easily entail billions of dollars in costs, and these costs are not balanced by sufficient fire risk management benefits for the animals and the producers’ operations.

Our review of the popular and commercial literature about fire sprinklers reveals there is widespread disagreement as to the capital and installation costs for sprinkler systems.\(^6\) Costs per square foot for the simpler residential wet systems seem to range from $0.50 to $5 or $6. Costs for commercial wet systems are apparently higher on average than for the residential systems. More expensive yet are the more complex dry systems, and the popular literature discusses them being generally twice the cost of the wet systems, and significantly more expensive to maintain. More expensive yet are dry systems where there are no public water supplies, and relatively low flow well water systems, which require the possible installation of new wells, new pumps, new water storage and fire ponds, etc. We assume that the simple capital and installation costs for a dry system’s hardware ranging could range $5 to $10 per square foot or higher. This excludes the major costs for water supply development, pumping and storage, which we don’t estimate here.

Using this cost figure and using simple rough estimates of the square footage requirements for the housing of the laying hens, broiler chickens, turkeys, lactating dairy cows, and finishing swine, in production at any one time, it is possible to create a very rough estimate of at least some of the costs for an industry-wide dry system. (Beef cattle are not included here as the vast majority of beef cattle are finished in open lots, although the trend in the Corn Belt is to raise these animals in covered facilities and there would be real costs for these producers as well.) This rough estimate will be vastly lower than the actual, given the excluded water


development, pumping and storage costs, given that we exclude ongoing maintenance costs, the
fact that costs for housed beef cattle are not included, and the fact that we exclude here the much
larger (by a factor of two to three times or more) number of animals being raised to replace the
mature animals when they reach the end of their production life, as most of these replacement
animals are housed as well. Using just this more limited cost figure and applying it to just the
mature animals and using standard per animal square footage figures, we estimate that these
basic, industry wide installation costs would range from $13 to $26 billion. The actual costs,
taking into account the excluded costs noted above would appear to increase this figure by a
factor of ten more (fire officials in Iowa have told us that in their state alone they estimated the
cost to Iowa producers to be tens of billions or more)

IV. For significant majorities of livestock and poultry producers, compliance
with the amended NFPA 150 is highly impractical.

We also worry about the practicality of these systems, and the enormous installation and
maintenance costs that those issues would generate. A large majority of the commercial animal
agriculture operations today do not currently have sufficient water supply available to service an
automatic sprinkler system, so the estimated cost of such a project would need to reflect the use
of dry systems, with its multiple fire zone management approaches, the cost of the storage tanks
and fire pumps, the digging and maintenance of additional wells, and fire ponds, and a number of
other measures that that would be necessary to make such systems operable. We worry about the
care and maintenance of the dry sprinkler systems themselves, and in particular we worry about
the maintenance of these sprinkler heads in animal houses that have a considerable quantity of
dust that requires frequent mechanical ventilation to manage.

V. The installation of fire sprinklers and their operation, maintenance and inspection creates
significant, new, risks of harm to the health and biosecurity of livestock and poultry,
particularly in light of the corresponding NFPA 25 inspection standards.

We have very practical concerns with the possibility of false alarms and the release of
significant quantities of water onto the animals and equipment. False alarms resulting in
sprinkler activation, or general malfunctions leading to leaking would introduce uncontrolled
moisture into the houses, creating vectors of disease and infection (flies, bacteria, others) as well
as the simple, greater physiological challenges for wet animals. Furthermore, a large proportion
of these livestock and poultry operations are also strictly regulated under the federal Clean Water
Act or similar state authorities by which they are held to a “zero water discharge” standard.
They are designed to keep rain water away from our animals and their manure to prevent the
movement of contaminated stormwater to rivers, streams and lakes. A sprinkler malfunction
could lead to contaminated waters leaving the facilities and potentially exposing producers to
serious Clean Water Act liabilities. Equipment would be damaged and maintenance costs will
go up should these sprinklers be set off in false alarms.

Perhaps, most significantly, are the biosecurity risks to these animals. Modern animal
agriculture operations have developed and strictly follow biosecurity protocols to minimize the
risk that diseases will be transmitted from flock to flock or herd to herd. The single largest such
vector is human beings and their vehicles. These protocols commonly dictate who can enter the
animal houses, how many days there must be between a visit to another flock or herd, whether
they need to shower otherwise clean themselves before entry, and what they must wear. We
understand that the NFPA 25 requires quarterly inspections by a qualified official of these sprinkler systems, which would of course be located inside the animal houses. Normal biosecurity protocols require up to 72 hours between visits to herd or flocks. We also have questions as to the possible biosecurity risks created by the sprinkler water itself in the case of accidental release, and whether these risks would create the need to treat the sprinkler water.

For this and all the reasons cited above, we strongly urge NFPA not to adopt this fire sprinkler amendment to the NFPA 150, and to return to the course of action that the NFPA 150 Technical Committee wanted to adopt before the floor vote in Las Vegas last month; to seek more and in-depth information from livestock and poultry producers and other stakeholders, learn more about the costs and specific technical challenges involved in these measures, conduct the appropriate analysis and then make a decision. We stand ready to work with the NFPA 150 Technical Committee on this and encourage you to adopt this course of action.

Sincerely,

Michael C. Formica
Chief Environmental Counsel
National Pork Producers Council
122 C Street, N.W.
Suite 875
Washington, D.C. 20001

On behalf of,

American Farm Bureau Federation
600 Maryland Ave, S.W.
Suite 1000W
Washington, D.C. 20024

United Egg Producers
1720 Windward Concourse
Suite 230
Alpharetta, GA 30005

US Poultry and Egg Association
1530 Cooledge Road
Tucker, Georgia 30084

National Council of Farmer Cooperatives
50 F Street N.W.
Suite 900
Washington, DC 20001

National Chicken Council
1015 15th Street, N.W.
Suite 930
Washington, D.C. 20005

National Turkey Federation
1225 New York Ave, N.W.
Suite 400
Washington, D.C. 20005

National Cattlemen’s Beef Association
1301 Pennsylvania Ave, N.W.
Washington, D.C. 20004

National Milk Producers Federation
2101 Wilson Blvd,
Suite 400
Arlington, VA 22201
<table>
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<tr>
<th>Dairy Farmers of America</th>
<th>Dairylea Cooperative</th>
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<tr>
<td>10220 N. Ambassador Dr.</td>
<td>P.O. Box 4844</td>
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<tr>
<td>Kansas City, MO 64153</td>
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<td>Northeast Dairy Farmers Cooperatives</td>
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<td>Suite A</td>
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<tr>
<td></td>
<td>Twin Falls, Idaho 83301</td>
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Cc: Thomas Vilsack, Secretary United States Department of Agriculture  
Senator Deborah Stabenow, Chair, United States Senate Committee on Agriculture, Nutrition and Forestry  
Congressman Frank Lucas, Chair, United States House of Representatives Committee on Agriculture  
James Pauley, Chair NFPA Standards Council  
Tracy Golinveaux, NFPA Staff  
Linda Fuller, NFPA Staff
Maynard, Mary

Subject: FW: NFPA 150

From: Brad Cronin [mailto:bcronin@harborfire.com]
Sent: Thursday, July 26, 2012 8:38 PM
To: Maynard, Mary; Fuller, Linda
Subject: NFPA 150

Mary,
Please see below for my statement in regards to the appeal on NFPA 150:

In regard to the appeal on NFPA 150, as chair of the technical committee on Fire and Life Safety in Animal Housing Facilities, I am speaking against the appeal to require sprinklers in all animal housing facilities and in favor of the committee position. The technical committee decided to reject the proposal for sprinklers in all animal housing facilities during the ROP stage and voted to hold the revision at the ROC based on public comments. We determined that there was not enough data provided to substantiate such a major change in the document. We also wanted to include representatives of the groups that would be affected by this change in order to get their input on how this change would be received.

Regards,
Brad Cronin, CFPS

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Brad Cronin, CFPS
Harbor Fire Protection
176 County Road
Plympton, MA 02367
(401) 424-1080
July 27, 2012

Standards Council
National Fire Protection Association
1 Batterymarch Park
Quincy, MA  02169-7471

Re: Request for Approval of Amendment to NFPA 150 Requiring Sprinklers in Animal Housing Facilities (the “Amendment”)

Dear Members of the Standards Council:

The undersigned organizations respectfully request that you approve and adopt the above-referenced Amendment. The Amendment is important, ethically, as a way to protect animals from the unnecessary pain and suffering caused by being burned to death. It also makes good business sense for those who raise and house animals. Finally, we note that delegates voted to approve the Amendment in a floor session at NFPA’s national conference last month.

Fires are a regular occurrence at animal facilities, in part, according to one news article, because high-powered ventilation in the facilities provides an unusually abundant source of oxygen. Consider the documented, fire-related tragedies at animal facilities in just the past several months:

- July 2012: 2,500 hogs and one building destroyed in Kansas
- June 2012: 17,000 chickens and one building destroyed in Nevada
- June 2012: 7,000 turkeys and one building destroyed in North Carolina
- June 2012: “Many” turkeys and two buildings destroyed in Minnesota
- May 2012: 500,000 chickens and three buildings destroyed in Colorado
- March 2012: 1,000 hogs and one building destroyed in New York
- March 2012: 200 hogs and one building destroyed in Maine

Ethical Considerations

Farm animals are intelligent, inquisitive, and behaviorally complex animals with the full range of personality and individuality of dogs and cats. Primatologist Dr. Jane Goodall explains that “farm animals feel pleasure and sadness, excitement and resentment, depression, fear, and pain. They are far more aware and intelligent than we ever imagined . . . they are individuals in

1 http://articles.kwch.com/2012-07-11/hog-farm_32636846
5 http://wtvr.com/2012/05/01/500000-chickens-killed-in-egg-farm-fire/
their own right.” Their suffering should be considered in the same way you would consider the suffering of dogs or cats.

Being burned alive is said to be the most painful way to die. Yet for animals in concentrated animal feeding operations, the prevalent animal farming system in the U.S. today, it actually gets worse. These animals are hyper-confined in ways that under normal conditions cause severe stress. Add an inescapable death by searing heat, and it’s hard to imagine a worse fate. In a fire, the animals shriek loudly in terror, bang desperately against the bars of their cages or crates, and pile on one another in their panic and fear at being trapped and killed.

Financial Considerations

In addition to causing almost unfathomable suffering, a fire at an animal facility typically causes losses in the hundreds of thousands of dollars. For example, the 2011 fire that killed 9,000 turkeys in Pelican Rapids, Minnesota caused $750,000 in losses. Yet according to the American Fire Sprinkler Association, the cost to retrofit an existing building with sprinklers is only $1.50 to $2.50 per square foot. Thus, for the 300’ by 60’ hog facility (housing 2,500 animals) destroyed in Benton Kansas this month, a $500,000 loss could likely have been prevented by a sprinkler system costing only $36,000.

Animal farming organizations routinely oppose any measure which purports to regulate them, and it comes as little surprise that these organizations object to the Amendment. However, we believe their objections are not based on an accurate assessment of the costs and benefits of installing sprinkler systems. For example, in an article titled “Fire Sprinklers Save Lives and Money … The Economics of Retrofit,” Kenneth Isman of the National Fire Sprinkler Association lists a number of economic benefits of installing fire sprinklers. These include, among others, savings on insurance premiums, income tax deductions, and mitigation of business interruption losses. Typical insurance premiums, according to Isman, are more than 80% lower for warehouse buildings with sprinklers than for those without. We believe that notwithstanding the industry’s instinctive opposition to the Amendment, the measure actually makes sound economic sense for animal food producers and, as Isman and other commentators advise for any commercial enterprise, will save them money in the long run.

With nearly one billion farm animals confined in U.S. facilities on any given day, the risk of a fire-related tragedy is very real. As shown above, 528,000 animals have met this excruciating end in just the past four months (and these are just the publicly-reported cases).

9 [http://www.firesprinkler.org/pressarea/fact2.html](http://www.firesprinkler.org/pressarea/fact2.html)
10 [http://www.firemarshals.org/pdf/F2%20FIRE%20SPRINKLERS%20SAVE%20LIVES%20AND%20MONEY.pdf](http://www.firemarshals.org/pdf/F2%20FIRE%20SPRINKLERS%20SAVE%20LIVES%20AND%20MONEY.pdf)
Farmers have an ethical duty to protect the animals whose lives they have exclusive control and responsibility over. Installing sprinklers so that animals do not burn to death is a minimal, yet fundamental, part of that duty. We hope you will enforce this one small obligation by adopting the Amendment.

Thank you for your consideration.

Sincerely,

ANIMAL PLACE
By: _______________________
Kim Sturla
Executive Director

CHOCOWINITY CHICKEN SANCTUARY
By: _______________________
Kay Evans
President

ANIMAL PROTECTION & RESCUE LEAGUE
By: _______________________
Bryan Pease
Board Chair

COMPASSION OVER KILLING
By: _______________________
Erica Meier
Executive Director

CHICKEN RUN RESCUE
By: _______________________
Mary Britton Clouse
President

FARM SANCTUARY
By: _______________________
Bruce Friedrich
Senior Director for Strategic Initiatives
FREE FROM HARM
By: _______________________
Robert Grillo
Editor

MERCY FOR ANIMALS
By: _______________________
Nathan Runkle
Executive Director

POPLAR SPRING ANIMAL SANCTUARY
By: _______________________
Terry Cummings
Director

PEOPLE FOR THE ETHICAL TREATMENT OF ANIMALS
By: _______________________
Tracy Reiman
Executive Vice President

SUNNYSKIES BIRD & ANIMAL SANCTUARY
By: _______________________
Linda Brink
President & Director

UNITED POULTRY CONCERNS
By: _______________________
Karen Davis
President

WOODSTOCK FARM ANIMAL SANCTUARY
By: _______________________
Jenny Brown
Director
26 July 2012

Amy Cronin, Executive Secretary
Standards Council
National Fire Protection Association
One Batterymarch Park
Quincy, Massachusetts 02169

Re: NFPA 150 Standard on Fire and Life Safety in Animal Housing Facilities
Appeal to Uphold the Association action to accept Proposals 150-11, 150-13, 150-14, and 150-15

Dear Secretary Cronin:

(1) My name is Valerie Traina. I live at 5555 E. Briarwood Avenue, Unit 2204, Centennial, CO 80122. I am unaffiliated, and I’m filing this appeal as a concerned, compassionate, taxpaying citizen.

(2) I write today in regard to the Association’s proposals 150-11, 150-13, 150-14 and 150-15. I am in favor of those proposals because they mandate the installation of sprinkler systems and other fire suppression devices in Category B animal housing facilities.

(3) My entire argument rests on the belief that we, as human beings, must operate out of compassion and fairness. If we hold ourselves up as the most perfect species on Earth, we need to prove it through our actions. I have heard time and again from farmers and ranchers that they care deeply about the animals in their care. They say that nobody has more motivation than they do to protect their charges. If that is true, then the entire industry should be appealing the NFPA Technical Committee’s decision to withdraw the aforementioned proposals. They should join me in supporting NFPA’s Proposals as stated above.

It’s noteworthy that the animal agriculture industry’s level of irresponsibility is almost beyond measure. First, they are recipients of taxpayer dollars through the various Congressional Farm Bills, meaning that their operations are subsidized by people like you and me. Then, they refuse to protect their caged and tethered animals from fire because, after all, they are insured. Farmers and ranchers will let the insurance industry foot the bill when a conflagration destroys their operations. Animals are not living beings to those in the business. They are simply agricultural units. Each unit represents a designated amount of revenue. The cost of installing sprinklers, therefore, is cutting into their bottom line. If, for example, a hen house goes up in flames, the way a facility here in Colorado did a few months ago, burning and suffocating half a million birds to death, the owner of that business is unconcerned about the suffering of the animals. He is worried about how long it will take him to ramp up his business again.

The industry reacts to the prospective imposition of NFPA’s fire protection standards in the same way any other industry acts when confronted with suggestions they should’ve implemented from the get-go. If, indeed, factory farmers cared a great deal in the past about their animals, then why
didn’t they construct barns and other facilities with fire suppression equipment? It’s always easier and cheaper to do the right thing from the start. And, it’s the moral thing to do. These aren’t furniture factories ~ these are barns containing creatures who have feelings and thoughts.

(4) We would not have a civilization if we did not abide by a moral code. Historically, when we’ve exalted money above all else, it has brought us misery. We aren’t worthy of respect when we abandon our highest value of compassion. All of the greatest spiritual, religious, and Humanist teachers have taught us that kindness is a human being’s greatest quality.

Based on these truths, I am asking the National Fire Protection Association to accept its proposals: 150-11, 150-13, 150-14 and 150-15. These animals need protection. The good people I know would never question the idea of extending compassion to nonhuman beings. They would find it shocking and shameful, as I do, to learn that not only are the factory farms deficient in fire suppression equipment, including sprinkler systems, but that the entire industry is fighting implementation of those structures. Please, I urge you to follow your hearts in this matter. All honorable people in our country will back you up.

Thank you very much for your consideration of this vitally important matter.

Sincerely,

Valerie A. Traina

Cc: Thomas Vilsack, Secretary, United States Department of Agriculture
    Senator Deborah Stabenow, Chair, U.S. Senate Committee on Agriculture, Nutrition and Forestry
    Congressman Frank Lucas, Chair, U.S. House of Representatives Committee on Agriculture
    Mary Maynard, Staff, National Fire Protection Association
Dear Linda,

Thank you for your message. I am disappointed that not only was the amendment not enacted, but that it also won't be reconsidered unless an appeal is made. I will not personally appeal the decision. I appreciate your including my comments in the Agenda that will be reviewed by the Standards Council. Hopefully, there will come a day when compassion for enslaved animals is "required" to be shown by those who profit from their exploitation. A requirement for sprinklers would have been a step in the right direction, but as usual, when a business's ox (profit) is in danger of being gored, the animals from which it profits are instead gored. Please include this comment along with my previous one for consideration by the Standards Council.

Craig Cline

-----Original Message-----
From: Maynard, Mary <mmaynard@NFPA.org>
To: candccline <candccline@aol.com>
Sent: Fri, Jul 20, 2012 11:21 am
Subject: FW: Amendment

Dear Mr. Cline:

I'd like to receive clarification of your intent with respect to your letter expressing your support of the action taken at the NFPA Association Technical Session regarding NFPA 150, Standard on Fire and Life Safety in Animal Housing Facilities. The action was to require sprinklers to be installed in factory farms for Category B animals. Your letter appears to be commenting on your support of the floor action and the failure of the Technical Committee to support the floor action. Please be advised that since it did not pass the Technical Committee, the recommendation that is forwarded to the Standards Council is that the amendment is not issued; this means that there will be no mandate to require sprinklers to be installed in factory farms for Category B animals. Currently, there is no appeal to the Council to go against this recommendation.

By way of this email, I wanted to inform you or other parties in support of the amendment have the right to file an appeal. Please let me know immediately if you or someone else wishes to appeal the issue. The NFPA Regulations Governing Committee Projects (Regs), in section 1.6.2(b) states, If an amendment recommended at an Association Technical Meeting fails to receive the approval of the TC or TCC, it will be automatically docketed as an appeal on the agenda of the Standards Council, and any party may advocate their position either in writing or in person before the Council.

Whether you wish to appeal or not, I will include your comments documented in your letter in the Agenda that will be reviewed by the Standards Council. I am making sure you understand the options available to you under our Regs. Please be advised that NFPA acts as a neutral administrator of its standards development process. In that capacity, NFPA and its staff are facilitators, not participants or decision-makers in the NFPA standards development process. I appreciate your interest in the NFPA codes and standards making system. If you have additional questions, please do not hesitate to contact me or the Executive Secretary of the Standards Council, Amy Cronin. I look forward to your response.

Linda Fuller
Manager, Codes & Standards Administration
National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02169-7471
617.984.7248 phone
617.770.3500 fax
Good morning,

Please stick to your guns and uphold the amendment requiring farm animal housing facilities to be equipped with fire sprinklers and smoke control systems. The cost of such systems can become a "cost of doing business," and no doubt consumer prices may have to rise accordingly. I believe that I speak for a great many consumers who would pay more for a product that came from a facility that "cares" about the animals it harbors. Is there a way to quantify the price of compassion and doing the right thing? Surely these virtues should have a place at the table of profits, and should be built in to companies’ ways of operating. Thank you for considering this request. Might I please have the courtesy of a reply?

Craig Cline
Salem, Oregon
July 17, 2012

Dear Ms. Fuller:

I hope this letter finds you well.

On behalf of The Humane Society of the United States and our more than 11 million constituents, I’m writing to express support for the position taken last month by floor vote that newly constructed factory farms have sprinkler systems.

Regrettably, it’s come to our attention that the technical committee has voted in its Final Ballot to reject that position after receiving pressure from agribusiness interests like the National Pork Producers Council (NPPC). Indeed, several members of the committee noted the reason for their vote against the amendment was meat industry opposition. One member declared that the reason for rejecting the vote was “because of a backlash from the animal industry” and another stated that the “animals and facilities would be easily replaced in the event of a fire loss.”

Billions of animals in factory farms across the United States are subjected to cruel confinement that, in the event of a fire, would entrap them in the flames and subject them to a certain, terrifying death. This reality was sadly demonstrated this month when an estimated 2,000 pigs needlessly died when a fire engulfed a pig facility in Benton, Kansas. It is inexcusable to not want to protect the lives of animals, workers and firefighters with something as practical and relatively inexpensive as requiring a sprinkler system in all newly constructed factory farm facilities.

We understand the recently-proposed NFPA amendment— to require sprinkler systems— was passed by a floor vote at the Association’s technical meeting last month, but despite the strong support of the assembly, the amendment was rejected in the technical committee’s final ballot following lobbying pressure by the NPPC, which opposed the mandate. The NPPC opposes all animal welfare regulations in factory farms, and even defends locking pigs in two-foot-wide gestation crates where they can’t even turn around for essentially their entire lives...or escape facility fires, as has been witnessed all too tragically often. We encourage the Council to reject their efforts and, instead, reaffirm the Association’s vote to protect both animals and
workers on these facilities.

Following the recommendation of the floor vote is the option most consistent with the Association’s stated fundamental principles of the animal housing standard that:

(1) Animals are sentient beings with a value greater than that of simple property.

(2) Animals, both domesticated and feral, lack the ability of self-preservation when housed in buildings and other structures.

(3) Current building, fire, and life safety codes do not address the life safety of the animal occupants.

Every year The HSUS responds to natural and man-made disasters across the county, to save the lives of thousands of animals from life-threatening harm. Just this past month we assisted with hundreds of animals who have been impacted by wildfires, and we understand firsthand how dangerous and unpredictable fires can be. We also know how deeply Americans want to protect animals who are displaced and endangered, and we hope you will heed their compassionate instincts, rather than the pork industry’s cruel refusal to take the most reasonable step to protect animals under their care.

Sincerely,

Niki Dawson

Niki Dawson, Director of Disaster Services
The Humane Society of the United States

Cc: Joe Scibetta, Principal Member, Technical Committee, NFPA 150
FARM ANIMALS NEED TO BE ADDED TO THE FIRE PROTECTION PETITION. BE HUMANE, STOP THE CRUELTY  roberta claypool, 2822 coconut ave, miami, fl 33133

LIFE IS LIFE, WHETHER IN A CAT, DOG, MAN. THERE IS NO DIFFERENCE THERE BETWEEN CAT OR MAN. THE IDEA OF DIFFERENCE IS A HUMAN CONCEPTION FOR MAN'S OWN ADVANTAGE.
On behalf of United Poultry Concerns, a nonprofit organization that promotes the compassionate and respectful treatment of domestic fowl, I am writing to commend the NFPA for approving an amendment to the 150 Standard for Fire & Life Safety in Animal Housing that would require installations of smoke and sprinkler control systems in animal housing facilities that contain, without any means of escape, thousands of chickens, turkeys, ducks, pigs and other farm animals, designated as “Category B.”

We are dismayed to learn, however, that the NFPA’s commendable and much needed fire protection amendment for these animals has been withdrawn in response to an industry coalition opposing it. We respectfully urge the NFPA to uphold its original decision to require installations of smoke and sprinkler control systems in Category B animal facilities.

Poultry and livestock producer opposition to such minimal protections for their defenseless animals as sprinklers and smoke control systems should be resisted by the NFPA. Please do not give in to industry’s preference for allowing thousands of animals to endure the terror and physical agony of suffocation and being burned to death in a fire-trap building, rather than installing the fire protection systems the NFPA has rightly recommended.

Here are just two examples, in 2012, of the horror endured by tens of thousands of birds in industry fires of the type and frequency that the NFPA amendment could mitigate if not completely eliminate:

“100,000 chickens killed in egg farm fire” in Colorado, May 1, 2012
“Fire at turkey house ruled accidental” in North Carolina (killing 7,000 turkeys), June 13, 2012

http://www2.wnct.com/news/2012/jun/13/9/7000-turkeys-killed-morning-fire-ar-2353778/

We urge the National Fire Protection Association to reverse its decision to withdraw the amendment at the behest of industries that prefer to let animals suffer and die horribly in preventable fires each year and collect the insurance, rather than to invest in a fire protection system. Please uphold your original amendment. We look forward to your response. Thank you for your attention.

Sincerely,

Karen Davis, PhD
President
Karen@upc-online.org

United Poultry Concerns is a 501(c)(3) organization that promotes the compassionate and respectful treatment of domestic fowl. www.upc-online.org
On behalf of United Poultry Concerns, a nonprofit organization that promotes the compassionate and respectful treatment of domestic fowl, I am writing to commend the NFPA for approving an amendment to the 150 Standard for Fire & Life Safety in Animal Housing that would require installations of smoke and sprinkler control systems in animal housing facilities that contain, without any means of escape, thousands of chickens, turkeys, ducks, pigs and other farm animals, designated as "Category B."

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http://wtvr.com/2012/05/01/500000-chickens-killed-in-egg-farm-fire/

"Fire at turkey house ruled accidental" in North Carolina (killing 7,000 turkeys), June 13, 2012
http://www2.wnct.com/news/2012/jun/13/7000-turkeys-killed-morning-fire-ar-2353778/
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Sincerely,

Chantal Buslot
Belgium
Maynard, Mary

From: DIANE ROUSSEAU [crestar@fairpoint.net]  
Sent: Thursday, July 19, 2012 11:39 PM  
To: stds_admin  
Subject: fire protection for confined farm animals

From: DIANE ROUSSEAU [mailto:crestar@fairpoint.net]  Sent: Friday, 

July 20, 2012 11:31 PM To: Maynard, Mary Subject: Re: FW:

fire protection for confined farm animals

dear ms. fuller, yes, i supported the amendment of extending fire protection to confined animals.

yes, i am not surprised that the agribusiness lobby trumped what is right in favor of what

is profitable, with the bureaucracy complicit. that's the story in government these days.

not only are animals not represented, neither are citizens, most of whom would not

support this cowardice if given the choice. thank you for your reply. diane rousseau >

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> -----Original Message----- > From: DIANE ROUSSEAU [mailto:crestar@fairpoint.net] >

Sent: Thursday, July 19, 2012 11:39 PM > To: stds_admin >

dear sirs; i urge you to stand by your original recommendations requiring fire protection for agribusiness. the position that it is better to let buildings and the animals within burn and collect insurance than to prevent fires is grotesque, especially in light of tens of helpless animals recently burning to death in these facilities, including here in colorado. sincerely, diane rousseau, crestone, colorado
Dear Sirs

I am writing to ask you, please, to ensure that farm animals are protected from preventable fires, as you have commendably recommended, by denying the farm animals' industry appeal and upholding your proposed amendment.

Yours truly

Deirdre balaam
I am writing to commend the NFPA for approving an amendment to the 150 Standard for Fire & Life Safety in Animal Housing that would require installations of smoke and sprinkler control systems in animal housing facilities that contain, without any means of escape, thousands of chickens, turkeys, ducks, pigs and other farm animals, designated as “Category B.”

I am dismayed to learn, however, that the NFPA’s commendable and much needed fire protection amendment for these animals has been withdrawn in response to an industry coalition opposing it. We respectfully urge the NFPA to uphold its original decision to require installations of smoke and sprinkler control systems in Category B animal facilities.

Poultry and livestock producer opposition to such minimal protections for their defenseless animals as sprinklers and smoke control systems should be resisted by the NFPA. Please do not give in to industry’s preference for allowing thousands of animals to endure the terror and physical agony of suffocation and being burned to death in a fire-trap building, rather than installing the fire protection systems the NFPA has rightly recommended.

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“Fire at turkey house ruled accidental” in North Carolina (killing 7,000 turkeys), June 13, 2012
http://www2.wnct.com/news/2012/jun/13/9700-turkeys-killed-morning-fire-ar-2353778/

I urge the National Fire Protection Association to reverse its decision to withdraw the amendment at the behest of industries that prefer to let animals suffer and die horribly in preventable fires each year and collect the insurance, rather than to invest in a fire protection system. Please uphold your original amendment. We look forward to your response. Thank you for your attention.

Sincerely,

Dave Simon
Director of Campaigns
Animal Protection & Rescue League
3843 South Bristol Street, Suite 294
Santa Ana, CA 92704
www.meetup.com/aprl-oc
www.aprl.org
(714) 975-1728
Maynard, Mary

From: Taffy Williams [tlwilliams@optonline.net]
Sent: Thursday, July 19, 2012 7:12 PM
To: stds_admin; PublicAffairs
Cc: Taffy Williams
Subject: Fire systems

We at NY4whales.org are appalled that the Egg Production industry, such as the US Poultry and Egg Association, National Chicken Council, National Turkey Federation and United Egg Producers have appealed the NFPA's recent amendment requiring farm animal housing to be equipped with fire sprinklers and smoke control systems. This is a blatant statement that there is no concern for the welfare of the birds held in confinement, a slap in the face of all attempts at humane treatment of farm animals.

We implore the NFPA to stand firm in the requirement to keep farm animals covered with these simplest protections against fire. Thank you for setting this amendment in place which does raise the welfare needs of farm animals on a very basic level.

Sincerely,
Taffy Williams

New York Whale and Dolphin Action League PO Box 273 Yonkers, NY 10707 USA
914-793-9186
914-395-0017 fax
www.ny4whales.org

Because when we save whales we save ourselves.
Hi Mary, I would like to support sprinklers to be installed in factory farms. I guess Category B animals are chickens?

It is horrible the way factory chickens and other animals have to live before they are slaughtered, but what is even more disturbing that the animals have no protection against being burned alive. It is despicable that again all that matters is making money off of the poor animals. I can't believe in this time we treat animals as commodity to profit over and not take in consideration that they are sentient beings.

Thanks

Bubblesnbark@comcast.net
I have attached my original letter. You asked for clarification on my stance concerning the sprinkler systems being installed for farmed animals.

I am a strong advocate for poultry welfare and all farm animals. These animals suffer far enough without having to be burned and suffocated by smoke from preventable fires. I am asking you to please up hold the original proposal of the NFPA of installing sprinkler systems and the minimum of fire safety standards to prevent such horrific deaths to helpless animals. It is a simple request. I am appealing to your humanity. I know in your heart and mind to imagine thousands of animals suffering in such a way has to strike your conscious at the very least heart breaking.

Please hear the message of those of us who speak for animals who have no voice.

Thank You.

Sincerely,
Mary Lapara
Mandeville, LA

Ms. Maynard,

Perhaps I misunderstood the article, but I took it that the proposal by the NFPA to be for installing fire protection for farmed animals and that the council that represents these farmers being against it won over the NFPA. I am clearly for protecting these innocent animals and want fire protection measures in place. I am sorry if somehow my letter caused confusion. I am asking for sprinkler systems and other fire safety measures to be put in place.

Thank You,
Mary Lapara
Mandeville, LA

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We have enslaved the rest of the animal creation, and have treated our distant cousins in fur and feathers so
badly that beyond doubt, if they were able to formulate a religion, they would depict the Devil in human form.

~William Ralph Inge, Outspoken Essays, 1922
Maynard, Mary

From: Valerie Traina [vtraina2002@yahoo.com]
Sent: Thursday, July 19, 2012 10:02 PM
To: stds_admin; PublicAffairs
Subject: Re: Amendment to the 150 Standard for Fire & Life Safety in Animal Housing

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

I write because I care very much about the safety and well-being of farmed animals. Your organization rightly put forth an amendment to the standards for animal housing that would mandate a sprinkler and smoke-control system in every factory farming facility. Then, because the industry raised a ruckus, you backed down.

I am the voice of the voiceless. These animals are completely defenseless. Should we really let them just burn to death? In my state, Colorado, a few months ago there was a horrible fire in an egg factory which killed half a million hens. Think of that: 500,000 living, breathing, sentient creatures suffocating and burning to death. It is immoral to stand by and do nothing.

I urge you to reinstate your amendment. I am not the only person who feels as I do. All good people think that your amendment is just. You will hear from many more of us.

Thank you very much for your consideration.

Sincerely,
Valerie Traina
5555 E Briarwood Ave
Unit 2204
Centennial, CO 80122

"In times of universal deceit, telling the truth becomes a revolutionary act." - George Orwell, 1984
I am writing to commend the NFPA for approving an amendment to the 150 Standard for Fire & Life Safety in Animal Housing that would require installations of smoke and sprinkler control systems in animal housing facilities that contain, without any means of escape, thousands of chickens, turkeys, ducks, pigs and other farm animals, designated as “Category B.”

I am dismayed to learn, however, that the NFPA’s commendable and much needed fire protection amendment for these animals has been withdrawn in response to an industry coalition opposing it.

I respectfully urge the NFPA to uphold its original decision to require installations of smoke and sprinkler control systems in Category B animal facilities.

Poultry and livestock producer opposition to such minimal protections for their defenseless animals as sprinklers and smoke control systems should be resisted by the NFPA.

Please do not give in to industry’s preference for allowing thousands of animals to endure the terror and physical agony of suffocation and being burned to death in a fire-trap building, rather than installing the fire protection systems the NFPA has rightly recommended.

With Regards,
Cindy Maddalena
Maynard, Mary

From: Diane Maass [diane@maass.org]
Sent: Thursday, July 19, 2012 6:30 PM
To: stds_admin
Subject: Uphold fire protection for animals

Dear NFPA,

Please deny the appeals and uphold FIRE PROTECTION for animals in confinement.

Thank you.

Sincerely,
Diane Maass
Sleepy Hollow, NY
Maynard, Mary

Subject: FW: BARNS NEED FIRE CONSTRUCTION STANDARDS - YOU ARE FAILING

I certainly want better standards for housing animals so that they do not burn up in fires in barns, where they cannot get out. i am sick to death of any living thing burning up in a fire. i want higher standards for all animals and i am appealing on that basis. we have to figure out something, as intelligent people, that prevents animals from dying in burning buildings. we need a failsafe system that brings help too. people in this business of fire protection ought to be putting attention to this problem. Many people weep when their animals die in this horrific fashion. the standards need to be there and in place.

From: usacitizen1 usacitizen1 [mailto:usacitizen1@live.com]
Sent: Tuesday, June 19, 2012 10:36 AM
To: Maynard, Mary; president@whitehouse.gov; speakerboehner@mailhouse.gov; rush.holt@mail.house.gov; americanvoices@mail.house.gov; info@themorristownteaparty.org; letters@newsweek.com; today@nbc.com; info@taxpayer.net; media@cagw.org; letterstotheeditor@northjersey.com; info@peta.org; humanelines@hsus.org; info@mercyforanimals.org; info@godscreaturesministry.org; info@idausa.org
Subject: RE: BARNS NEED FIRE CONSTRUCTION STANDARDS - YOU ARE FAILING

JUST SO I AM SURE YOU HAVE IT IN HAND AND THAT YOU DONT CONTINUE TO STIFLE PUBLIC COMMENT, CONSIDER THAT I AM SUBMITTING THE SAME COMMENT NOW. I FIND THAT YOUR ORGANIZATION STIFLES PUBLIC COMMENT. YOU SEEM TO EXIST TO DO THAT. THIS COMMENT IS SUBMITTED NOW FOR THE NEXT HEARING. THIS AGENCY NOW EXISTS AS AN IMPEDIMENT TO THE PUBLIC. THIS COMMENT IS FOR YOUR PUBLIC RECORDS. JEAN PUBLIC

Thank you for your comment; it will be forward to the NFPA Standards Council for their review and consideration.

Sincerely,

Mary Maynard
Codes and Standards Administration

--Forwarded Message Attachment--
From: usacitizen1@live.com
To: nitmama@nfpa.org; info@emagazine.com; letters@newsweek.com; today@nbc.com
CC: americanvoices@mail.house.gov; comments@whitehouse.gov; speakerboehner@mail.house.gov; sf.nancy@mail.house.gov
Subject: PUBLIC COMMENT ON FEDERAL REGISTER FW: barns need fire codes

WE NEED NEW CONSTRUCTION STANDARDS FOR SAFETY IN BARNS WHICH HOLD ANIMALS. I HAVE SEEN FAR TOO MANY BARNS BURN UP BECAUSE THEY ARE SO POORLY CONSTRUCTED. IT IS TIME THAT ANIMALS, WHICH ARE VALUABLE, ARE PROTECTED. YOU NEED TO HAVE STANDARDS SET UP FOR CONSTRUCTION OF BARNS, NOT JUST HOMES. I SUBMITTED THIS LAST YEAR AND YOU IGNORED MY REQUEST TO IMPLEMENT THIS. WHY ARE YOU IGNORING THE SAFETY OF ANIMALS. THIS IS A COMMENT FOR THE PUBLIC RECORD. PLEASE DO NOT DISRESPECT THE PUBLIC. JEAN PUBLIC
the craven, self interested remarks of these degenerate profiteers who will allow animals to be burned alive by their failure to protect these animals lives is disgusting and depraved. their lobbying and attempt to control this federal agency is beyond the pale. this comment is for the public record. i definitely do not support these self interested cheap profiteers. they are cheap cheap cheap -willing to let animals burn alive for their profiteering. they do not reflect well on america at all. this is comment for the public record on this matter. jean public
Sir/Madam—

Especially in light of the recent death of so many defenseless, trapped birds in Roggen, Colorado it is apparent that large concentrations of farm animals need fire protection. I hope you will do what you can to ensure that this does become standard practice with adequate monitoring.

Thank you.

James Riopelle MD  
13201 Patterson Rd  
New Orleans LA  70131

C: United Poultry Concerns
Maynard, Mary

From: avatar11@rediffmail.com on behalf of Ravi Grover [avatar11@rediffmail.com]
Sent: Friday, July 20, 2012 9:36 AM
To: stds_admin; PublicAffairs
Subject: deny appeal on amendment for fire safety in livestock housing

I am writing in support of the NFPA's approval of an amendment to the 150 Standard for Fire & Life Safety in Animal Housing that would require installations of smoke and sprinkler control systems in animal housing facilities designated as “Category B.”

I am also disappointed that this same fire protection amendment has been withdrawn because of pressure from the livestock industry. This has the potential to create large scale disaster, in addition to putting firemen called in to put out fires in the line of danger.

The National Fire Protection Association must reverse its decision to withdraw the amendment and not cave in to special interests.

Thank you,
Ravi G
To whom it may concern,

As someone who cares about the well-being of animals on farms (and the people who live adjacent to the farms), I ask that you hold strong with your amendment that requires farm animal housing facilities to be equipped with a fire sprinkler and smoke control systems.

Thank you,
Jon Camp, Kensington, MD
I urge with every fiber of my being that FIRE protection measures be utilized for EVERY animal facility, especially for farmed animals. These creatures give their lives for us, surely we can be humane and compassionate enough to give them protection from the ravages of fire. Thank you, Elaine Livesey-Fassel
To:

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

Dear Sir/Madam:

I write because I care very much about the safety and well-being of farmed animals. Your organization rightly put forth an amendment to the standards for animal housing that would mandate a sprinkler and smoke-control system in every factory farming facility. Then, because the industry raised a ruckus, you backed down.

These animals are completely defenseless. Should we really let them just burn to death? In my state, Colorado, a few months ago there was a horrible fire in an egg factory which killed half a million hens. Think of that: 500,000 living, breathing, sentient creatures suffocating and burning to death. It is immoral to stand by and do nothing.

I urge you to reinstate your amendment. I am not the only person who feels as I do. All good people think that your amendment is just. You will hear from many more of us.

Thank you very much for your consideration.

Sincerely,

VICTORIA M. CASTANEDA
On behalf of United Poultry Concerns, a nonprofit organization that promotes the compassionate and respectful treatment of domestic fowl, I am writing to commend the NFPA for approving an amendment to the 150 Standard for Fire & Life Safety in Animal Housing that would require installations of smoke and sprinkler control systems in animal housing facilities that contain, without any means of escape, thousands of chickens, turkeys, ducks, pigs and other farm animals, designated as “Category B.”

We are dismayed to learn, however, that the NFPA’s commendable and much needed fire protection amendment for these animals has been withdrawn in response to an industry coalition opposing it. We respectfully urge the NFPA to uphold its original decision to require installations of smoke and sprinkler control systems in Category B animal facilities.

Poultry and livestock producer opposition to such minimal protections for their defenseless animals as sprinklers and smoke control systems should be resisted by the NFPA. Please do not give in to industry’s preference for allowing thousands of animals to endure the terror and physical agony of suffocation and being burned to death in a fire-trap building, rather than installing the fire protection systems the NFPA has rightly recommended.

Here are just two examples, in 2012, of the horror endured by tens of thousands of birds in industry fires of the type and frequency that the NFPA amendment could mitigate if not completely eliminate:

- "500,000 chickens killed in egg farm fire” in Colorado, May 1, 2012
  [http://wtvr.com/2012/05/01/500000-chickens-killed-in-egg-farm-fire/](http://wtvr.com/2012/05/01/500000-chickens-killed-in-egg-farm-fire/)

- “Fire at turkey house ruled accidental” in North Carolina (killing 7,000 turkeys), June 13, 2012

We urge the National Fire Protection Association to reverse its decision to withdraw the amendment at the behest of industries that prefer to let animals suffer and die horribly in preventable fires each year and collect the insurance, rather than to invest in a fire protection system. Please uphold your original amendment. We look forward to your response. Thank you for your attention.

Sincerely,
Jason Green
UPC Supporter

Care2 makes it easy for everyone to live a healthy, green lifestyle and impact the causes you care about most. Over 12 Million members! [http://www.care2.com](http://www.care2.com)

Feed a child by searching the web! Learn how [http://www.care2.com/toolbar](http://www.care2.com/toolbar)
Please do not let irresponsible agribusiness get around installing sprinkler and
smoke control systems in their facilities in order to save money.

Creatures burning to death to save money? And.....these are moral people
running these businesses? And they want to allow this carnage to occur, to save money?

Please continue to demand that animal agriculture install sprinklers and smoke control devices
and not let these irresponsible businesses save money by letting the animals/bird perish in the
most cruel way i.e. fire/smoke.

Thank you.
Lawrence G. Pearson
4707 Doyle Rd.
Pittsburgh, PA 15227
Maynard, Mary

From: Marcia Mueller [mmueller@webmedx.com]
Sent: Monday, July 23, 2012 12:23 AM
To: stds_admin
Subject: DEMAND SPRINKLERS AND SMOKE DETECTORS IN ANIMAL HOUSING

Categories: Red Category

2811 South Fiske #37
Spokane, WA 99223
July 22, 2012

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

Dear Sirs:

I am writing about your decision to require farmed animal housing facilities to be equipped with fire sprinklers and smoke detectors. I applaud your decision since it would be an enormous improvement in farmed animal welfare.

However, I fear the reaction of the farmed animal associations. Apparently US Poultry and Egg Association, National Chicken Council, National Turkey Federation, and United Egg Producers have appealed your decision and want it rescinded. This is a totally reprehensible demand, particularly in light of the recent fires that have claimed the lives of tens of thousands of animals. For example, just in May 500,000 hens burned to death in an egg farm in Colorado and in North Carolina 7,000 turkeys burned to death.

It is hard to imagine corporations being so greedy that they would allow animals confined to cages to die in fires when sprinklers and smoke detectors could save them. It is also hard to imagine how powerful corporations in this country can bend legislatures and enforcement agencies to their will. It is more than unimaginable. It is inexcusable!

Please do not cave in to big agriculture’s demands and/or threats. The moral and ethical thing to do would be to enforce your decision for the fire prevention equipment. From past behavior we already know that the farmed animal associations are only concerned with profits. They do not care for the well being of the animals and must be forced to comply with decisions such as yours.

Thank you for your attention.

Sincerely,

Marcia Mueller
mmueller@webmedx.com
I am writing to commend the NFPA for approving an amendment to the 150 Standard for Fire & Life Safety in Animal Housing that would require installations of smoke and sprinkler control systems in animal housing facilities that contain, without any means of escape, thousands of chickens, turkeys, ducks, pigs and other farm animals, designated as “Category B.”

I was dismayed to learn, however, that the NFPA’s much needed fire protection amendment for these animals has been withdrawn in response to an industry coalition opposing it. I urge the NFPA to uphold its original decision to require installations of smoke and sprinkler control systems in Category B animal facilities.

Poultry and livestock producer opposition to such minimal protections for their defenseless animals as sprinklers and smoke control systems should be resisted by the NFPA. Please do not give in to industry’s preference for allowing thousands of animals to endure the terror and pain of suffocation and being burned to death in a fire-trap building, rather than installing the fire protection systems the NFPA has rightly recommended.

Two recent examples, in 2012, involved tens of thousands of birds in industry fires of the type and frequency that the NFPA amendment could mitigate if not completely eliminate:

“500,000 chickens killed in egg farm fire” in Colorado, May 1, 2012
http://wtvr.com/2012/05/01/500000-chickens-killed-in-egg-farm-fire/

“Fire at turkey house ruled accidental” in North Carolina (killing 7,000 turkeys), June 13, 2012
http://www2.wnct.com/news/2012/jun/13/9/7000-turkeys-killed-morning-fire-ar-2353778/

I ask you to reverse your decision to withdraw the amendment at the request of an industry that prefers to let animals suffer and die horribly in preventable fires each year and collect compensation, rather than to invest in a fire protection system. Please uphold your original amendment. Thank you for your attention and consideration.

Sincerely,
Lowell Garner
Ithaca, NY
Dear People at NFPA.

I am mortified to think that you opposed installing smoke and sprinkler control systems in animal housing facilities. This seems barbaric, cruel, inhumane and totally unacceptable. Would you allow YOUR pet to reside in such a facility? If not, why not? Do you not understand what cruelty this can impose on innocent critters, held against their will? These are sentient beings, not machines.

How can you live with yourselves in opposing humane treatment?

Disgustedly yours,

Joan Armer
San Mateo, CA
I am writing to commend the NFPA for approving an amendment to the 150 Standard for Fire & Life Safety in Animal Housing that would require installations of smoke and sprinkler control systems in animal housing facilities that contain, without any means of escape, thousands of chickens, turkeys, ducks, pigs and other farm animals, designated as “Category B.”

We are dismayed to learn, however, that the NFPA’s commendable and much needed fire protection amendment for these animals has been withdrawn in response to an industry coalition opposing it. We respectfully urge the NFPA to uphold its original decision to require installations of smoke and sprinkler control systems in Category B animal facilities.

Poultry and livestock producer opposition to such minimal protections for their defenseless animals as sprinklers and smoke control systems should be resisted by the NFPA. Please do not give in to industry’s preference for allowing thousands of animals to endure the terror and physical agony of suffocation and being burned to death in a fire-trap building, rather than installing the fire protection systems the NFPA has rightly recommended.

Here are just two examples, in 2012, of the horror endured by tens of thousands of birds in industry fires of the type and frequency that the NFPA amendment could mitigate if not completely eliminate:

1,000 chickens killed in egg farm fire” in Colorado, May 1, 2012
http://wtvr.com/2012/05/01/500000-chickens-killed-in-egg-farm-fire/

“Fire at turkey house ruled accidental” in North Carolina (killing 7,000 turkeys), June 13, 2012
http://www2.wnct.com/news/2012/jun/13/9/7000-turkeys-killed-morning-fire-ar-2353778/
We urge the National Fire Protection Association to reverse its decision to withdraw the amendment at the behest of industries that prefer to let animals suffer and die horribly in preventable fires each year and collect the insurance, rather than to invest in a fire protection system. Please uphold your original amendment. We look forward to your response. Thank you for your attention.

Sincerely,
Nicole Weber
Maynard, Mary

From: Joyce Janicki [joycejanicki@hotmail.com]
Sent: Sunday, July 22, 2012 3:19 PM
To: stds_admin; PublicAffairs
Subject: Please Protect Animals

Hello-

I hope you're having a great day.

This letter is regarding the industry groups (including US Poultry and Egg Association, National Chicken Council, National Turkey Federation, and United Egg Producers) which appealed the National Fire Protection Association's decision to require fire sprinklers and smoke control systems in farm animal facilities.

I strongly urge the National Fire Protection Association to deny the industry appeal and uphold the NFPA proposed amendment.

Please protect the animals concerned.

Thanks for your time.

Joyce Janicki
St. Clair Shores, MI
I have learned from United Poultry Concerns, Machipango, VA, that the NFPA proposed an amendment to provide fire safety equipment for farm animal confinement systems. This is something that's urgently needed, as thousands of farm animals die in fires that they can't escape. Please uphold this amendment against the wishes of agribusiness! Thank you for considering my comments.

Sara Pollock
Petersburg, VA
Supporter of United Poultry Concerns
From: Nicholas Kyriazi [mailto:nkyriazi@comcast.net]
Sent: Monday, July 23, 2012 10:48 PM  To: Maynard, Mary  Subject: Re: Request

I was unaware of the details behind the action.
I support the mandate to require sprinklers to be installed in animal housing facilities for Category B animals. I have no intention of filing an appeal to the decision not to include this amendment. I consider it an action internal to NFPA over which I have no authority except to say that I share the sentiment behind the amendment to prevent suffering and painful death for thinking and feeling animals.

Please re-instate the amendment to the 150 Standard for Fire & Life Safety in Animal Housing.

Nicholas Kyriazi
517 Avery Street
Pittsburgh, PA  15212
Maynard, Mary

From: Sarah Stewart [sarahbstewart@yahoo.com]
Sent: Friday, July 20, 2012 4:24 PM
To: stds_admin; PublicAffairs
Subject: Please uphold the NFPA amendment to the 150 Standard for Fire & Life Safety in Animal Housing

Dear Members of the National Fire Protection Association

I am writing as a concerned citizen to state that I care about farm animals and want them protected from preventable fires, just as the NFPA had commendably recommended in an amendment to the 150 Standard for Fire & Life Safety in Animal Housing. I was delighted by the NFPA recommendation and assumed that such basic preventions would already be a requirement. However, I am concerned and saddened that the amendment has been withdrawn in response to an industry coalition opposing it.

I respectfully urge the NFPA to uphold its original decision to require installations of smoke and sprinkler control systems in Category B animal facilities rather than cave to the industrial farm animals pressure that the standards remain unsafe and inhumane. Poultry and livestock producer opposition to such minimal protections for their defenseless animals as sprinklers and smoke control systems should be resisted by the NFPA. Please do not give in to industry’s preference for allowing thousands of animals to endure the terror and physical agony of suffocation and being burned to death in a fire-trap building, rather than installing the fire protection systems the NFPA has rightly recommended.

I ask that the National Fire Protection Association to reverse its decision to withdraw the amendment at the behest of industries that prefer to let animals suffer and die horribly in preventable fires each year and collect the insurance, rather than to invest in a fire protection system. Please uphold your original amendment.

Thank you for your attention to my opinions and concerns.
Sincerely, Sarah Stewart, 207 Appleton Street, Cambridge, MA 02138 and 302 Granite Street, Gardiner, MT 59030

Sarah B. Stewart, Psy.D., PLLC
NOTE: My e-mail is not a reliable way to reach me, as I check it irregularly. If you need a timely reply, it is best to leave a message on my work voice mail at 617-876-6735. I neither schedule nor change appointments vía e-mail. Please call my work number instead. Thank you.
Subject: FW: Farm animal confinement building amendment

From: slaird141@comcast.net [mailto:slaird141@comcast.net]
Sent: Tuesday, July 24, 2012 11:35 PM
To: Maynard, Mary
Subject: Re: Farm animal confinement building amendment

Dear Mss. Maynard and Fuller,

I'm impressed by your diligence and organization in getting thoughtful replies to everyone who emailed NFPA on this issue. I now know that Karen Davis of United Poultry Concerns is filing an appeal on this issue, which I trust represents my concerns and desire on the subject. So without repeating all that I'm sure will be in the arguments of her appeal, I just want to go on record as another person in support of basic fire protection for confined farm animals, especially those in mass production facilities. Agribusiness will hoot and holler about how terrible a burden it will be and how they care so much for their factory farmed animals and that they don't need outsiders telling them what to do, but the truth is they'd rather just let insurance cover the financial loss represented by the animals that die and suffer from burning and smoke inhalation. The larger operations especially can afford basic safety standards for the animals who already have a terrible existence without fire; this is the USA, not a 3rd world country, so let's have standards befitting the USA. I hope that NFPA is guided by common sense and ethics over industry pressure on this issue.

Sincerely,
Scott Laird
617.770.3500 fax

From: slaird141@comcast.net [mailto:slaird141@comcast.net]
Sent: Sunday, July 22, 2012 5:33 PM
To: PublicAffairs
Subject: Farm animal confinement building amendment

Please stand your common sense ground on amending policy to require sprinklers and smoke escape devices in all confined farm animal structures. Don't let the moneygrubbing, uncaring agri-industry write its own non-regulation. Don't cave in to them.

Sincerely,
Scott Laird
Hello,
I care about farm animals and want them protected from preventable fires, just as you have commendably recommended.
PLEASE DENY the industry appeal & uphold your original proposed amendment to install smoke & sprinkler control systems in Category B animal facilities. Thank you for your consideration.
Dr. Theresa Gargiulo
Maynard, Mary

Subject: Fife safety controls in Anmal confinement facilities

From: Chelsea Chavis [mailto:gypseamusic@gmail.com]
Sent: Monday, July 30, 2012 11:43 PM
To: stds_admin; PublicAffairs
Subject: Fife safety controls in Anmal confinement facilities

I care so much about animals and it breaks my heart that they are hurt every day as though they are worth less than humans.
We all share this planet and we have to protect each other.
I hate that animals are more or less [more more than less!] tortured to death to reach the unhealthy demands for meat in our country.
The least we can do is make them more comfortable as many of them wait, with their quality of life in the negatives, to die.

I care about farm animals that are being used for milk, eggs, meat, and wool. Please deny the industry appeal and uphold your proposed amendment to make their confinement spaces safer so accidental fires will not cause them to suffer even more.

Thank you so much

Chelsea Chavis
Redondo beach, CA 90277
Item 12-8-9
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (275-1)


Motion: To Reject Comment 275-1

TC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment HAS achieved the necessary 2/3 majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is 10 [20 (eligible to vote) – 5 (ballots not returned) – 1 (abstention) = 14 × 0.66 = 9.24]

20 Eligible to Vote
5 Not Returned (Hogan, Long, Marshall, Sheppard, Sloan)

11 Agree
3 Do Not Agree (Beitel, Francis, McPhee)
1 Abstain (Koffel)

TC Action: PASS
Amendment: Reject Comment 275-1

NOTE: This Association Amendment (“Amendment”) is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects (“Regs”). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, there is no existing text therefore the text would be deleted.

5.2.3 When the fire performance of the thermal barrier does not meet the acceptance criteria described in 5.2.1 or 5.2.2, the thermal barrier shall be acceptable for use if it remains in place and prevents the foam plastic insulation from contributing to the fire growth for the test period conducted through visual inspection of the foam.

A.5.2.3 This alternate acceptance criterion recognizes that some materials can meet the Temperature Transmission test but may fail the acceptance criteria in the Integrity Fire test. Even though the thermal barrier protects the foam plastic insulation, its own nature may cause excessive flame spread or flashover to occur, prior to any involvement of the foam plastic insulation. One example of this type of material is 19 mm (0.75 inch) thick plywood.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs. that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

X Do Not Agree*

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:
I do not agree. I believe that a material which meets and fire resistance portion of NFPA 275 but fails the room/corner tests can still be used if the room/corner test is conducted for the duration required for the test, and post-test inspection shows that the foam plastic is not significantly involved, then the material did its job in protecting the foam plastic.

Signature: ________________

Name - Please Print: Jesse Beitel

Date: 6/27/2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Jenny Depew, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
EMAIL: jdepw@nfpa.org  FAX: 617-984-7110
Amendment: Reject Comment 275-1

NOTE: This Association Amendment (“Amendment”) is being submitted for a ballot for the Technical Committee pursuant to section 4.7.1 of the Regulations Governing Committee Projects (“Regs”). Under the Regs., if an Amendment fails the ballot of the Technical Committee, the text affected by the Amendment returns to previous edition text. See Regs. at 4.7.1(c). Please note that the Amendment that is the subject of this ballot recommends a return to previous edition text. In this case, there is no existing text therefore the text would be deleted.

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☐ Agree

☒ Do Not Agree*

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

The committee discussed this provision in the first iteration of the change in the standard and again this cycle. The committee recognizes the contribution materials classified under the old standard have made to fire safety and wished to maintain that provision. The new text allows for the continued contribution of materials protecting foam products and allows for additional criteria where the necessity exists. The committee acted prudently and in the interests of fire safety.

__________________________________________________________

__________________________________________________________

Signature: ____________________________

Name - Please Print: ____________________________

Date: ______________________________

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Jenny Depew, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
EMAIL: jdepew@nfpaso.org  FAX: 617-984-7110
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This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs. that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☐ Do Not Agree*

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I am voting negative because historically, earlier code provisions for thermal barriers have allowed for the use of thick wood-based structural panels that meet the requirements for protection of the foam insulation. Materials that can meet the ‘fire resistance’ criteria (limit temperature rise and ignition at foam interface) should be permitted, regardless of whether their flammability causes flashover, provided they protect the foam plastic insulation so that it does not become involved and contribute in the early stages of the fire, including one that has already gone to flashover.

Signature: ____________________________________________

Name - Please Print: Rodney A McPhee

Date: June 28th, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Jenny Depew, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
EMAIL: jdepew@nfpa.org  FAX:  617- 984-7110
Amendment: Reject Comment 275-1

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5.2.3 When the fire performance of the thermal barrier does not meet the acceptance criteria described in 5.2.1 or 5.2.2, the thermal barrier shall be acceptable for use if it remains in place and prevents the foam plastic insulation from contributing to the fire growth for the test period conducted through visual inspection of the foam.

A.5.2.3 This alternate acceptance criterion recognizes that some materials can meet the Temperature Transmission test but may fail the acceptance criteria in the Integrity Fire test. Even though the thermal barrier protects the foam plastic insulation, its own nature may cause excessive flame spread or flashover to occur, prior to any involvement of the foam plastic insulation. One example of this type of material is 19 mm (0.75 inch) thick plywood.

This means that, whether this ballot agrees or disagrees with the Amendment, the default recommendation to the Standards Council will be to return to previous edition text. While the Standards Council generally defers to the default recommendation prescribed by the Regs. that recommendation is not binding, and in the event of an appeal to the Standards Council, the Technical Committee ballot results will be reviewed and considered by the Council as part of its deliberations. It is important, therefore, that you provide your vote and reasoning for the consideration of the Council.

☐ Agree

☐ Do Not Agree*

☒ ☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

In accordance with the policy of the Standards Council, I have abstained from voting. However, based upon the Ballot, the language above is not consistent with the ballot processed by the Committee. The language balloted by the Committee also included references to the “MCM” product. I do concur with those that have argued that people are confusing the room corner test used to qualify an interior finish as compared to the room corner test used to qualify a thermal barrier that might not be an interior finish material.

_______________________________________________________________

Signature: ____________________________

Name - Please Print: William E. Koffel

Date: June 27, 2012

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Jenny Depew, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Visual inspection of the foam or MCM being protected. There are test safety concerns as well as equipment safety concerns. In addition, determining whether the foam or MCM contributes to the fire growth may be difficult through visual inspection when the room corner assembly has gone beyond flashover.

WESEL, R.: I would like to change my vote to “negative” on the proposal for 275. I agree with the rationale stated by Marcillo. This test method needs to retain the existing pass/fail criteria. One of the methods purposes is to evaluate and limit materials that exhibit flashover. It makes no sense to cover a nonpassing material with another nonpassing material and call it “good.” We need to retain the flashover as a mode of failure. It is a system or assembly that is being tested and flashover of the system, regardless of the protective material, should not be considered to be a passing performance.

Explanation of Abstention:

NEWMAN, K.: Not qualified to comment on this section.

THORBERRY, R.: I am required to abstain by the NFPA Technical Committee Projects Regulation since I have a direct client interest in this item. However, I fully support the Committee Action taken on this ballot item.

Ballot Results:

Final Action: Reject


Number Eligible to Vote: 21

Ballot Results: Affirmative: 12 Negative: 4 Abstain: 5

Explanation of Negative:

KOFFEL, W.: I agree with the ballot comments of Beitel and Thornberry. MCPHEE, R.: I agree with Jesse Beitel’s comments that accompanied his ballot comments.

SUMÁTHIPALA, K.: Wood structural panels currently meets the thermal barrier requirements and should be continued to be allowed per NFPA 275.

Ballot Results: Affirmative: 12 Negative: 4 Abstain: 5


Explanation of Negative:

BEITEL, J.: I vote negative because there are materials that can meet the fire-resistance test criteria and can provide protection to foam plastic in a room/corner test but due to their flammability fail the criteria for the room/corner tests. These materials should be allowed to be used as a thermal barrier.

KOPPFF, W.: I agree with the ballot comments of Beitel and Thornberry.

MCPHEE, R.: I agree with Jesse Beitel’s comments that accompanied his ballot comments.

SUMÁTHIPALA, K.: Wood structural panels currently meets the thermal barrier requirements and should be continued to be allowed per NFPA 275.

Ballot Results: Affirmative: 12 Negative: 4 Abstain: 5


Explanation of Negative:

KOFFEL, W.: I agree with the ballot comments of Beitel and Thornberry.

SUMÁTHIPALA, K.: Wood structural panels currently meets the thermal barrier requirements and should be continued to be allowed per NFPA 275.
have been developed with acceptance criteria for assessing the performance of interior finish materials to satisfy other code requirements which may not be applicable to the material being used as the thermal barrier in actual applications in buildings. Therefore, it seems overly restrictive to require thermal barriers to meet the acceptance criteria for these room corner tests in order to demonstrate that they will remain in place for the duration of the 15 minute fire exposure.

And I move to reject comments 275-1.

PRESIDING OFFICER HARRINGTON: Do I have hey second? I didn't hear. Do I have a second?

SPEAKER: Second.

PRESIDING OFFICER HARRINGTON: Okay.

Thank you.

Please proceed.

MR. HIRSCHLER: Thank you. This is different from what the things I was talking about yesterday. This is a technical issue. What we're talking about is that the committee chose to replace in the test method, which is the room corner test, replace the pass/fail criteria by eliminating the pass/fail criteria.

So what we're now faced with, if this motion fails, is that a thermal barrier will be a product that is tested in the room corner test. That test is run. Flashover occurs. That test continues, and after the test, in some way the laboratory determines that the plastic insulation it still remains in place. I'm not sure how they can determine whether it remains in place. A number of problems with this.

Number 1, the problem of safety to the lab. The lab is required to run a test long past flashover. This is a 15-minute test. It could be the flashover occurs in two or three minutes, and we'll have to continue running the test for another 12 minutes or so during flashover.

Number 2, there is an issue of we are determining that the material that fails a test, because it goes to flashover, is suitable for protecting other materials as a thermal barrier. The rationale for the issue can be found.

If you look at the proposal, one page above the comment, proposal 275-12 in page 275-4 for
Mr. (inaudible) explained that wood structural panels currently meet the thermal barrier requirements of the past and should be continued to be used --

PRESIDING OFFICER HARRINGTON: One minute remaining.

MR. HIRSCHLER: -- if the belief is the thermal wood structure panels are suitable, then that is a code issue; and that's not a standard issue. The test shouldn't be revised to approve particular materials and endanger the lives of the labs and endanger lives of people because now we have a test without a proper criteria.

Please approve this motion. Thank you.

PRESIDING OFFICER HARRINGTON: Thank you.

Mr. Bedders, would you like to give the Committee's perspective on that?

MR. BEDDERS: Mr. Chair, I wish to defer to Jess Beitel, a member of the fire test committee to speak on behalf.

PRESIDING OFFICER HARRINGTON: Thank you.

Microphone 8.

MR. BEITEL: Jess Beitel, Hughes Associates, speaking for myself on this issue and try to give some clarity to what we are debating. Basically --

PRESIDING OFFICER HARRINGTON: And are you speaking for or against?

MR. BEITEL: I'm against the motion on the floor.

PRESIDING OFFICER HARRINGTON: Okay.

Thank you.

MR. BEITEL: In essence, the issue here is a thermal barrier product is a product which goes through two tests -- a fire resistance test and then a room corner type test. It evaluates whether or not it will protect underline foam plastic that this material was covering.

What we have found, as we developed
NFPA 275 -- it's a new standard -- is that we recognize, after the first standard is published, that there was an issue with respect to certain materials which have been used as thermal barrier products because they can meet the fire resistance portion of the test but yet not meet the room corner test.

So, for example, if I have an assembly with foam plastic in the wall, I cover that with, let's say, a thickness of wood of a wood product, whatever thickness that is. That thickness can pass the first portion of the 275 test, which is the fire resistance test; and then we put that assembly into a room corner test. What will happen is that the wood material typically will flash over that roof and will fail that test. However, what we are asking in this change is that, in essence, that you allow that room test, even though it flashes over, it continues to run for the entire 15-minute duration that's specified for that test. And at the end of that, extinguish the fire, remove that protective material, and see if the foam is involved.

If the foam has not been involved in that fire, then the wood product did exactly what it's supposed to do. It acted as a thermal barrier. A couple of issues that I'd like to quickly rebut, one is that our laboratories that can run that test for post flashover conditions, they are out there. Maybe not all, but there are laboratories that can intersect testing, and San Antonio is one.

The other issue is, in the same manner which we protect structural steel, we allow combustible materials, at the correct thickness, to protect structural steel. We're just allowing a combustible material to protect a foam plastic. At the end of the day, the flame spread characteristics of the protective membrane are basically regulated by the interior section of the
code, either 101 or 5000. So those products are then regulated by that. So if they cause a flashover or if they cause a -- have a Class B or Class A flame spread, they may not be able to be used even as a thermal barrier based on those other regulations.

We feel that this was an appropriate change to make to recognize alternate products to be used as alternate thermal barriers.

Thank you.

PRESIDING OFFICER HARRINGTON: Thank you.

So with that, we'll open up for floor debate on the motion. Again, as a reminder, please provide your name, affiliation, and whether you're going to be speaking in support of or against the motion.

Microphone 5.

MR. KOVACIK: Thank you, Mr. Chairman. I'm John Kovacik, Underwriters Laboratories. I speak in support of the motion on the floor. UL has the member on this committee, and our vote was to reject this comment. We do not believe that the material that the committee is proposing to put into the document is appropriate and represent some real safety concerns, specifically related to the testing procedures themselves.

In our negative ballot, we stated the following:

For the test method referenced in Section 5, specifically UL 9 -- excuse me -- UL 1715 and NFPA 286, flashover typically indicates conclusive test results; and consequently the tests are terminated. These methods are not intended as post flashover tests. Test laboratories have limited or no experience conducting these tests potentially well beyond flashover for the purpose of examining the foam for MCM being protected. There are test safety concerns as well as equipment safety concerns.

In addition, determining whether the foam
or MCM contributes to the fire growth may be difficult through visual inspection when the room corner assembly has gone beyond flashover.

I urge the members of this body to vote in support of this motion.

Thank you.

PRESIDING OFFICER HARRINGTON: Thank you.

Microphone 8.

SPEAKER: Timothy (inaudible) American Wood council speaking against the motion.

This motion is a backhanded effort to regulate interior finish through 15-minute thermal barrier. One place where wood product is commonly used to protect foam insulation is on houses that are built on stilts like close to the ocean to prevent storm surge from getting into house.

If you're going to use foam insulation on the underside of the house, you need to protect the foam; and typically you can use gypsum board because it's exposed to -- and what's commonly used right now is wood product that meets the 15-minute thermal barrier requirement.

There was a question about the laboratories can actually conduct the test proposed by the committee. There are two labs that are capable of conducting it. That's Southwest Reserve as well as Western Fire. I urge you to reject this motion.

Thank you.

PRESIDING OFFICER HARRINGTON: Microphone Number 5.

MR. DAVIS: Dick Davis, FM Global speaking in support of the motion. I would like to make it clear to everyone that the language on 275-2 in the ROC is only language, even though some of it has been underlined.

This concern over the performance of the thermal barrier, after the test, it's stated to be based on visual examination. The language in this proposal is not proper. It doesn't say how to
provide visual examination. It doesn't tell you what the pass/fail criteria should be. It may be obvious to some of us, perhaps, more so with the foam. But this also includes metal composite materials will be more difficult for someone to assess whether or not it actually passed or failed without a specific pass/fail criteria in the standard.

And just not to repeat what's been said, but I've overseen many of these tests. There are four different corner tests that are allowed to be used by the standard ranging from 8 to 50 feet in height. And typically, when they do fail, it happens relatively earlier in a fire, which means you have to continue running the test for at least another five or ten minutes. And there is a very good chance it may over task the pollution control system, and it does put the personnel in jeopardy that are running the test. And I've seen quite a few tests that are pretty scary and failed these tests.

So I urge you to support this proposal.

Thank you.

PRESIDING OFFICER HARRINGTON: Thank you.

Microphone Number 4.

MR. HOLLAND: Joe Holland, Hoover Treated Wood Products. Speaking against the motion.

When you -- I need to respond to a couple of comments by folks that are supporting the motion.

When you're running a test, you know, you've got to look at what's the end result of the test that you're trying to achieve. I think Jess explained that quite well in that, in this particular case, you want to ensure that the material behind the thermal barrier is not going to be impacted. And the fact that you have flashover is not an indication that the material behind the material is going to be impacted. All that means is that we have a fire, but what we want to be sure
is that, in this case, the foam plastic does not
become involved in the fire and add to it. So that
is the purpose of the thermal barrier.
The purpose of the thermal barrier is not
to ensure that we don't have flashover. The
problem that the test lab have, those are problems
that the test lab have. That has nothing to do
with what we are trying to achieve in running this
test. We just want to make sure that foam plastic
is not becoming involved in the fire.
I urge you to reject the comment -- I
mean, to -- against the motion. How is that?
PRESIDING OFFICER HARRINGTON: Thank you.
Microphone Number 5.
MR. HIRSCHLER: Marcelo Hirschler GBH
International for NAFRA. I want to rebut a couple
of things.
First of all, this test is referenced in
all the building codes, both NFPA 5000 and IBC --
PRESIDING OFFICER HARRINGTON: Are you
speaking for or against the motion?
MR. HIRSCHLER: Excuse me. I'm speaking
for the motion.
PRESIDING OFFICER HARRINGTON: Thank you.
MR. HIRSCHLER: Okay. Excuse me about
that.
This is referenced in the code. So that
pass/fail criteria come here will have an impact in
the code. This is not a backhanded way of
address -- of addressing the code. If someone
wants to have a specific exclusion for a specific
material, like a wood structural panel that happens
to behave well, then the code is the place to do
that.
The code requires that interior finished
foam plastic shall not be used exposed. It needs
to be covered by thermal barrier. What's the point
of that? The point of that is to demonstrate that
we don't get flashover; that we don't get a serious
situation.
I just noticed the gentleman before, Joe Holland, saying that flashover just indicates there is a fire. No, flashover indicates a hell of a lot more then there is a fire. There's a big fire. That room is gone. So if we have a room corner test, the test where we test the entire room and if we go to that room to flashover, we're now saying that this material that is going -- that has gone to flashover is safe to protect another material.

I don't think so. Thank you.

PRESIDING OFFICER HARRINGTON: Thank you.

Microphone 8.

MR. BEITEL: Jess Beitel, Hughes Associate. Representing myself on this issue and stand against the motion on the floor.

I just like to reiterate a couple of things. There are labs which can do this test. If any lab takes on wanting to do this test, then that lab report, because of all their procedures, will determine whether or not they can run that test from a lab safety point of view either for personnel or equipment protection.

With respect to the use of this type of assembly, which would be a combustible material to protect foam plastic, we think that's a viable alternative. It's not going to be common. It's not going to be used a lot because, if you can think about that, if you can picture that room corner test continuing to flashover for another ten minutes, that's an excessive amount of severe fire which is going to be imposed onto that thermal barrier material and whether or not it can withstand that and still protect the foam underneath it.

If it can, we feel that that material should be allowed to be used. That material surface flammability is regulated by other sections of the code, which will address that issue; and in a very similar manner, as we protect things such as
structural steel, we can use combustible materials
to protect structural steel hourly ratings, two
hours rating. This is the same thing, just
protecting the foam plastic.
I urge you to reject the motion.
Thank you.

PRESIDING OFFICER HARRINGTON: Thank you.
Is there any further discussion on
Motion 271-51 which is to reject Comment 275-1?
Any final comments from the Chair?
MR. BEDDERS: Not at this time.
PRESIDING OFFICER HARRINGTON: Okay.
Thank you. So at this point, we're going to move
on to vote, and before we vote; let me restate the
motion.
The motion on the floor is to reject
Comment 275-1. So please record your vote, one in
favor of the motion or two opposed to the motion.
Balloting closing in five seconds. Balloting
closed. And the motion passes.
Item 12-8-10
ASSOCIATION AMENDMENT BALLOT RESULTS

DATE: July 10, 2012

AMENDMENT (499-1)

Document: NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas

Motion: To Accept an Identifiable Part of Comment 499-6

TC FINAL Ballot Results

According to 4.7.1 in the NFPA (RGCP), the final results show this Amendment **HAS** achieved the necessary **2/3** majority vote. The number of affirmative votes needed to obtain a recommendation to issue the Amendment is **12**\[18 \text{ (eligible to vote)} - 0 \text{ (ballots not returned)} - 1 \text{ (abstention)} = 17 \times 0.66 = 11.22\]

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<tr>
<td>Abstain</td>
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<td>(Driscoll)</td>
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TC Action: PASS
NFPA 499
TC BALLOT for Electrical Equipment in Chemical Atmospheres
June 2012 ASSOCIATION AMENDMENT #499-1

Amendment: Accept an Identifiable Part of Comment 499-6.

☐ Agree

If you agree with this amendment, the recommendation will be to define combustible dust in a single sentence to read as follows:

3.3.3 Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air.

☒ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

3.3.3* Combustible Dust. Any finely divided solid material that is 420 microns or smaller in diameter (material passing a U.S. No. 40 Standard Sieve) and presents a fire or explosion hazard when dispersed and ignited in air.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Particle size is an essential parameter that needs to be considered when deciding if a location needs to be classified as a Class II location. It therefore needs to remain in the definition.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110

Signature: Edward M. Briesch

Name - Please Print: Edward M. Briesch

Date: 6/22/2012
Amendment: Accept an Identifiable Part of Comment 499-6.

☐ Agree

If you agree with this amendment, the recommendation will be to define combustible dust in a single sentence to read as follows:

3.3.3 Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air.

☒ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

3.3.3 Combustible Dust. Any finely divided solid material that is 420 microns or smaller in diameter (material passing a U.S. No. 40 Standard Sieve) and presents a fire or explosion hazard when dispersed and ignited in air.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

We do not agree with the amendment.

At least six different NFPA standards now cover combustible dusts (e.g., NFPA 61, NFPA 484, NFPA 499, NFPA 654, NFPA 655, NFPA 656) and each have their own definition for the term “Combustible Dust”. This proposed new definition correlates with no other NFPA standard; and placing another new and different definition into NFPA 499 will not resolve these inconsistencies; in fact, doing so exacerbates the situation.

Therefore, we believe that it is beneficial and appropriate for NFPA to resolve the issue, by assembling a group to develop a definition for Combustible Dust which can be used uniformly across the standards. Uniform definitions help reduce trade barriers and result in productivity improvements for businesses that manufacture, store or use materials, which may form combustible dusts.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: [Name]

Date: [Date]

July 31, 2012
NFPA 499
TC BALLOT for Electrical Equipment in Chemical Atmospheres
June 2012 ASSOCIATION AMENDMENT #499-1

Amendment: Accept an Identifiable Part of Comment 499-6.

☐ Agree

If you agree with this amendment, the recommendation will be to define combustible dust in a single sentence to read as follows:

3.3.3 Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

3.3.3* Combustible Dust. Any finely divided solid material that is 420 microns or smaller in diameter (material passing a U.S. No. 40 Standard Sieve) and presents a fire or explosion hazard when dispersed and ignited in air.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I continue to believe that the original Technical Committee ROC action was technically correct. However, given only the two above choices, the existing text is the least objectionable of the two. The other definition introduces “flash” and removes the definition of “finely”, neither of which was supported by the committee.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110

Signature: William G. Lawrence

Name - Please Print: William G Lawrence
Date: 2012-06-25.
Amendment: Accept an Identifiable Part of Comment 499-6.

☐ Agree

If you agree with this amendment, the recommendation will be to define combustible dust in a single sentence to read as follows:

3.3.3 Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air.

☐ Do Not Agree*

If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

3.3.3 Combustible Dust. Any finely divided solid material that is 420 microns or smaller in diameter (material passing a U.S. No. 40 Standard Sieve) and presents a fire or explosion hazard when dispersed and ignited in air.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I am not in a technical position to make this determination.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110

Signature: ____________________________

Name - Please Print: Mark Driscoll

Date: June 20, 2012
Amendment: Accept an identifiable Part of Comment 499-6.

☐ Agree

If you agree with this amendment, the recommendation will be to define combustible dust in a single sentence to read as follows:

3.3.3 Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air.

☐ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

3.3.3* Combustible Dust. Any finely divided solid material that is 420 microns or smaller in diameter (material passing a U.S. No. 40 Standard Sieve) and presents a fire or explosion hazard when dispersed and ignited in air.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

I think it unlikely to find "Dust that wouldn't have a range of sizes above and below 420µm"

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: Matt Eglolf

Date: 6-19-2012
Amendment: Accept an Identifiable Part of Comment 499-6.

X Agree

If you agree with this amendment, the recommendation will be to define combustible dust in a single sentence to read as follows:

3.3.3 Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air.

☐ Do Not Agree* If you do not agree with this amendment, the recommendation is to return to previous edition text which reads as follows:

3.3.3* Combustible Dust. Any finely divided solid material that is 420 microns or smaller in diameter (material passing a U.S. No. 40 Standard Sieve) and presents a fire or explosion hazard when dispersed and ignited in air.

☐ Abstain*

*Please give reasons for voting “Do Not Agree” or “Abstain”:

Defining dust as to the likelihood of flash fire or explosion hazard is more relevant to this code in the Classified Areas in the NEC.

Please return as soon as possible, but no later than Thursday, June 28, 2012 to:

Joanne Goyette, Administrator, Technical Projects
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
FAX: 617-984-7110

Signature: [Signature]

Name - Please Print: [Name - Please Print]

Date: [Date]
499-6 Log #16 — Final Action: Accept in Principle in Part
(3.3.3 Combustible Dust, 4.2.1, A.3.3.3, and A.4.2.1)

Submitter: Marcelo M. Hirschler, GBH International

Comment on Proposal No: 499-1

Recommendation: Revise text to read as follows:

3.3.3* Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air. Particles in the solid phase that can be electrically charged and can include hollow particles. Dust that can accumulate on equipment and includes particles of 420 microns or smaller (material passing a U.S. No. 40 Standard Sieve) is considered to present a dust flash fire or dust explosion hazards unless testing shows otherwise. See ASTM E 1226, Standard Test Method for Explosibility of Dust Clouds. (Material passing a U.S. No. 40 Standard Sieve) should be considered to present a dust flash fire or dust explosion hazards unless testing shows otherwise. See ASTM E 1226, Standard Test Method for Explosibility of Dust Clouds. More information regarding testing is more appropriately placed in the annex under 4.2.1 and not under the definition of combustible dust. ASTM E 1226 has a 2010 date and a revised title.

Committee Meeting Action: Accept in Principle in Part

1. Accept the portion of the submitter’s recommendation identified to add the text for materials that do not require testing as Annex for 4.2.1 as shown below:

A.4.2.1 The following materials would not need to be tested:

1. Noncombustible materials — Noncombustible materials should be established by a recognized test procedure or self-evident chemical structure (e.g., completely oxidized metal, silicate tale, etc.).

2. Resilient pellets — Pellets or other coarse material significantly greater than 420 microns, which are nonfrangible (which will not break into smaller particles during normal handling or pneumatic conveying), do not require testing.

3. Combustible dust includes particles in the solid phase and not those in a gaseous or liquid phase and can include hollow particles. Dust which can accumulate on equipment and includes particles of 420 microns or smaller (material passing a U.S. No. 40 Standard Sieve) is considered to present a dust flash fire or dust explosion hazards unless testing shows otherwise. See ASTM E 1226, Standard Test Method for Explosibility of Dust Clouds, 2010. Standards Council Supplemental Agenda August 7-9, 2012 Page 604 of 2025


5. Update the identified references in Annex B to be consistent with their appearance in updated Annex A material.

6. Update the identified references in Annex B to be consistent with their appearance in updated Annex A material.

7. The proposed definition is in conflict with the manual of style and the submitter’s recommendation identified to add the text for materials that do not require testing as Annex for 4.2.1 as shown above.

8. Delete 3.3.x Flash Fire and A.3.3.x Flash Fire.

9. Recommendation: Revise text to read as follows:

3.3.3* Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air. The term ‘solid particles’ addresses particles in the solid phase and not those in a gaseous or liquid phase and can include hollow particles. Dust which can accumulate on equipment and includes particles of 420 microns or smaller (material passing a U.S. No. 40 Standard Sieve) is considered to present a dust flash fire or dust explosion hazard unless testing shows otherwise. (See ASTM E1226, Standard Test Method for Explosibility of Dust Clouds.)

Further Backup from Comment 499-6 (Committee Statement)

499-3 Log #2 — Final Action: Accept in Part
(3.3.3 Combustible Dust)

Submitter: David B. Wechsler, The Dow Chemical Company

Comment on Proposal No: 499-1

Recommendation: Revise text to read as follows:

3.3.3* Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air. The term ‘solid particles’ addresses particles in the solid phase and not those in a gaseous or liquid phase and can include hollow particles. Dust which can accumulate on equipment and includes particles of 420 microns or smaller (material passing a U.S. No. 40 Standard Sieve) is considered to present a dust flash fire or dust explosion hazard unless testing shows otherwise. (See ASTM E1226 or ISO 6184/1.)

Delete 3.3.x Flash Fire and A.3.3.x Flash Fire.

Substantiation: NFPA 499 does not provide any testing or criteria to address ‘flash-fire’. NFPA 499 is dealing with a combustible dust, whose primary potential hazard is an overpressure condition developed by a dust in a cloud. While a fire which spreads rapidly may be a significant concern, this specific NFPA recommended practice does not address this specific fire condition.

Committee Meeting Action: Accept in Part

1. Revise text to read as follows:

3.3.3* Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air. The term ‘solid particles’ addresses particles in the solid phase and not those in a gaseous or liquid phase and can include hollow particles. [Use third sentence revised by Comment 499-4 (Log #3).] (See ASTM E1226 or ISO 6184/1.)

Delete 3.3.x Flash Fire and A.3.3.x Flash Fire.

Substantiation: NFPA 499 does not provide any testing or criteria to address ‘flash-fire’. NFPA 499 is dealing with a combustible dust, whose primary potential hazard is an overpressure condition developed by a dust in a cloud. While a fire which spreads rapidly may be a significant concern, this specific NFPA recommended practice does not address this specific fire condition.

Committee Meeting Action: Accept in Part

1. Revise text to read as follows:

3.3.3* Combustible Dust. Finely divided solid particles that present a dust flash fire or dust explosion hazard when dispersed and ignited in air. The term ‘solid particles’ addresses particles in the solid phase and not those in a gaseous or liquid phase and can include hollow particles. [Use third sentence revised by Comment 499-4 (Log #3).] (See ASTM E1226 or ISO 6184/1.)

Delete 3.3.x Flash Fire and A.3.3.x Flash Fire.

Committee Statement: The Committee accepted the addition of the underlined text in A.4.2.1 with minor revision, revised the particle size from “420” to “500” microns, and accepted the deletion of the first two subparts (1) and (2) in the beginning of A.3.3.3 for Group F dust. See Committee Action on Comments 499-3 (Log #2) & 499-4 (Log #3). The Committee did not accept the submitter’s recommendation to delete text from the definition of 3.3.3 Combustible Dust because they believe that the text is essential information for the definition of Combustible Dust.

The Committee accepted the new title and edition of ASTM E 1226 and the relocation of the ISO Standards Publications into Chapter 2 and Annex B according to the NFPA Manual of Style. Number Eligible to Vote: 17

Ballot Results: Affirmative: 16 Abstain: 1

Explanation of Abstention:

DRISCOLL, M.: My technical background on this specific item is not adequate to make an opinion.
The Committee did not accept the deletion of the words “dust fire or”. The Committee believes that this definition serves the purposes of this document. The Committee did not accept the submitter’s wording for the third sentence in the definition. See Comment 499-4 (Log #3).

Number Eligible to Vote: 17

Ballot Results: Affirmative: 16 Negative: 1

Explanation of Negative:
URAL, E: Proliferating multiple different meanings to the same term (Combustible Dust) is counterproductive and will serve no useful purpose other than confusing to the users. I also like the flash fire part.

499-4 Log #3 Final Action: Accept in Principle in Part (3.3.3 Combustible Dust)


Comment on Proposal No: 499-1

Recommendation: Revise the third sentence of the revised Combustible dust definition to read: Dust which can accumulate on equipment and includes particles of 500 microns or smaller (material passing a U.S. No. 35 40 Standard Sieve as defined in ASTM E 11-04) are considered to present a dust flash fire or dust explosion hazard unless determined testing shows otherwise. (See ASTM E1226 or ISO 6184/1.)

Substantiation: The revised text provides a historic perspective that correctly addressed a combustible dust and yet still permits a determination which may be testing, published data or other information as to why dust particles of small size (500 microns or less) should not be considered a combustible dust. Making some type of comment about the dusts accumulating on equipment really has no bearing on whether or not the dust is a combustible dust. As an example, a process operation may have outstanding housekeeping so that there is no dust accumulations and yet the material being processed may still be a combustible dust.

Committee Meeting Action: Accept in Principle in Part

1. Revise the third sentence of the submitter’s recommendation for the definition of Combustible Dust to read: Dust which can accumulate on equipment and includes particles of 500 microns or smaller (material passing a U.S. No. 35 40 Standard Sieve as defined in ASTM E 11, Standard Specification for Wire Cloth and Sieves for Testing Purposes) are considered to present a dust flash fire or dust explosion hazard unless determined testing shows otherwise. (See ASTM E 1226 or ISO 6184/1.)


Committee Statement: The Committee accepted the submitter’s revised particle size of 500 microns in the Combustible Dust definition; they corrected the sieve size to “U.S. No. 35” that correlates with the 500 micron size particle, and accepted the text that was struckout as shown in the third sentence. The Committee deleted the “04” following ASTM E 11, as it refers to the edition date. The Committee did not accept deleting the words “dust fire or”. See Committee Action on Comment 499-3 (Log #2).

Number Eligible to Vote: 17

Ballot Results: Affirmative: 16 Negative: 1

Explanation of Negative:
URAL, E: Proliferating multiple different meanings to the same term (Combustible Dust) is counterproductive and will serve no useful purpose other than confusing to the users.

Backup Proposal to Comment 499-6

499-1 Log #CP2 Final Action: Accept (Entire Document)

Submitter: Technical Committee on Electrical Equipment in Chemical Atmospheres

Recommendation: Completely revise NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas, including updating existing text and adding new and updating references to other or organization documents as directed below and as shown in the draft at the end of this report.

1. Revise existing 1.1 with minor revisions as shown in the ROP Draft. See revised 1.1.1 in the ROP Draft.

2. Revise existing 1.1.2 with minor revisions as shown in the ROP Draft. See revised 1.1.2 in the ROP Draft.

3. Add a new 1.1.3 as shown in the ROP Draft.

4. Renumber existing 1.1.3 and as 1.1.4 as shown in the ROP Draft.

5. Revise existing 1.2 and remunerate as 1.1.5 with a terminology change deleting the phrase “powdered grain” and replacing it with “grain dust.”

6. Renumber existing 1.1.5 as 1.1.6 as shown in the ROP Draft.

7. Renumber existing 1.1.6 as 1.1.7 as shown in the ROP Draft.

8. Delete existing 1.2.2 since it has been revised to 1.1.2.

9. Renumber existing 1.2.3 as 1.2.2 as shown in the ROP Draft.

10. Renumber existing 1.2.4 as 1.2.3 and delete the existing second sentence as shown in the ROP Draft.

11. Add a new 1.2.4 as shown in the ROP Draft.

12. Add a new 1.2.5 as shown in the ROP Draft.


14. Add the following ASTM documents to existing 2.3.1 as shown in the ROP Draft:


15. Add a reference for ISO Publications as new 2.3.3 to read as shown in the ROP Draft:

   2.3.3 ISO Publications. International Organization for Standardization, 1, rue de Varembo, Case postale 56, CH-1211 Geneva 20, Switzerland.

16. Renumber existing definition of 3.3.3* Combustible Dust and its existing Annex as shown in the ROP Draft.

17. Revise existing definition 3.3.4 Combustible Dust, Class II to become “3.3.4 Combustible Dust Groups” as shown in the ROP Draft.

18. Revise existing definition 3.3.4.3* Group G and add new text Annex for A.3.3.4.3 Group G as shown in the ROP Draft.

19. Delete existing definition 3.3.5 Combustible Material.

20. Delete existing definition 3.3.6 Explosion Severity.

21. Add a new definition 3.3.x* Flash Fire with Annex text as A.3.3.x Flash Fire extracted from NFPA 2113 as shown in the ROP Draft.

22. Revised existing definition 3.3.7* Hybrid Mixture to be an extracted term from NFPA 68, 2007 as shown in the ROP Draft.

23. Delete existing definition 3.3.9 Ignition Sensitivity.

24. Add a new definition 3.3.10 Material Form as shown in the ROP Draft.

25. Add a new definition 3.3.11 Unclassified Locations to be an extracted term from NFPA 70, 2011 as shown in the ROP Draft.

26. Add new Sections 4.1, 4.2, and 4.3 relating to the criteria for ignition of combustible dusts including material form, combustible dust in clouds, or combustible dust in layers, updating the combustible dust testing references, including (combustible) dust cloud explosivity testing, (combustible) dust layer ignition temperature testing, and cloud ignition temperature testing. Delete existing Sections 4.2.1, 4.4.2.4. Retain existing 4.4.3 as 4.3.1.2 and retain existing Section 4.3 as Section 6.2. See revised Chapter 4 in the ROP Draft.

27. Existing Section 4.2.4* Hybrid Mixtures with its associated Annex text A.4.2.4 was relocated into Chapter 4 and numbered as Section 4.4* Hybrid Mixtures A.4.4. See revised Section 4.4 in the ROP Draft.

28. Add new Section 4.5* Electrostatic Discharges and its associated Annex text A.4.5 as shown in the ROP Draft.

29. Add a new Section 4.6 Ignition Criteria as shown in the ROP Draft.

30. The Committee added a new Chapter 5 to focus on the National Electrical Code (NEC) Criteria for combustible dusts, which was previously located in Chapter 4 and moved most of the existing Chapter 4 information into this new chapter. Existing Sections 4.1 through 4.1.1 were moved in the following new sections:

   Section 5.1 National Electrical Code (NEC) Criteria

   Section 5.2 Classification of Combustible Dusts which contains relocated existing Section 4.5 Classification of Combustible Dusts to the new Chapter 5 in the ROP Draft. The brackets [ ] following the paragraphs in Chapter 5 indicate the previous numbering of the material from the 2008 edition of NFPA A 499.

31. The Committee renumbered existing Chapter 5 as Chapter 6 titled as Classification of Class II (Combustible Dust) Locations and revised the provisions to be consistent with the new testing procedures that were updated in Chapter 4.

Existing Section 5.1 became Section 6.1; Existing Section 4.3 became Section 6.2; Existing Section 5.2 became Section 6.3; Existing Section 5.3 became Section 6.4; Existing Section 5.4 became Section 6.5; Existing Section 5.5 became Section 6.6; added new Section 6.7; Existing Section 5.5 became Section 6.8; Existing Section 5.6 became Section 6.9; and Existing Section 5.8 became Section 6.10. The Committee relocated and remunerated existing Figures 5.8(a) through 5.8(i) to Chapter 6 as Figures 6.10(a) through 6.10(i). The Committee also added a legend for “Source” to existing Figure 5.8(a)-elevation view and Figure 5.8(b)-elevation view that did not have the source identified.

New Section 6.7 was added into Chapter 6 to address housekeeping frequencies as a strategy to control dust accumulations. In addition, a table was provided in the Annex as a practical approach to determining appropriate housekeeping frequency.

The brackets [ ] following the paragraphs in Chapter 5 indicate the previous numbering of the material from the 2008 edition of NFPA A 499.

Substantiation: Due to discussions and recent incidents involving combustible dusts, the Committee has taken actions to both clarify and make specific revisions to this recommendation. This action was added in order to provide clarity to the document and includes the following significant clarifications:

1. The Committee revised existing 1.1.1 to clarify the scope of the document.

2. The Committee revised existing 1.1.2 to clarify that this document provides dust information for proper selection of electrical equipment and that the dust table information is not an all inclusive list. The basis for this change was to recognize that the electrical equipment being selected as a result of the hazardous classification process for combustible dusts uses electrical...
equipment tested only under standard temperature, pressure, and oxygen conditions.

3. The Committee added a new 1.1.3 to clarify that this document deals with dust released under a normal atmosphere which may accumulate on the surface of equipment where it could be ignited.

4. The Committee renumbered existing 1.1.3 as 1.1.4 for editorial reasons to retain it in the section.

5. The Committee renumbered existing 1.1.4 as 1.1.5 and changed the terminology from “powdered grain” to “grain dust.”

6. The Committee renumbered existing 1.1.5 as 1.1.6 for editorial reasons to retain it in the section.

7. The Committee renumbered existing 1.1.6 as 1.1.7 for editorial reasons to retain it in the section.

8. The Committee deleted existing Section 1.2.2 to eliminate text which contained duplicate or redundant information. Existing 1.2.2 was deleted as the information was placed in 1.1.2. Other paragraphs were renumbered accordingly. Texts which contained duplicate or redundant information were eliminated.

9. The Committee renumbered existing 1.2.3 as 1.2.2 for editorial reasons to retain it in the section.

10. The Committee added a new 1.2.5 to address the fact that the hazardous area classification process does not address all potential dust hazards.

11. The Committee renumbered existing 1.2.5 as 1.2.6 for editorial reasons to retain it in the section.

12. The Committee added a reference to NFPA 70, 2011 in the mandatory references since it has been added into the body of the document.

13. The Committee added additional ASTM references into Section 2.3 ASTM Publications which now address testing specified within the document.

14. The Committee added a reference to Kline and Sivaraman. ASTM E1226 -2010 Standard Test Method for the Explosibility of Dust Clouds. The proposed revision of the ASTM E1226 does not include the material for this section.

15. The Committee revised existing definition 3.3.4 Combustible Dust for combustible dusts to provide clarification for the application of the document. This text does not in any way modify the content of the Annex material for this section.

16. The Committee revised existing definition 3.3.4 Combustible Dust, Class II to become Combustible Dust Groups to clarify that the dusts defined in NEC Articles 500 and 502 are combustible dusts.

17. The Committee revised existing definition 3.3.4.3 Group G and its Annex to clarify that some carbonaceous dusts with less than or equal to 8 percent total entrapped volatiles can be combustible dusts and would be classified in Group G. While this action was accomplished under Proposal 499-4 (Log83), it was decided to remove the existing Annex material as the ISO test standard was added to the document.

18. The Committee deleted existing definition 3.3.5 Combustible Material as this term added unnecessary confusion with other clarifications that had been made. The Committee believed that it was no longer useful in the document.

19. The Committee deleted existing definition 3.3.6 Ignition Sensitivity as this was not believed to be a valid property for hazardous area classification work.

20. The Committee added a new defined term 3.3.3x for Flash Fire with Annex text as the term was brought into NFPA 499 from NFPA 2113, Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire. The new term was used in the revised definition of combustible dust. The concept is that a combustible dust cloud might be of a magnitude which is different from an ordinary combustible material, in addition to its exploitable dust cloud potential.

21. The Committee revised existing definition 3.3.7 Hybrid Mixtures as an extraction from NFPA 68 for combustible dust.

22. The Committee deleted existing definition 3.3.9 Ignition Sensitivity as this was no longer determined to be a valid property for hazardous area classification work.

23. The Committee added a new defined term for 3.3.10 Material Form to address the specific material being addressed and to help clarify that perhaps a tablet form might not need to be ground down to the smallest particle size for evaluation.

24. The Committee added a new defined term for 3.3.11 Unclassified Locations to clarify the term used in the document.

25. The Committee added new Chapter 4 and completely revised Sections 4.1 through 4.6 to provide more understanding of the ignition aspects of combustible dusts. The Committee renumbered existing 4.1.4 through 4.6 for consistency. The aspects of the dust cloud, the dust layers, and appropriate testing for each, can now be addressed through the use of the new ASTM and ISO standards. The Committee deleted former Section 4.2 and moved the material into those sections dealing with dust clouds and dust layers.

26. The Committee relocated existing Section 4.2.2* Hybrid Mixtures and its Annex text into Section 4.4* with its Annex material.

27. The Committee added new Section 4.5* Electrostatic Charges and its associated Annex text to provide information to address static discharges as a potential ignition source that should be addressed in classifying hazardous locations.

28. The Committee added new Section 4.6 Ignition Criteria to provide information to address ignition criteria.

29. The Committee added new Section 5.4.1.6* Ignition Criteria to provide information to address ignition criteria.

30. The Committee added new Chapter 5 to focus on the National Electrical Code (NEC) Criteria for combustible dusts, which was previously located in Chapter 4 and moved most of the existing Chapter 4 information into this new chapter. The former Chapter 4 was revised for clarification. See new Chapter 5 in the ROP Draft.

31. The Committee renumbered existing Chapter 5 as Chapter 6 titled as Class II (Combustible Dust) Locations and revised the
PRESIDING OFFICER McDANIEL: Thank you, Mr. Fiske. Let's now proceed with the discussion on certified amending motion on NFPA 499.

Microphone 5, please.

MARCELO HIRSCHLER: Marcelo Hirschler, GBH International and I'm here on behalf the North American Flame Retardant Alliance and I move certified amending motion 499-1.

PRESIDING OFFICER McDANIEL: There's a motion on the floor to accept an identifiable part of 499-6. Is there a second? There's a second.

Please proceed.

MARCELO HIRSCHLER: Thank you, Mr. Chairman. This is an issue of definitions again. And the issue I'm bringing to the floor is the following. The definition that is included in 499 contains three sentences. The first sentence the actual definition, combustible dusts is finely divided particles dust/fire hazard.

What this motion would do if accepted by the membership would be to stop the definition there. Then it goes beyond and starts discussing other things and starts including things like reference to a particular NFPA standard and corresponding things that associated with NFPA standard. Maybe that is a requirement. I am not exactly sure. I think it is. This just has no room, no place in the definition. The definition is very clear. First sentence says so. Combustible dust finely divided dust or dust explosion hazard will disperse or ignite in the air period. That's the end.

Whether this includes hallow particles, all that stuff in actually in fact is discussed in more detail in section four in the document.

So I urge you to vote in favor of the motion and have NFPA use clear and concise definitions that include what is required and nothing else. Thank you.

PRESIDING OFFICER McDANIEL: Thank you. Mr. Fiske, would you like to offer the committee's position?

COMMITTEE CHAIR FISKE: Yes, thank you, Mr. Chairman.

Much like the previous chair, I would like
to point out that this is very much -- it's not an
occupancy related standard, but it is usage related.
This is the committee on electrical
equipment and chemical atmospheres and it relates only
to electrical equipment. And this is very strongly tied
to another document that's well known and well used in
NFPA and this is the national electrical code.
The NEC refers to NFPA 499. 499 refers to
the NEC. And in fact, the nexus is so strong that four
of the members of this committee are also members of
code panel 14, myself included, which is responsible for
Articles 502 and 506.

So I believe that the technical committee is
due a certain amount of deference for its specific
expertise in its specific fields. And as a matter of
tradition, not of rule, NFPA's position generally has
been that the technical committee are, in fact, due a
certain after the deference.

This particular comment was accepted in
principal in part and the vote was 17 in favor with one
abstention.

PRESIDING OFFICER McDANIEL: Thank you,
Mr. Fiske.

With that, we'll open debate on the motion.
Please provide your name and affiliation, whether you're
speaking in support of or against the motion.
Microphone 5, please.
MARCELO HIRSCHLER: Marcelo Hirschler, GBH
International, in support of the motion.
I want to point out to the committee --
sorry -- to the membership that all the information that
is in the additional sentences has been included by the
committee in Section 84201 which adds all the
information about compliance with 1226, complies with
the ISO standards. All of that stuff is included
because as the committees correctly noted, all of that
is needed information that has nothing to do with the
definition. It is included elsewhere in the document.

So what we're talking about is where the
committee should include references to other standards
and requirements based on other standards in the
definition which are extraneous to the definition
itself.
I want to point out one more time, as I did earlier today, that NFPA definitions are not enforceable. Thank you.

PRESIDING OFFICER McDANIEL: Microphone 5, please.

ERDEM URAL: I'm going to -- I'm going to speak --

PRESIDING OFFICER McDANIEL: Name and.

ERDEM URAL: Erdem Ural in favor of the motion.

I am a member of this committee. I was also on the task group who developed this definition. Looking at this results here, seems like I voted affirmative. I voted -- am I looking at the right thing? I voted affirmative.

I agree with Mr. Hirschler that definitions should be simple. This thing is talking about hallow particles. Hallow particles are so rare I don't even remember seeing them.

So and I think what this is trying to do is taking the other extraneous material and putting it on the annex and I think that's appropriate because that's information, that's more informational material. Thank you.

PRESIDING OFFICER McDANIEL: Is there any other discussion on this, Mr. Fiske?

COMMITTEE CHAIR FISKE: Thank you, Chairman. Quickly if I may, neither of the people who spoke in favor of this motion have stated that there is anything wrong with the definition. Granted, we all like nice simple definitions, but they aren't always that way and when they are or not there's a reason for it.

PRESIDING OFFICER McDANIEL: Thank you, Mr. Fiske.

Is there any other discussion on Motion 499 to accept an identifiable part of Comment 499-6?

Seeing none.

RICHARD WOOD: Microphone 7, please.

DANNY McDANIEL: Microphone 7.

RICHARD WOOD: Richard Wood representing myself. I just want to --

PRESIDING OFFICER McDANIEL: Speaking for or against the motion?
RICHARD WOOD: I'm speaking for the motion. I want to point out with deference to the chairman of the technical committee that you are correct. When there is something that's a definition that's specific to your field of expertise, we should show you deference. But in this case we're talking about the definition of combustible dust and that should be consistent across all standards. So as somebody who spent 25 years as an AHJ, certainly an electrical committee doesn't have special expertise in defining combustible dust. So I would ask this group to approve this particular motion. Thank you.

PRESIDING OFFICER McDANIEL: Thank you. Is there any further discussion of NFPA 499? Is there any further discussion on this motion? Seeing none, we'll move to a vote. Before we vote, I'd like to restate the motion. The motion on the floor is to accept an identifiable part of Comment 499-6.

Please vote in favor with one or against with a two.

Five seconds. Balloting is close closed. Motion has passed.
610 Walnut St.
Lake Jackson, TX 77566
June 28, 2012

Secretary Standards Council
National Fire Protection Association
P.O. Box 9101
1 Batterymarch Park
Quincy, MA 02269-9101

Subject: Appeal CAM 499-1
NFPA June 2012 Vegas Meeting

I am appealing the recent CAM action taken at the June 2012 Vegas Meeting to accept Motion Seq# 499-1 and request that the Council overturn this decision for the following reasons:

1) The stated CAM intent was to seek a single sentence definition for combustible dust on the basis that NFPA required a definition to be one sentence. If this is the true objective the Standards Council needs to take the following actions:
   a. Implement steps to revise the NFPA Style Manual to state that NFPA definitions shall be one sentence. Currently none of the Style Manual section 1.6.3 Chapter 3 Definitions listed criteria contain or even suggest one line as being required. There also currently does not appear to be any one line definition requirement in the NEC Style Manual either.
   b. Communicate this 1.6.3 Definition ‘one sentence’ requirement to all NFPA Staff Liaisons and NFPA Committee members. This will help improve the work and efficiency of the dedicated volunteer committee members in developing clear NFPA codes and standards. It may also reduce the duration of some of the NFPA meetings.

2) There is an unfortunate unintended significant consequence with this meeting action. The CAM 3.3.3 Combustible Dust definition was based upon NFPA 499 ROP work. During the NFPA 499 ROC, the Committee was made aware of problems with inclusion of the term ‘dust flash fire’ because the portion of the term ‘flash fire’ was not well understood and could be misapplied. In the one place where it was found that the term ‘flash fire’ was defined in NFPA documents, this was done in conjunction with an electrical arc-flash condition which has nothing to do with the scope of NFPA 499. For these reasons this phrase was modified to strike the word ‘flash’ during the ROC.

If the intent of this CAM was to select only the first sentence of the NFPA 499 definition, then because of the NITMAN regulations instead of the intended NFPA 499 ROC first sentence, the action will be to use the inferior ROP first sentence definition. As can be seen from the
documentation record of the floor discussions on combustible dust (NFPA 59A, NFPA 61, etc.) it should be very apparent that ‘experts’ have strong and differing technical positions on the term. It would be ill-advised to the NFPA 499 document users to introduce this undefined term, which even the NFPA 499 Technical Committee itself does not support, into this already charged dust atmosphere discussion scenario.

It is recognized that voting action of the NFPA 499 Committee could help change the Standard Council action by defeating this CAM. However if this were to happen the result would be the continued use of the current NFPA 499-2008 Combustible Dust definition. Again the floor meeting comments attest to the wide sentiments and concerns about technical issues around this ‘solids –combustible-dust’ material, and the pro’s and con’s for providing a particle size, etc.

The NFPA Standards Council has taken action to see that each of its NFPA codes are provided with a knowledgeable technical group of experts. NFPA 499 has been working long and hard to coordinate the special aspects associated with the Scope of NFPA 499 with other NFPA Codes dealing with similar issues involving this material. The Standards Council is also aware of the dust explosion incidents and the strong benefits of properly applying the content of NFPA 499. It therefore seems of critical importance that the expertise of the NFPA 499 Committee be supported by the Standards Council by taking an unusual step to use the NFPA 499 ROC definition of a combustible dust. I have presented this below for information. As can be seen, this definition contains a good simple first sentence as desired by this CAM action. However it also addresses other important issues which need to be ‘up-front’ visible to users of the NFPA 499 document in applying this document for real-world applications. This ROC definition contains NO requirements and this has been attested to by the very knowledgeable and most experienced NFPA 499 NFPA Staff Liaison, Martha Curtis. This ROC definition also complies fully with the NFPA Style Manual Section 1.6.3 for Definitions.

However in the event that the Standards Council does not wish to take this position, I would ask that the Council provide supportive technical recommendations to the NFPA 499 Committee on just how this Committee should address this important definition. If the NFPA 499 Committee cannot clearly determine what they consider to be a combustible dust, should we really expect users to be more knowledgeable?

With appreciation to Martha Curtis and NFPA Staff, this is the NFPA 499 final ROC combustible dust ROC action:

3.3.3* Combustible Dust. Finely divided solid particles that present a dust fire or dust explosion hazard when dispersed and ignited in air.

The term ‘solid particles’ addresses particles in the solid phase and not those in a gaseous or liquid phase and can include hollow particles.

Dust particles of 500 microns or smaller (material passing a U.S. No. 35 Standard Sieve as defined in ASTM E 11, Standard Specification for Wire Cloth and Sieves for Testing Purposes) are considered to present a dust fire or dust explosion hazards unless determined otherwise. (See ASTM E 1226, Standard Test Method for Pressure and Rate of Pressure Rise for Combustible Dusts Explosibility of Dust Clouds, or ISO 6184/1, Explosion Protection Systems — Part 1: Determination of Explosion Indices of Combustible Dust in Air.)
Thank you for your consideration of this important topic.

Sincerely yours,

[Signature]

David Wechsler
Email: dbwechsler@att.net
I’m in favor of a simpler and clearer definition for this. If it takes more than a sentence to convey this, we should use more than one or risk the ire of the “grammar police” by making it a long one. We spent considerable time debating this issue.

There is a work around if you can demonstrate that your situation is non-hazardous. But this costs time and money. I have to be ambiguous due to non-disclosure agreements. Many years ago we developed an instrument that contained a tiny amount of flammable gas. The process of getting it approved by DOT & ICAO to ship by air, as well as listing and marking for domestic and foreign markets, cost significantly more than the rest of the development (both time and money). The company in question worked with non-hazardous lab equipment and the regulatory aspects of flammable gases were unknown and unfamiliar to us at the time. The tiny amount of gas was not there for fuel but for other properties to be analyzed – would that we could have found a non-flammable substitute. I was not privy to sales as I left while approvals were still pending, but I do know that several competitors beat it to market owing to these delays, and I suspect that they did not recoup these unexpected costs or the missed opportunity to sell earlier.

I’m sympathetic towards companies absorbing these kinds of time & monetary costs get products to market, especially when the rules are not “one size fits all,” and an exemption/exception must be made.

On dust I don’t see many situations where you won’t have a variety of sizes, including smaller, if you have any “dust” present.

On the overall issue, as someone who has designed a variety of products, compliance can be difficult. This is especially true when the definitions can be confused, even by people versed in the subject, as David Wechsler noted in his letter.

If there is a clearer and more concise way to state this...

Matt Egloff, PE
Lab Director
General Engineering Dept.
Montana Tech
1300 West Park St.
Butte, MT 59701
(406) 496 4893
I suppose I should elaborate further and you can append my additional comments. If I were trying to get a product for use in a dust environment to market and couldn’t get the <500um to pass muster, having it certified for >500um dust only really wouldn’t be viable as most environments with dust will have dust of all sizes both below & above.

It would be as having a refrigerator listed for everything but keeping alcoholic beverages. If you went for an exception, what would need to be done to assure that sealed cans & bottles of beer are no hazard, or perhaps no more than a case inside, or special bottle and cans only that are less likely to leak, or what to do if one leaks or is stored open, etc.? These issues are for the NRTL. That said, how many customers will read the fine print, and how many will fill it with beer anyway? We buy listed products every day, but do we use them in accordance with a listing we haven’t even read and can’t easily access? If I designed a refrigerator and belatedly learned in the last stage of testing with the NRTL coming in, that I needed to do x, y, and z to use it for beer, and now faced a re-design, it would be a big issue. What if I bought and used one not knowing it wasn’t supposed to be for beer and it burned my house down?

Companies design and customers use many unique and new products. Many must go into hazardous locations. The more the engineers designing the product know upfront about the safety & compliance issues, the better.

Thus I would err on the side of a clearer definition, even if it was longer than a single sentence, or required an appendix to explain.

Matt
Maynard, Mary

Subject: NFPA 499 definition of combustible dust

From: Bill Fiske Intertek [mailto:bill.fiske@intertek.com]
Sent: Thursday, July 19, 2012 3:40 PM
To: Fuller, Linda
Cc: Curtis, Martha; Beckey Stallcup
Subject: NFPA 499 definition of combustible dust

Dear Ms. Fuller,

Martha Curtis, Staff Liaison for the Technical Committee on Electrical Equipment in Chemical Atmospheres (EEC-AAA), suggested I forward to you some comments that I had made within EEC-AAA following the Technical Session in Las Vegas last month.

You might recall that I represented EEC-AAA in the Chairman's absence. A Certified Amending Motion (499-1) was made by Marcelo Hirschler that would, in effect change the definition of Combustible Dust in NFPA 499 - 2012 to read:

3.3.3 Combustible Dust. Finely divided solid particles that present a dust fire or explosion hazard when dispersed and ignited in air.

A majority of the voting members present accepted the CAM, as the conference record shows.

The TC Chairman has polled the members, so as to reach a committee position on the CAM. Members are aware that the membership vote on the CAM takes away the definition reached by the TC (absent a successful appeal to the Standards Council), leaving the committee to support the CAM definition or support a return to the existing definition from NFPA 499 - 2008.

Comments from among the TC members indicate that some of them have invested a bit of their egos in either the definition that was created by the TC at ROC stage, or in the definition that resulted from the June Technical Session. There is evidently some concern that without a particle size or test method reference in the definition, confusion may result. This writer does not envision mass confusion, because the methods for determining whether a dust is combustible are in 4.2 Combustible Dust Testing, that references ASTM E1226 and E2021, and A4.2.1 in the Annex, where particle size is introduced. The necessary technical data are captured in the document, although not in the definition.

Another reason that people should not get too exercised over the "right" definition of a combustible dust in NFPA 499 is that it is a Recommended Practice, not a Standard. No one is obligated to use NFPA 499 for any purpose. Those who want to deviate from it, and have sound reason to do so, are free to do as they see fit.

Even though I personally have no reason to oppose the Technical Session's result, for the reasons just stated, I remain concerned over the broader implications of what the Regulations Governing Committee projects allow to happen in the standards development process, and that the next 2 paragraphs relate to that concern.

It may be that someone will file an appeal to the Standards Council opposing the membership's acceptance of CAM 499-1. My observation of the action at the Tech Session - and possibly yours as well - was that there was really very little discussion of the CAM on the floor. The only EEC-AAA members present were Mr. Erdem Ural and this writer. Mr. Hirschler spoke multiple times in favor of the CAM, and Mr. Ural spoke once in favor (despite having been part of the unanimous vote at ROC stage), and I spoke against, as the TC representative. Very few others spoke at all.

If there are appeals, it is our understanding of the Regulations Governing Committee Projects that the Standards Council must decide if the Regulations were followed, and if anyone had been denied due process. If those are the sole criteria, there is no question that the Council would uphold action of the Technical Session. It may be that a few minutes' discussion on the floor of the general session and a vote by the members - most of whom have little or no knowledge of the arcana of dust ignition phenomena - constitute a basis for overriding a year's work by the hazardous locations experts on the TC, but it does not seem to be good standards development, in my opinion.
Please note that all opinions expressed herein are my own, and not in any way Intertek’s official position on the matter (the company doesn’t have one).

Thank you for taking the time to read this message and doing with it as you see fit. Please feel free to contact me if there are any questions about this message.

Best regards,

Bill Fiske

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http://www.intertek.com
July 16, 2012

Joanne Goyette  
NFPA  
Administrator, Technical Projects

Joanne,

Per request, I have communicated with members of the EECA committee and have concluded that the majority of the committee are for Amendment 499-1 to accept an identifiable part of Comment 499-6 and are aware and understand the reasoning behind Dave Weschler’s appeal. And even though his reasoning is understood and has been considered, it would appear the majority still supports the Amendment being incorporated into the document and as Chairman of the committee, I must support that majority decision.

Respectfully,

James G. Stallcup  
EECA Committee Chairman  
grayboy02@aol.com