

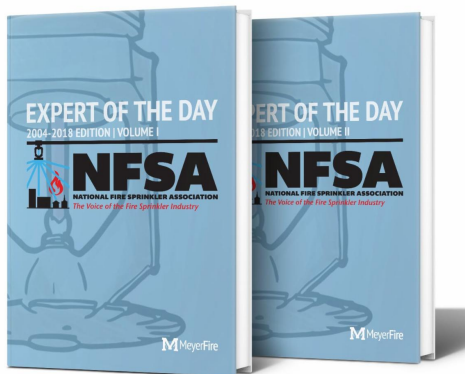
Editor - Roland Asp, CET

#468

07/27/2021

The following issue of TechNotes has been written by Roland Asp, C.E.T., Manager of Codes and Standards for the NFSA.

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## 2021 NFPA Technical Meeting Debrief

### 2021 NFPA Technical Meeting Debrief

The 2021 NFPA Technical Meeting (also known as the Tech Session) was recently completed and is nearing the end of the three-year revision cycle that will result in the 2022 edition of NFPA 13 and other standards important to the fire sprinkler industry. Like in 2020, this year's technical meeting was held virtually. The following were some of the steps and important dates:

- May 19-July 2: Voting Registration
- June 14-25: Electronic Debate
- June 28-July 2: Voting on CAMs
- July 6: Posting of Voting Results



The Tech Session is a vital step in the revision process and can be thought of as

opportunity for the public to comment on and potentially revise the NFPA standard prior to being issued by the NFPA Standards Council.

The Tech Session is the 3rd step in the NFPA process. Step 1, known as the Public Input Stage, results in the First Draft Report from the technical committee. Step 2, known as the Public Comment Stage, results in the Second Draft Report from the technical committee. Step 3 is known as the Tech Session Stage. Step 4 is the appeal stage which is the final step before the NFPA's Standards Council reviews and issues the standards.

If a motion (NITMAM) on a document is made and certified by NFPA (CAM), it is debated and voted on by NFPA members at the Tech session.

The 2021 NFPA Tech Session addressed motions on the following ten NFPA Standards:

NFPA Standard	# of CAMS	NFPA Standard	# of CAMS
<b>NFPA 10</b> , <i>Standard for Portable Fire Extinguishers</i>	2	<b>NFPA 13</b> , <i>Standard for the Installation of Sprinkler Systems</i>	14
<b>NFPA 72</b> , <i>National Fire Alarm and Signaling Code</i>	12	<b>NFPA 80</b> , <i>Standard for Fire Doors and Other Opening Protectives</i>	1
<b>NFPA 291</b> , <i>Recommended Practice for Fire Flow Testing and Marking of Hydrants</i>	1	<b>NFPA 1123</b> , <i>Code for Fireworks Display</i>	1
<b>NFPA 1225</b> , <i>Standard for Emergency Services Communications</i>	3	<b>NFPA 2001</b> , <i>Standard on Clean Agent Fire Extinguishing Systems</i>	2
<b>NFPA 318</b> , <i>Standard for the Protection of Semiconductor Fabrication Facilities</i>	1	<b>NFPA 501</b> , <i>Standard for the Protection of Semiconductor Fabrication Facilities</i>	1

NFSA, under the direction of NFSA's Engineering and Standards (E&S) committee, submitted three motions to NFPA 13. The three motions submitted by NFSA were:

- CAM 13-34: Reject Second Revision 1162. This motion passed.
- CAM 13-37: Accept Public Comment 172. This motion passed.
- CAM 13-38: Accept Public Comment 174. This motion was withdrawn as it was not needed because the concept was included in CAM 13-37.

## CAM 13 - 34

This CAM sought to reject Second Revision No. 1162, which added K-28 and K-33.6 ESFR sprinklers to Table 23.3.1 and would mandate that these sprinklers be used with traditional 12 sprinklers in the design area even though they have been approved and tested with a 9 or 10 sprinkler design area. E&S authorized the CAM on this issue for the following reasons:

- Fire tests have shown that these ESFR sprinklers perform adequately with a 9 or 10 sprinkler design area. Mandating 2 or 3 additional sprinklers will substantially increase the needed demand. This will limit options for designers and installers and would substantially increase the costs to the owners.

- This Second Revision would limit options for Authorities Having Jurisdiction (AHJs) to accept these approved designs and cause confusion. Although AHJs do have the ability to approve the use of these sprinklers based upon approved 9 or 10 sprinkler design area, the fact that NFPA 13 would specifically mandate a twelve-sprinkler design area for the same product would certainly cause confusion and conflicting requirements.
- It is not good for the fire protection industry to have conflicting requirements for the same product. This will simply cause confusion and differing requirements project to project.

The NFPA membership agreed with the merits of this CAM (138 agreed and 75 were opposed) and the language in question will not be included in the 2022 edition of NFPA 13.

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## CAM 13 - 37 (and CAM 13-23/CAM 13-42)

This CAM sought to return to the language of previous editions of NFPA 13 regarding performing and evaluating hydrant flow tests. It is important to note the American Fire Sprinkler Association (AFSA) and Terry Victor of Johnson Controls submitted similar motions (CAM 13-23 and CAM 13-42). These three CAMs all sought the same outcome and were heard as one. The proposed language these motions opposed would have added a requirement to Chapter 5 that the raw data from a hydrant flow test would be required to be evaluated to determine if an adjustment is needed. This evaluation would be based upon engineering judgment and knowledge of the water supply. E&S authorized this CAM to reject this proposed language and return to the existing language as this existing language is adequate and already gives sufficient guidance regarding performing and evaluating hydrant flow tests. The proposed change regarding water supply evaluations does not provide clarification and will likely cause additional confusion regarding this issue. The following supported this stance:

- As shown by the enviable record of fire sprinkler systems, the current language found in 5.2.2.2 and its associated annex language has been proven to be adequate and needs to remain as currently written.
- The current language found in 5.2.2.2 states the flow and pressure of the water supply must be determined by an approved method. This means the AHJ needs to be consulted and approve the method used to determine the volume and pressure of the public water supply. The annex to this section gives sufficient guidance for the AHJ to use to evaluate the adequacy of the water supply depending on multiple factors, and to approve the method used to determine volumes and pressures available including any adjustments that might be needed where appropriate.

- The time-tested process mandated by NFPA 13 in determining the proper design criteria has been proven to be adequate. While a specific safety factor is not mandated by NFPA 13, the process has been shown to be more than sufficient. NFPA 13 has safety built into the process. The hydraulic calculation process and the listing process for sprinklers is inherently conservative. Some of the factors that build in safety include required discharge densities, size and shape of the hydraulically most remote area, Hazen-Williams C-values, and more.
- The proposed language is inappropriate to be included in the general (prescriptive) section of NFPA 13 (Chapter 5). Specific knowledge of the water supply is the responsibility of the water purveyor and engineering judgment is the responsibility of a professional engineer. It is not reasonable to give this responsibility to all users of NFPA 13. If these new requirements are to be added to NFPA 13, they would be more appropriate to be included in the Owner's Certificate (Section 4.2) which requires the owner and their responsible design professional to provide the water supply information including any needed evaluation. However, the fact that this information will be added to Chapter 5, will force all users including the installing contractor to take on the responsibilities of the engineer and of the owner.
- No data was submitted showing that the current language is a problem or is leading to ineffective systems.

The NFPA membership agreed with the merits of these CAMs (147 agreed and 63 were opposed).



## Industry Participation

NFSA did not limit our participation to the comments that were submitted by NFSA. NFSA listened and voted on all comments that impact our industry. In total there were 30 motions debated at the technical meeting on the above mentioned ten NFPA Standards. NFSA developed a voting guide which outlined NFSAs stance on all the CAMs heard at the technical meeting.

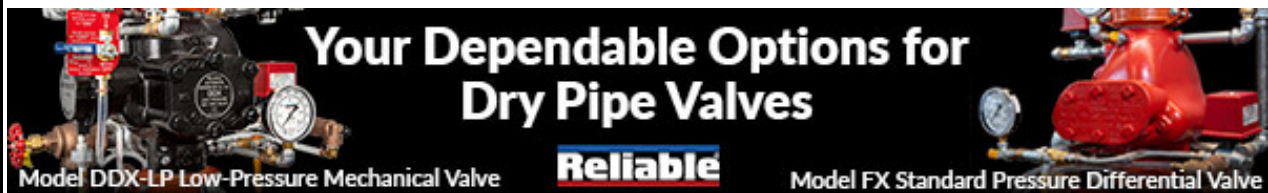
The technical session is however not the end of the process: NFPA does allow a final appeal before these documents are issued. Once any appeals are heard, the NFPA Standards Council will issue the document.

An appeal was filed on the results of the water supply CAM (CAM 13-37, 13-23 and 13-42). NFSA, AFSA and Terry Victor of Johnson Controls, as the submitters of the CAMs in question, worked together and submitted a joint response urging NFPA's Standards Council to reject this appeal and uphold the action taken at the 2021 Technical Meeting.

NFSA is heavily invested in the NFPA process, specifically for the documents that impact our industry. NFSA staff, the E&S Committee, and NFSA members who represent the NFSA on the NFPA technical committees are committed to this process. A lot of time and effort is invested on behalf of our members to ensure that the relevant NFPA standards continue to provide unsurpassed life and property protection and to ensure our industry is represented in this process.

For more information on the NFPA Standards Development Process please see the article "*The NFPA Standards - The Revision Process and NFSA's Role*" published in the May/June 2018 edition of The National Fire Sprinkler Magazine which is available to members on the NFSA website.

Full results of the technical meeting and a summary of the process can be viewed on the NFPA website.



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**New EOD Process**

Starting on July 15, 2020, the NFSA has a new EOD process where members can submit questions, track the progress, and view their EOD cases. The step by step process is detailed in [TechNotes #442](#).

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