



Public Comment No. 76-NFPA 25-2021 [Global Input]

Correlate the use of "Water Control Valve" and "Control Valve" throughout the document.

Statement of Problem and Substantiation for Public Comment

The term "water control valve" was added during the last cycle of NFPA 13 and in the last draft of NFPA 25, but it conflicts with "control valve" that is used throughout the document as well.

Related Item

- FR-9

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:05:42 EDT 2021

Committee:

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-46-NFPA 25-2021](#)

Statement: Clarification provided to differentiate between a control valve and a water control valve.



Public Comment No. 88-NFPA 25-2021 [Global Input]

Reconsider PI-137, PI-138, PI-143, PI-144 as it relates to nitrogen generators and the ITM requirements needed to maintain a C-value of 120 if used for the original design. NFPA 13 has completed its revision cycle and these changes are needed to ensure certain design aspects are maintained throughout the life cycle of the system.

Additional Proposed Changes

<u>File Name</u>	<u>Description Approved</u>
PI-137.pdf	PI-137
PI-138.pdf	PI-138
PI-143.pdf	PI-143
PI-144.pdf	PI-144

Statement of Problem and Substantiation for Public Comment

Reconsider PI-137, PI-138, PI-143, PI-144 as it relates to nitrogen generators and the ITM requirements needed to maintain a C-value of 120 if used for the original design. NFPA 13 has completed its revision cycle and these changes are needed to ensure certain design aspects are maintained throughout the life cycle of the system.

Related Item

• PI-137 • PI-138 • PI-143 • PI-144

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:59:08 EDT 2021

Committee:

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-40-NFPA 25-2021

Statement: These ITM requirements are necessary to maintain system design integrity in accordance with new NFPA 13 allowances for increased C values in dry and preaction systems using nitrogen.



Public Comment No. 144-NFPA 25-2021 [Section No. 1.1.3.1]

1.1.3.1*

This standard does not require the inspector to verify the adequacy of the design or the accuracy of the installation of the system.

Statement of Problem and Substantiation for Public Comment

The current statement is correct that verifying the adequacy of the design is not the responsibility of personnel performing inspections and tests in accordance with NFPA 25, but it doesn't go far enough. It is also not the responsibility of personnel performing inspections and tests to verify the accuracy of the installation. This change further clarifies the intent of NFPA 25.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 145-NFPA 25-2021 [Section No. A.1.1.3.1]	
<u>Related Item</u>	
• PI 240	

Submitter Information Verification

Submitter Full Name: Terry Victor
Organization: Johnson Controls
Street Address:
City:
State:
Zip:
Submittal Date: Tue May 11 13:14:54 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-19-NFPA 25-2021
Statement: The reference to accuracy was deleted in that it is ambiguous and information is not provided for comparative basis. Also, it was noted that Chapter 5 does include an inspection for orientation which is an evaluation as to whether the installation was accurate.

The Committee did not agree with the deletion of the reference to Annex E but did revise the language to refer to Annex E as an example.



Public Comment No. 135-NFPA 25-2021 [New Section after 3.3.1]

Accessible

3.3.1 Permitting a safe, unobstructed and close approach for inspection, viewing, testing, operation or maintenance through the use of tools, keys, or equipment.

Statement of Problem and Substantiation for Public Comment

The term accessible has several different meanings and is not clearly defined in NFPA 25. Defining the term will assist in clarifying the intent of the term.

Related Item

- PI- 76 thru 85, 107 and 108

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

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Submittal Date: Tue May 11 10:29:39 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: The Committee does not see the need to define accessible and is comfortable relying on the definition in the dictionary. Components could be easily accessed although it may require one to move something or open an access panel. The proposed language also creates other concerns as to the need to define "safe" and "unobstructed."



Public Comment No. 94-NFPA 25-2021 [Section No. 3.3.15]

3.3.15 * – Floor Level.

~~The surface in a building or structure that is constructed to be walked on under normal conditions without the use of any special safety devices or measures.~~

Statement of Problem and Substantiation for Public Comment

I agree with the negative ballots that the new definition for floor level is not necessary and provides no added value to the standard.

Additionally, the definition states that a "floor level" must be "without the use of any special safety devices or measures", which is not correct or acceptable. Many, if not most industrial type facilities have special safety measures that must be conformed to before anyone is permitted onto the floor of a facility. The need for hard hats, safety boots, safety glasses, hearing protection, high visibility vests or other protective clothing is so common as to make this definition unworkable. Inspections of sprinklers, pipe and fittings have been successfully accomplished from "floor level" since the term was first coined in the 1995 edition of NFPA 25, so this too complicated confusing definition is not necessary. Plain language terms such as this should not need a definition.

Further to this, the text in the proposed new A.3.3.15 that says: "This definition is not intended to apply to flooring put down in an unoccupied attic" should not be accepted either. Such flooring is laid to aid with the accessibility of a space, so there is no reason to ignore this assistance. On a recent project that I was involved with, the ITM inspector did not use such attic flooring to get to the upper test port for the attic antifreeze system. This omission led to a problem with dilution of the A/F solution going undiscovered, and contributed a messy freeze up situation.

Related Item

- FR-60

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 22:38:35 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-21-NFPA 25-2021](#)

Statement: A definition for floor level is not required. The definition of floor level was too restrictive because some safety gear may be necessary depending on the type and location of the walking surface.



Public Comment No. 126-NFPA 25-2021 [Section No. 3.3.27]

3.3.27* Inspection, Testing, and Maintenance Service.

A service provided ~~by a qualified person(s) through which~~ by qualified personnel where all components ~~unique~~ specific to a property's systems are inspected, tested and ~~tested~~ maintained at required times- ~~and are maintained as necessary~~ .

Statement of Problem and Substantiation for Public Comment

This comment seeks to simplify the complex sentence structure of the first revision and to underscore that the maintenance of components is also subject to "required times", whether due to scheduled maintenance as outlined by the standard (i.e. less frequent inspections like 3 and 5 year inspections) or due to inoperability. Use of the phrase "as necessary" could imply that the need for maintenance is subjective and could, therefore, be deemed unnecessary.

The word "specific" is preferred over "unique" according to Merriam Webster's definition of unique as sole, peculiar, unusual, distinct and unequaled.

Finally, see substantiation for PC-127 with regard to "qualified personnel" as opposed to "a qualified person(s)".

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]	
<u>Related Item</u>	
• FR-4	

Submitter Information Verification

Submitter Full Name: Joe Scibetta

Organization: BuildingReports

Street Address:

City:

State:

Zip:

Submittal Date: Mon May 10 14:48:37 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Maintenance is often performed by a separate service.

**Public Comment No. 92-NFPA 25-2021 [Section No. 3.3.27]****3.3.27*** Inspection, Testing, and Maintenance Service.

A service provided by a qualified person(s) through which all components ~~unique~~ specific to a property's systems are inspected and tested at required times and are maintained as necessary.

Additional Proposed Changes**File Name**

.1620440970577

Description Approved**Statement of Problem and Substantiation for Public Comment**

While I realize the word has been in the definition for "Inspection, Testing, and Maintenance Service" for a considerable period of time, I believe the word "unique" should be replaced with the word "specific". The components in a water-based fire protection system that need to be considered for ITM purposes are not generally "unique to a property's systems". Items such as control valves, dry pipe valves, pressure regulating devices, etc. are components that must be considered if found in specific systems, but they are not unique to any system.

Related Item

- FR-4

Submitter Information Verification**Submitter Full Name:** Larry Keeping**Organization:** PLC Fire Safety Solutions**Street Address:****City:****State:****Zip:****Submittal Date:** Fri May 07 22:28:27 EDT 2021**Committee:** INM-AAA**Committee Statement****Committee Action:** Rejected but see related SR**Resolution:** SR-22-NFPA 25-2021

Statement: Revised "times" to "frequencies" since that is the term used in the standard. Components are subject to an inspection or test as required by this Standard and it may not require all components. Editorial clarifications to existing text. Revise title to annex text as well.



Public Comment No. 68-NFPA 25-2021 [Section No. 3.3.31]

3.3.31 * – Monitor Nozzle.

~~A permanently mounted device specifically designed with a high flow rate to provide a far-reaching stream for locations where large amounts of water need to be available without the delay of laying hose lines.~~

Statement of Problem and Substantiation for Public Comment

This is not within the purview of the ITM committee to define a device in an installation standard. This definition provides no additional value to the standard.

Related Item

- FR-127

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

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Zip:

Submittal Date: Fri May 07 16:56:11 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: The definition is included for clarity as there is not a definition in the installation standard.



Public Comment No. 69-NFPA 25-2021 [Section No. 3.3.34]

3.3.34 – Pressure Proportioning Head.

An assembly of components that forms an integral part of a pressure proportioning tank and creates a differential pressure in the water line, causing foam concentrate to be metered by an orifice into the water stream.

Statement of Problem and Substantiation for Public Comment

The term is not used in the proposed Chapter 11. Additionally, this definition should be extracted from NFPA 11 (if it exists).

Related Item

- FR-139

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 16:57:33 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-23-NFPA 25-2021](#)

Statement: The term is not used in the body of the standard.



Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]

3.3.37* Qualified- Person .

~~A competent and capable person who has met the~~ Demonstrating competency and capability in a given field by meeting requirements and training ~~for a given field~~ acceptable to the AHJ.

Statement of Problem and Substantiation for Public Comment

The definition of "Qualified" is always with reference to a "person", "individual", "personnel" or "worker" in NFPA 25. It is only used once with reference to something other than a person, which is in Chapter 11 with reference to a laboratory. A related comment will seek to rectify that one instance so that all references to "qualified" in NFPA 25 apply to a "person" or "personnel", thus negating the need to include "Person" in the name of the definition. This FR and related changes has created a grammatical error many times over where the incorrect phrase "a qualified person(s)" appears. Leaving the definition as "Qualified", changing all instances of "person(s)" to "personnel" (covering one or more than one person) and eliminating the one instance of qualified as it relates to a laboratory, will resolve this.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 128-NFPA 25-2021 [Section No. 11.3.1.2]	
Public Comment No. 126-NFPA 25-2021 [Section No. 3.3.27]	
Public Comment No. 128-NFPA 25-2021 [Section No. 11.3.1.2]	
Public Comment No. 129-NFPA 25-2021 [Section No. 4.1.1.3]	
Public Comment No. 130-NFPA 25-2021 [Section No. 4.1.5.2]	
Public Comment No. 131-NFPA 25-2021 [Section No. 4.6.6.14]	
Public Comment No. 132-NFPA 25-2021 [Section No. 8.3.2.10.4]	
Public Comment No. 133-NFPA 25-2021 [Section No. 8.3.7.1.2]	
Public Comment No. 134-NFPA 25-2021 [Section No. 13.7.3]	

Related Item

- FR-15

Submitter Information Verification

Submitter Full Name: Joe Scibetta

Organization: BuildingReports

Street Address:

City:

State:

Zip:

Submittal Date: Mon May 10 15:10:46 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Rejected but see related SR

Action:

Resolution: [SR-25-NFPA 25-2021](#)

Statement: The Standard refers to an individual (person) and the definition should then be "qualified personnel."



Public Comment No. 73-NFPA 25-2021 [Section No. 3.3.43]

3.3.43 – Rupture Disk.

A device used in a subsurface foam injection line to prevent backflow of hydrocarbon liquids to pressure foam makers (i.e., high back pressure or forcing type) and designed to burst when foam pressure builds at the foam maker discharge.

Statement of Problem and Substantiation for Public Comment

The term is not used in the proposed Chapter 11. Additionally, this definition should be extracted from NFPA 11 (if it exists).

Related Item

- FR-140

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:01:40 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-26-NFPA 25-2021

Statement: The term is not used in the body of the standard.



Public Comment No. 14-NFPA 25-2021 [Section No. 3.3.50]

3.3.50* Testing.

A procedure used to determine the operational status of a component or system by conducting periodic physical ~~checks~~ tests .

Statement of Problem and Substantiation for Public Comment

The word checks was removed from the standard in previous editions in all other sections.

Related Item

- FR8

Submitter Information Verification

Submitter Full Name: David Baron

Organization: Global Fire Protection Company

Street Address:

City:

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Submittal Date: Fri Apr 30 10:29:46 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-27-NFPA 25-2021

Statement: Committee did not want to use “test” in the definition of “testing.”



Public Comment No. 74-NFPA 25-2021 [Section No. 3.3.53]

3.3.53 – Vapor Seal.

~~A device used in a fixed foam discharge outlet to prevent flammable liquid vapors from being released from a product storage tank.~~

Statement of Problem and Substantiation for Public Comment

The term is not used in the proposed Chapter 11. Additionally, this definition should be extracted from NFPA 11 (if it exists).

Related Item

- FR-141

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:03:02 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Vapor seal is used in the body of the standard and is appropriately defined.



Public Comment No. 75-NFPA 25-2021 [Section No. 3.3.58]

3.3.58 – Wide-Range or Variable-Range Proportioner.

A foam proportioner for use in closed head foam-water sprinkler systems where an accurate foam injection rate (i.e., percent concentration) must be held over a wide range of anticipated flow rates.

Statement of Problem and Substantiation for Public Comment

The term is not used in the proposed Chapter 11. Additionally, this definition should be extracted from NFPA 11 (if it exists).

Related Item

- FR-142

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:03:56 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-29-NFPA 25-2021

Statement: The term is not used in the body of the standard.



Public Comment No. 93-NFPA 25-2021 [New Section after 3.5.9]

A.3.5.9 Dry Valves, Preaction Valves, and Deluge Valves are recognized by UL as Water Control Valves.

Statement of Problem and Substantiation for Public Comment

With this new definition, some annex text is also needed to provide examples of what types of devices are classified as "water control valves" (ie. dry pipe valves, preaction valves, and deluge valves, as described in the Committee Statement"). The term "water control valve" could otherwise be misinterpreted as other types of valves, such as control valves, drain valves, etc.

Related Item

- FR-9

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 22:32:55 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-46-NFPA 25-2021

Statement: Clarification provided to differentiate between a control valve and a water control valve.



Public Comment No. 44-NFPA 25-2021 [New Section after 3.7.1.8]

3.7.1.9 Ten Years Frequency.

Occurring once every 120 months with a minimum of 114 months and a maximum of 126 months.

Statement of Problem and Substantiation for Public Comment

NFPA 25 defines the window of time associated with quarterly, semi-annually, annually, 3-year and 5-year intervals. This would also be appropriate for the longer intervals required by this standard.

Related Public Comments for This Document

Related Comment

Relationship

Public Comment No. 45-NFPA 25-2021 [New Section after 3.7.1.8]

Public Comment No. 46-NFPA 25-2021 [New Section after 3.7.1.8]

Related Item

- FR-51

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 14:48:33 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: The testing should be done within the tenth year.



Public Comment No. 45-NFPA 25-2021 [New Section after 3.7.1.8]

3.7.1.10 Twenty-Five Years Frequency.

Occurring once every 300 months with a minimum of 294 months and a maximum of 306 months.

Statement of Problem and Substantiation for Public Comment

NFPA 25 defines the window of time associated with quarterly, semi-annually, annually, 3-year and 5-year intervals. This would also be appropriate for the longer intervals required by this standard.

Related Public Comments for This Document

Related Comment

Relationship

Public Comment No. 44-NFPA 25-2021 [New Section after 3.7.1.8]

Public Comment No. 46-NFPA 25-2021 [New Section after 3.7.1.8]

Related Item

- FR-51

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 14:52:12 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: The testing should be done within the twenty-fifth year.



Public Comment No. 46-NFPA 25-2021 [New Section after 3.7.1.8]

3.7.1.11 Fifty Years Frequency.

Occurring once every 600 months with a minimum of 594 months and a maximum of 606 months.

Statement of Problem and Substantiation for Public Comment

NFPA 25 defines the window of time associated with quarterly, semi-annually, annually, 3-year and 5-year intervals. This would also be appropriate for the longer intervals required by this standard.

Related Public Comments for This Document

Related Comment

Relationship

Public Comment No. 44-NFPA 25-2021 [New Section after 3.7.1.8]

Public Comment No. 45-NFPA 25-2021 [New Section after 3.7.1.8]

Related Item

- FR-51

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 14:53:43 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: The testing should be done within the fiftieth year.



Public Comment No. 129-NFPA 25-2021 [Section No. 4.1.1.3]

4.1.1.3

Inspection, testing, and maintenance shall be performed by ~~a~~- qualified ~~person(s)~~ personnel .

4.1.1.3.1

~~A qualified person(s)~~ Qualified personnel shall meet at least one of the following qualifications:

- (1) Meets the requirements and training for a given field acceptable to the authority having jurisdiction
- (2) Is certified by a nationally recognized fire protection certification organization acceptable to the authority having jurisdiction
- (3) Is registered, licensed, or certified by a state or local authority to perform inspection, testing, and maintenance of water-based fire protection systems

Statement of Problem and Substantiation for Public Comment

See substantiation for PC 127

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]	
<u>Related Item</u>	
• FR-11	

Submitter Information Verification

Submitter Full Name: Joe Scibetta
Organization: BuildingReports
Street Address:
City:
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Zip:
Submittal Date: Mon May 10 16:13:00 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-24-NFPA 25-2021
Statement: Personnel can be both singular and plural. It better aligns with how the term is used throughout the standard.



Public Comment No. 71-NFPA 25-2021 [Section No. 4.1.1.3.1]

4.1.1.3.1 –

A qualified person(s) shall meet at least one of the following qualifications:

- (1) ~~Meets the requirements and training for a given field acceptable to the authority having jurisdiction~~
- (2) ~~Is certified by a nationally recognized fire protection certification organization acceptable to the authority having jurisdiction~~
- (3) ~~Is registered, licensed, or certified by a state or local authority to perform inspection, testing, and maintenance of water-based fire protection systems~~

Statement of Problem and Substantiation for Public Comment

This language is not necessary. "Acceptable to the AHJ" is sufficient. There is no value added by this revision. This currently just restates the definition and adds redundant language to the standard.

Related Item

- FR-11

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submission Date: Fri May 07 17:00:08 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-49-NFPA 25-2021

Statement: The Annex note clarifies that a different level of qualification is appropriate for the different tasks required by the standard



Public Comment No. 30-NFPA 25-2021 [New Section after 4.1.5.1.1]

4.1.5.1.1 Impairments shall be corrected or repaired as soon as practical.

4.1.5.1.1.1 Until impairments are corrected or repaired an impairment program in accordance with Chapter 15 of

this standard shall be implemented.

4.1.5.1.2* Critical deficiencies shall be corrected or repaired within 30 days.

4.1.5.1.2.1* A different timeframe for correcting or repairing critical deficiencies shall be permitted by the AHJ.

4.1.5.1.3* Non-Critical deficiencies shall be corrected or repaired within 90 days.

4.1.5.1.3.1* A different timeframe for correcting or repairing non-critical deficiencies shall be permitted by the

AHJ.

Statement of Problem and Substantiation for Public Comment

This PI was resolved with comment that the AHJ has final say, and we agree the AHJ does have the final say, but there should be some sort of time frame in NFPA 25. Often repairs are not completed for several years.

NFPA 25 has no guidance that advises the owner, the AHJ, or other parties what a reasonable time frame is for

correcting deficiencies and impairments. Some owners or their designated representative may be misled to believe

deficiencies must be repaired immediately and initiate costly repairs needlessly. Others have no urgency to get any

deficiencies repaired because the standard doesn't provide this guidance. In every case of correcting deficiencies

the AHJ can be consulted if repairs can't be performed within the time frame cited, or the AHJ can adopt their own

requirements with time frames different than those in the standard.

Many AHJs have complained about not having enforceable language in NFPA 25 for correcting deficiencies and

this new text gives them that language.

Impairments found while performing an inspection or test are considered emergency impairments (15.6.1). Unless

the impairment is corrected or repaired immediately, an impairment program in accordance with Chapter 15 is

required. In some cases it isn't practical to correct or repair the impairment right away due to the availability of parts

and/or labor.

Related Public Comments for This Document

Related Comment

Relationship

Public Comment No. 31-NFPA 25-2021 [New Section after A.4.1.5.1.2]

Public Comment No. 32-NFPA 25-2021 [New Section after A.4.1.5.1.2]

[Public Comment No. 33-NFPA 25-2021 \[New Section after A.4.1.5.1.2\]](#)

[Public Comment No. 34-NFPA 25-2021 \[New Section after A.4.1.5.1.2\]](#)

Related Item

- PI 273

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Wed May 05 08:57:21 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: It should not be up to the service provider to determine the timeframe. The timeframe for correction should be addressed between the owner and AHJ. This language is more appropriate for the enforcement document, NFPA 1.



Public Comment No. 47-NFPA 25-2021 [Section No. 4.1.5.1.1]

4.1.5.1.1 * –

Upon discovery of any component and equipment under recall or replacement programs by the owner's maintenance personnel, designated representative, or contractor, the owner shall be notified in writing.

Statement of Problem and Substantiation for Public Comment

This section requires the owner to notify themselves. This is a contractual requirement and not need in an ITM standard.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 48-NFPA 25-2021 [Section No. A.4.1.5.1.1]	
<u>Related Item</u>	
• PI-273	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 14:55:41 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: It is important that the notification be in writing.



Public Comment No. 125-NFPA 25-2021 [New Section after 4.1.5.2]

The property owner or designated representative shall submit to the AHJ for approval a plan including time frames to correct or repair deficiencies or impairments.

Statement of Problem and Substantiation for Public Comment

NFPA 1 section 13.1.9 states "Whenever impairments, critical deficiencies, or non-critical deficiencies are identified in water-based fire protection systems maintained in accordance with NFPA 25, they shall be corrected in a time frame approved by the AHJ." In order for the AHJ to approve the time frame for corrections or repairs to be made, a plan must be submitted by the owner or their representative to the AHJ. This change to NFPA 25 will create correlation with NFPA 1.

Related Item

- PI No. 273

Submitter Information Verification

Submitter Full Name: Terry Victor

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Mon May 10 13:20:05 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Administrative process that is handled by the AHJ.



Public Comment No. 140-NFPA 25-2021 [New Section after 4.1.5.2]

4.1.5.3

Where a nitrogen supply is used as part of the dry pipe or preaction system design in accordance with NFPA 13 it shall be maintained, repaired, or replaced with a nitrogen supply capable of maintaining design concentrations.

Statement of Problem and Substantiation for Public Comment

If approved by NFPA 13, dry and preaction systems using nitrogen as a supervisory gas will be permitted to use a higher c-value for system design. It is important that NFPA 25 recognize this practice and establish a path forward for ensuring the nitrogen supply remains intact where system design is based on its use. 4.1.5.3 addresses the required steps to take when making corrections and repairs. In this section it that the owner is responsible for maintaining the supply only when nitrogen was used as part of system design. The committee statement regarding the PI was that Section 4.1.7 was not the appropriate section.

Related Item

- Pi 137, 143, 144

Submitter Information Verification

Submitter Full Name: Vincent Powers
Organization: National Fire Sprinkler Associ
Affiliation: NFSA Engineering and Standards Committee
Street Address:
City:
State:
Zip:
Submittal Date: Tue May 11 11:18:58 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-51-NFPA 25-2021
Statement: Where used, a nitrogen system needs to be maintained. The Annex note indicates why it is important to maintain the nitrogen supply.



Public Comment No. 130-NFPA 25-2021 [Section No. 4.1.5.2]

4.1.5.2

Corrections and repairs shall be performed by a- qualified ~~person(s)~~ personnel .

Statement of Problem and Substantiation for Public Comment

See substantiation for PC 127

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]	
<u>Related Item</u>	
• FR-16	

Submitter Information Verification

Submitter Full Name: Joe Scibetta
Organization: BuildingReports
Street Address:
City:
State:
Zip:
Submittal Date: Mon May 10 16:14:48 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-24-NFPA 25-2021
Statement: Personnel can be both singular and plural. It better aligns with how the term is used throughout the standard.



Public Comment No. 38-NFPA 25-2021 [New Section after 4.1.8]

4.1.8 * - Evaluation of the Installed System

Where required by governing laws, codes, or standards, or other parts of this standard, the requirements of this chapter, or portions thereof, shall apply.

A.4.1.8

Fires codes require an annual verification and evaluation to the approved storage plan, when provided. This requires the owner to comply with both the NFPA 25 and the local fire code.

Statement of Problem and Substantiation for Public Comment

NFPA 1 and the International Fire Code have annual verification and evaluation to the approved storage plan. This public comment makes the tie to the fire code without being specific.

Related Item

- PI-263

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Thu May 06 10:08:13 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: There is no reason to repeat in NFPA 25 what is required in governing laws, codes, or standards. There are other portions of this Chapter that apply regardless of what is contained in a fire code. In other words, if it is not required by another code/standard, then that portion of NFPA 25 could not apply.



Public Comment No. 79-NFPA 25-2021 [Section No. 4.1.8]

4.1.8 – Control Valve Location.

The location of control valves shall be identified at the system riser or other approved location(s).

Statement of Problem and Substantiation for Public Comment

Delete this section. This is an installation requirement and outside the scope of NFPA 25 for ITM

Related Item

- FR-17

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:11:05 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: As part of emergency response planning, it is critical that people know the location of the control valve. By including this requirement in NFPA 25, it applies to new and existing systems.



Public Comment No. 80-NFPA 25-2021 [Section No. 4.1.9]

4.1.9 * – Information Sign.

4.1.9.1 –

A permanently marked metal or rigid plastic information sign shall be placed at each system control riser.

4.1.9.2 –

Each sign shall be secured with a corrosion-resistant wire, chain, or other approved means and shall indicate at least the following information:

- (1) Location of the area served by the system
- (2) Location of auxiliary drains and low-point drains for dry pipe and preaction systems
- (3) Presence and location of antifreeze or other auxiliary systems
- (4) Presence and location(s) of heat tape
- (5) Location of control valves as required by 13.3.1.1

Statement of Problem and Substantiation for Public Comment

Delete this section. This is an installation requirement and outside the scope of NFPA 25 for ITM

Related Item

- FR-19

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:13:02 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: By including this in NFPA 25 it applies to new and existing systems. The intent of the section and the ability to provide the information is covered in A.4.1.9.



Public Comment No. 106-NFPA 25-2021 [Section No. 4.1.9.1]

4.1.9.1

A permanently marked metal or rigid plastic information sign shall be placed at each system control- riser.

Statement of Problem and Substantiation for Public Comment

While the term has been in the requirement for an Information Sign since it was first added in the 2008 edition of NFPA 25, I believe the term "system control riser" should be revised to just "system riser", since that is the defined term in NFPA 13 and that is the term commonly used in other standards, such as NFPA 14, NFPA 15 and NFPA 16.

Related Item

- FR-19

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 23:33:18 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-52-NFPA 25-2021

Statement: Removing the term "control" for clarification.



Public Comment No. 15-NFPA 25-2021 [Section No. 4.1.9.1]

4.1.9.1

A permanently marked metal or rigid plastic information sign shall be placed at each system control- riser.

Statement of Problem and Substantiation for Public Comment

I do not believe that "control riser" is an accurate or proper accepted term, it seems truncated and wrong. By either removing "control" or changing to "system riser control valve" it makes the sentence understandable.

Related Item

- FR19

Submitter Information Verification

Submitter Full Name: David Baron

Organization: Global Fire Protection Company

Street Address:

City:

State:

Zip:

Submittal Date: Fri Apr 30 10:35:08 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-52-NFPA 25-2021](#)

Statement: Removing the term "control" for clarification.



Public Comment No. 21-NFPA 25-2021 [Section No. 4.1.9.2]

4.1.9.2 – 1.1

Each sign shall be secured with a corrosion-resistant wire, chain, or other approved means and shall indicate at least the following information:

- (1) Location of the area served by the system
- (2) Location of auxiliary drains and low-point drains for dry pipe and preaction systems
- (3) Presence and location of antifreeze or other auxiliary systems
- (4) Presence and location(s) of heat tape
- (5) Location of control valves as required by 13.3.1.1

Statement of Problem and Substantiation for Public Comment

Making this section a subsection of 4.1.9.1 clarifies that it applies specifically to the information sign.

Related Item

- FR-18

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 04 09:58:53 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Inconsistent with the Manual of Style which would require two sub-paragraphs.



Public Comment No. 107-NFPA 25-2021 [Section No. 4.1.10]

4.1.10* Antifreeze Information Sign.

An antifreeze information sign shall be placed on the antifreeze system ~~main-~~ control valve indicating the manufacture type and brand of the antifreeze solution, the concentration by volume of the antifreeze solution used, and the volume of the antifreeze solution used in the system.

Statement of Problem and Substantiation for Public Comment

While I realize the term has been utilized since the requirement for a antifreeze information sign was introduced into NFPA 25, I believe that the words "antifreeze system main valve" should be revised to "antifreeze system control valve" to correspond with the definition in 3.5.1 and with common usage.

Related Item

- FR-20

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 23:35:38 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-53-NFPA 25-2021

Statement: Control valve is the defined term in the standard.



Public Comment No. 81-NFPA 25-2021 [Section No. 4.1.10]

4.1.10 * – Antifreeze Information Sign.

An antifreeze information sign shall be placed on the antifreeze system main valve indicating the manufacture type and brand of the antifreeze solution, the concentration by volume of the antifreeze solution used, and the volume of the antifreeze solution used in the system.

Statement of Problem and Substantiation for Public Comment

Delete this section. This is an installation requirement and outside the scope of NFPA 25 for ITM

Related Item

- FR-20

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:13:45 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Information about antifreeze is critical to the proper inspection and testing of systems containing antifreeze. This information is needed for both new and existing systems.



Public Comment No. 35-NFPA 25-2021 [Section No. 4.3.1.1]

4.3.1.1*

Records shall be maintained by the property ~~owner~~ owner in the fire command center, primary fire sprinkler riser room or other approved and identified location .

Statement of Problem and Substantiation for Public Comment

Property owners do not have a central place to store water-based ITM records that are accessible to the contractor or AHJ. Often, the owner does not know where the previous records are, and the contractor is left without an inspection history. This increases unnecessary ITM costs for owners. This public comment to the committee input adds specific places where records can be stored or gets the AHJ involved to establish a central place

Related Item

- CI-130

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Wed May 05 14:20:24 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Existing language already addresses the issue adequately and applies to ITM records only. It should be noted that 4.3.1.2 permits the records to be stored and accessed electronically which would conflict with proposed language.



Public Comment No. 37-NFPA 25-2021 [New Section after 4.3.5]

4.3.6

Less frequent inspections and tests that cannot be verified through records shall be considered a non-critical deficiency.

A.4.3.6

The term, less frequent, refers to inspections and tests with greater intervals than annual. This includes, for example, the 3-, 5-, 20-, 50-year tests.

Statement of Problem and Substantiation for Public Comment

The AHJ relies heavily on the contractor and owner to conduct ITM at the correct intervals. If the owner cannot provide records that show that the correct ITM is being conducted this should be considered a non-critical deficiency and documented. The intent of this is to capture the less frequent and detrimental ITM requirements such as 3, 5, 20 etc. year testing requirements.

Related Item

- PI-92

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Thu May 06 09:55:09 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Where does the service provider draw the line? If the scope of one's contract is an annual test of the fire pump but a five-year standpipe flow test is not performed, does the service provider identify the lack of the standpipe flow test? This would be better addressed as an observation in an inspection report.



Public Comment No. 101-NFPA 25-2021 [Section No. 4.3.5]

4.3.5

Inspection, ~~test~~ testing , and maintenance records shall be retained for a minimum period of 1 year after the next inspection, test, or maintenance of that type required by the standard.

Statement of Problem and Substantiation for Public Comment

As per the title of NFPA 25, plus the definition for ITM Service in Section 3.3.27 and as per the common terminology used throughout the standard, the starting text of Section 4.3.5 should be revised from "Inspection, test, and maintenance" to "Inspection, testing, and maintenance".

Additionally, addition of the word "minimum" is recommended, because it can always be beneficial to have more than one previous report on file. Having a series of main drain tests or pump flow tests can be very useful to recognize trends or cycles.

Related Item

- FR-23

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submission Date: Fri May 07 23:10:10 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-54-NFPA 25-2021

Statement: Editorial correction to align with the title of the standard.

The word "minimum" was added, because it can always be beneficial to have more than one previous report on file. Having a series of main drain tests or pump flow tests can be very useful to recognize trends or cycles.



Public Comment No. 82-NFPA 25-2021 [Section No. 4.3.5]

4.3.5

Inspection, test, and maintenance records shall be retained for ~~a period of 1 year after the next inspection, test, or maintenance of that type required by the standard~~ for the lifetime of the building .

Statement of Problem and Substantiation for Public Comment

The current requirement is too confusing. This would require the complete ITM history to be available for owner/AHJ review.

Related Item

- FR-23

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:16:00 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: It is not necessary to retain records for the lifetime of the building especially when the older records may not be relevant to a system that has been modified.



Public Comment No. 131-NFPA 25-2021 [Section No. 4.6.6.14]

4.6.6.14

Automated inspections and testing shall be observed and results analyzed by a- qualified person(s) personnel .

Statement of Problem and Substantiation for Public Comment

See substantiation for PC 127

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]	
<u>Related Item</u>	
• FR-10	

Submitter Information Verification

Submitter Full Name: Joe Scibetta
Organization: BuildingReports
Street Address:
City:
State:
Zip:
Submittal Date: Mon May 10 16:17:06 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-24-NFPA 25-2021
Statement: Personnel can be both singular and plural. It better aligns with how the term is used throughout the standard.



Public Comment No. 25-NFPA 25-2021 [Section No. 4.6.6.14]

4.6.6.14

Automated inspections and testing shall be observed and ~~results~~ shall be analyzed by a qualified person(s).

4.6.6.15

Automated testing results shall be analyzed by a qualified person(s)

Statement of Problem and Substantiation for Public Comment

Adding the new section specifies the duty of the qualified person(s) and changing the PI wording addresses the negative comment.

Related Item

- FR-10

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 04 10:31:27 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-79-NFPA 25-2021

Statement: The inspection or test is not observed, it is the results that are analyzed.



Public Comment No. 108-NFPA 25-2021 [Section No. 4.9.7]

4.9.7 Accessibility.

4.9.7.1

Inspection of equipment installed in areas that are inaccessible for safety considerations due to process operations shall be inspected during each scheduled shutdown.

4.9.7.2

Where approved by the authority having jurisdiction, testing of equipment installed in areas that are inaccessible for safety considerations due to process operations shall be inspected conducted during each scheduled shutdown.

4.9.7.3

Where approved by the authority having jurisdiction, maintenance of equipment installed in areas that are inaccessible for safety considerations due to process operations shall be conducted during each scheduled shutdown.

4.9.7.4 *

Where a risk assessment demonstrates that a temporary condition will result in personnel safety being compromised, inspection and testing activities shall be delayed when approved by the authority having jurisdiction.

Statement of Problem and Substantiation for Public Comment

There is a typo in the proposed new text of Section 4.9.7.2. Since Section 4.9.7.1 discusses the subject of inspections, the phrase in 4.9.7.2 that "... testing of equipment ... shall be inspected ..." needs to be revised to say that "... testing ... shall be conducted ...".

Additionally, additional text should be added, to address the maintenance of equipment that is installed in areas that are inaccessible for safety considerations.

Related Item

- FR-13

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 23:40:44 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-55-NFPA 25-2021](#)

Statement: Current language is appropriate. Maintenance can be addressed by the Fire Code. If needed, this might be better addressed as an Annex note.

Editorial correction to change “inspected” to “conducted” for clarity.



Public Comment No. 123-NFPA 25-2021 [Section No. 4.9.7.2]

4.9.7.2

Where approved by the authority having jurisdiction, testing and maintenance of equipment installed in areas that are inaccessible for safety considerations due to process operations shall be ~~inspected~~ conducted during each scheduled shutdown.

Statement of Problem and Substantiation for Public Comment

This intent of this comment is to address the misuse of the word "inspected" with regard to "testing" of equipment and to include the "maintenance" of equipment in such cases as well.

Related Item

- FR-13

Submitter Information Verification

Submitter Full Name: Joe Scibetta

Organization: BuildingReports

Street Address:

City:

State:

Zip:

Submittal Date: Mon May 10 12:36:46 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-55-NFPA 25-2021

Statement: Current language is appropriate. Maintenance can be addressed by the Fire Code. If needed, this might be better addressed as an Annex note.

Editorial correction to change "inspected" to "conducted" for clarity.



Public Comment No. 26-NFPA 25-2021 [New Section after 4.9.7.3]

4.10 Contractors Responsibilities

4.10.1 Contractor shall inform the owner in writing when a newer edition of this standard is adopted in the owner's jurisdiction....

Statement of Problem and Substantiation for Public Comment

NFPA 25 is modified every three years and the model codes adopted updated editions of the Standard. There isn't a current communication that informs an owner or building manager of the newer editions when they are adopted in an location. Sprinkler contractors hired by the owner or building manager are in a very good position to communicate to owners and managers that there is a new edition available and or adopted. Contractors are aware of changes to the edition of the standard and generally owners are not. Contractors can improve communication with owners by informing the owner when the standard has changed. It may be argued this is the AHJ's job, reality is the contractor may be the only entity to set foot in a building and they are utilizing the standard for their service. It is reasonable they could inform the owner a newer edition is enforceable because they are aware of that change. This is a win win for everyone involved. A contractor sells a NFPA standard and an owner obtains the standard they are required to comply with. It is the owners responsibility to conform to codes and standards, but a contractor, hired to inspect, test, and maintain system can communicate to the owner or manager the need to obtain a new standard.

Related Item

- PI 115

Submitter Information Verification

Submitter Full Name: Scott Futrell

Organization: Futrell Fire Consult & Design, Inc.

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 04 15:22:40 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: It is not the responsibility of the service provider to notify owners when a newer edition of the standard is adopted. The proposed language does not provide a timeframe for notification. A contractor's responsibilities are defined by the contract between the contractor and the owner.



Public Comment No. 150-NFPA 25-2021 [Section No. 5.1.1.2]

5.1.1.2

Table 5.1.1.2 shall be used to determine the minimum required frequencies for inspection, testing, and maintenance.

Table 5.1.1.2 Summary of Sprinkler System Inspection, Testing, and Maintenance

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
Inspection	-	-
Assessment of the internal piping condition	—	Chapter 14
Control valves	—	Chapter 13
Fire department connections	—	Chapter 13
Gauges (wet and deluge systems)	—	Chapter 13
Gauges (dry and preaction systems)	—	Chapter 13
Hangers/braces/supports	Annually	5.2.3
Heat tracing	Per manufacturer's requirements	5.2.6
Hydraulic design information sign	Annually	5.2.5
Information signs	Annually	5.2.7, 5.2.8, and 5.2.9
Pipe and fittings	Annually	5.2.2
Sprinklers	Annually	5.2.1
Sprinklers (spare)	Annually	5.2.1.4
Sprinkler guards	Annually	5.2.1.1.7.1
Supervisory signal devices (except valve supervisory switches)	—	5.2.4 and Chapter 13
System valves	—	Chapter 13
Valve supervisory signal devices	—	5.2.4 and Chapter 13
Waterflow alarm devices	Quarterly	5.2.4
Test	-	-
Antifreeze solution	Annually	5.3.4
Control valves	—	Chapter 13
Gauges	—	Chapter 13
Main drain	—	Chapter 13
Sprinklers (<u>all</u>)	At 50 years and every 10 years thereafter	5.3.1.1.1, 5.3.1.1.1.1, and 5.3.1.1.1.2
Sprinklers (<u>all</u>)	At 75 years and every 5 years thereafter	5.3.1.1.1.5 <u>6</u>
Sprinklers (dry)	At 45 <u>20</u> years and every 10 years thereafter	5.3.1.1.1.6 <u>7</u>
Sprinklers (extra-high or greater temperature solder type)	Every 5 years	5.3.1.1.1.4 <u>5</u>
Sprinklers (fast-response)	At 20 <u>25</u> years and every 10 years thereafter	5.3.1.1.1.3
Sprinklers (<u>CMSA</u> or <u>ESFR</u>)	At <u>20 years and every 10 years thereafter</u>	<u>5.3.1.1.1.4</u>
<u>Sprinklers</u> (harsh environments)	Every 5 years	5.3.1.1.2
Supervisory signal devices (except valve supervisory switches)	—	Chapter 13

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
System valves	—	Chapter 13
Valve supervisory signal devices	—	Chapter 13
Waterflow alarm devices (mechanical)	Quarterly	5.3.3.1
Waterflow alarm devices (vane and pressure switch type)	Semiannually	5.3.3.2
Maintenance	-	-
Low-point drains (dry pipe and preaction systems)	—	Chapter 13
Sprinklers and automatic spray nozzles protecting commercial cooking equipment and ventilation systems	Annually	5.4.1.7
Replacement of sprinklers	Removed for any reason	5.4.1.1
Replacement of sprinkler guards	Damaged	5.2.1.1.7.2
Valves (all types)	—	Chapter 13
Investigation	-	-
Obstruction	—	Chapter 14

Statement of Problem and Substantiation for Public Comment

Updates table based on actions taken during the first draft. Changes the testing interval for dry sprinklers and fast-response sprinklers. Adds a line item for the new testing requirements for CMSA/ESFR sprinklers.

Related Item

- FR-51

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 15:10:12 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-13-NFPA 25-2021](#)

Statement: Changes were made to the table to incorporate first and second revisions.



Public Comment No. 78-NFPA 25-2021 [Section No. 5.1.1.2]

5.1.1.2

Table 5.1.1.2 shall be used to determine the minimum required frequencies for inspection, testing, and maintenance.

Table 5.1.1.2 Summary of Sprinkler System Inspection, Testing, and Maintenance

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
Inspection	-	-
<u>Assessment of the internal piping condition</u>	<u>Annually</u>	<u>Chapter 14</u> <u>5.2.10</u>
<u>Automatic air vents</u>	—	<u>Chapter 13</u>
<u>Control valves</u>	—	<u>Chapter 13</u>
<u>Electrically operated sprinklers</u>	<u>Annually</u>	<u>5.2.1.5</u>
Fire department connections	—	Chapter 13
Gauges (wet and deluge systems)	—	Chapter 13
Gauges (dry and preaction systems)	—	Chapter 13
Hangers/braces/supports	Annually	5.2.3
Heat tracing	Per manufacturer's requirements	5.2.6
Hydraulic design information sign	Annually	5.2.5
Information signs	Annually	5.2.7, 5.2.8, and 5.2.9
Pipe and fittings	Annually	5.2.2
<u>Sprinklers</u>	<u>Annually</u>	<u>5.2.1</u>
<u>Sprinklers clearance to storage</u>	<u>Annually</u>	<u>5.2.1.2</u>
Sprinklers (spare)	Annually	5.2.1.4
Sprinkler guards	Annually	5.2.1.1.7.1
Supervisory signal devices (except valve supervisory switches)	—	5.2.4 and Chapter 13
System valves	—	Chapter 13
Valve supervisory signal devices	—	5.2.4 and Chapter 13
Waterflow alarm devices	<u>Quarterly</u>	<u>5.2.4 and Chapter 13</u>
Test	-	-
Antifreeze solution	Annually	5.3.4
<u>Control valves</u>	—	<u>Chapter 13</u>
<u>Electrically operated sprinklers</u>	—	<u>5.3.2</u>
Gauges	—	Chapter 13
Main drain	—	Chapter 13
Sprinklers	At 50 years and every 10 years thereafter	5.3.1.1.1, and 5.3.1.1.1.1, and 5.3.1.1.1.2
Sprinklers	At 75 years and every 5 years thereafter	5.3.1.1.1.5 <u>6</u>

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
Sprinklers (dry)	At 15- 20 years and every 10 years thereafter	5.3.1.1.1.6 7
Sprinklers (extra-high or greater temperature solder type)	Every 5 years	5.3.1.1.1.4
<u>Sprinklers (fast-response , except ESFR and CSMA)</u>	<u>At 25 years and every 10 years thereafter</u>	<u>5.3.1.1.1.3</u>
<u>Sprinklers (ESFR and CSMA w fast response elements)</u>	<u>At 20 years and every 10 years thereafter</u>	<u>5.3.1.1.1.4</u>
Sprinklers (harsh environments)	Every 5 years	5.3.1.1.2
Supervisory signal devices (except valve supervisory switches)	—	Chapter 13
System valves	—	Chapter 13
Valve supervisory signal devices	—	Chapter 13
Waterflow alarm devices (mechanical)	Quarterly	5.3.3 4
Waterflow alarm devices (vane and pressure switch type)	Semiannually	5.3.3.2
<u>and Chapter 13</u>		
Maintenance	-	-
Low-point drains (dry pipe and preaction systems)	—	Chapter 13
Sprinklers and automatic spray nozzles protecting commercial cooking equipment and ventilation systems	Annually	5.4.1.7
<u>Replacement of sprinklers</u>		
<u>Removed</u>		
<u>manufactured prior to 1920</u>		<u>5. 3.1.1.1.2</u>
<u>Replacement of sprinklers after a fire</u>		<u>5. 4.1.1</u>
<u>Replacement of threaded sprinklers removed from a fitting for any reason (except dry type)</u>		<u>5.4.1.2</u>
Replacement of <u>damaged</u> sprinkler guards	Damaged	5.2.1.1.7.2
Valves (all types)	—	Chapter 13
Investigation	-	-
Obstruction	—	Chapter 14

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
NFPA_25_TG_3_-_PC_Changes_to_Table_5.1.1.2.docx	Changes proposed by task group 3	

Statement of Problem and Substantiation for Public Comment

Table 5.1.1.2 needs to be updated with first revisions and with proposed second revisions. These changes are submitted on behalf of NFPA 25 task group 3.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 72-NFPA 25-2021 [Section No. 6.1.1.2]	
Public Comment No. 122-NFPA 25-2021 [Section No. 7.1.1.2]	
<u>Related Item</u>	
• First Revision 112	

Submitter Information Verification

Submitter Full Name: Terry Victor
Organization: Johnson Controls
Affiliation: NFPA 25 Task Group 3
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 17:10:15 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: [SR-13-NFPA 25-2021](#)
Statement: Changes were made to the table to incorporate first and second revisions.



Public Comment No. 154-NFPA 25-2021 [New Section after 5.2.1]

5.2.1.x

A representative sample of concealed sprinklers shall be inspected on a 5-year basis.

5.2.1.x.1 Where historical data indicate, longer intervals between inspections shall be permitted.

5.2.1.x.2 A representative sample of concealed sprinklers for inspection per 5.2.1.x shall consist of a minimum of not less than four concealed sprinklers or 1 percent of the number of concealed sprinklers per individual sprinkler sample area, whichever is greater.

5.2.1.x.3 Where one sprinkler within a representative sample fails to meet the inspection requirements, all concealed sprinklers within the area represented by that sample shall be inspected.

Statement of Problem and Substantiation for Public Comment

A concealed sprinkler, as defined in NFPA 13 (extracted to NFPA 25 in Section 3.3.44.1.1), is a recessed sprinkler with a cover plate. The recessed sprinkler portion, typically inspected through Section 5.2, is hidden by the cover plate. The cover plate, as observed from the floor level, prevents full compliance with 5.2. This CI recognizes the extra effort and expense of the inspector and owner by physically removing cover plates to inspect the sprinkler on a less frequent basis.

Related Item

- CI- 134

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 16:01:16 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-2-NFPA 25-2021

Statement: Inspecting sprinklers behind cover plates periodically will help ensure that sprinklers will operate as intended and to help prevent premature discharge of sprinklers due to the conditions described. The five-year frequency is intended to coincide with other five-year requirements when ladders and lift equipment will be needed. Existing sections 5.2.1.1.1 and following are to be renumbered.



Public Comment No. 16-NFPA 25-2021 [Section No. 5.2.1.1.1]

5.2.1.1.1*

Any sprinkler that shows signs of any of the following shall be replaced:

- (1) Leakage
- (2) Corrosion detrimental to sprinkler performance
- (3) Physical damage
- (4) Loss of fluid in the glass bulb heat-responsive element
- (5) Loading detrimental to sprinkler performance
- (6) Paint, other than that applied by the sprinkler manufacturer, detrimental to sprinkler performance .

Statement of Problem and Substantiation for Public Comment

This wording is vague and unenforceable and does not belong in the body of the standard. It should be in the annex and should be there for the AHJ to use as guidance for enforcement in real word applications. If fire sprinklers are noted to have "non-factory applied paint" on them then any action required whether it is removal of the head, testing, or removal of the paint, or any other possible solution it should be determined on a case by case basis and approved by the owner and AHJ. Some may be very simple and some may not but that type of judgement should not be in the hands of the inspector performing an NFPA 25 inspection.

Related Item

- FR64

Submitter Information Verification

Submitter Full Name: David Baron

Organization: Global Fire Protection Company

Street Address:

City:

State:

Zip:

Submittal Date: Fri Apr 30 11:32:44 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Small amounts of paint on certain parts of a sprinkler as described in the annex section are not necessarily detrimental to sprinkler performance. This language allows reasonable judgment to be used instead of applying a strict pass/fail criteria.



Public Comment No. 83-NFPA 25-2021 [Section No. 5.2.1.1.1]

5.2.1.1.1*

Any sprinkler that shows signs of any of the following shall be replaced:

- (1) Leakage
- (2) Corrosion detrimental to sprinkler performance
- (3) Physical damage
- (4) Loss of fluid in the glass bulb heat-responsive element
- (5) Loading detrimental to sprinkler performance
- (6) Paint, other than that applied by the sprinkler manufacturer, ~~detrimental to sprinkler performance~~

Statement of Problem and Substantiation for Public Comment

The language added during the first draft relies too heavily on the judgement of the qualified person(s). ANY paint on the sprinkler should require replacement which correlates with the installation requirements of NFPA 13. As the requirement is currently written, sprinklers deemed acceptable by an inspector would need to be replaced by the installing contractor the next time work is performed in the area in accordance with NFPA 13.

Per NFPA 13-2019:

16.2.3 Painting.

16.2.3.1 Where sprinklers have had paint applied by other than the sprinkler manufacturer, they shall be replaced with new listed sprinklers of the same characteristics, including K-factor, thermal response, and water distribution.

16.2.3.2 Where cover plates on concealed sprinklers have been painted by other than the sprinkler manufacturer, the cover plate shall be replaced.

Related Item

- FR-64

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submission Date: Fri May 07 17:18:59 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Rejected

Action:

Resolution: Small amounts of paint on certain parts of a sprinkler as described in the annex section are not necessarily detrimental to sprinkler performance. This language allows reasonable judgment to be used instead of applying a strict pass/fail criteria.



Public Comment No. 104-NFPA 25-2021 [Section No. 5.2.1.2 [Excluding any Sub-Sections]]

The minimum clearance to storage, stock furnishings or equipment as described in 5.2.1.2.1 through 5.2.1.2.6 shall be maintained below all sprinkler deflectors, to avoid unacceptable obstructions to spray patterns .

Statement of Problem and Substantiation for Public Comment

With all the revisions to Section 5.2.1.2 over a great number of cycles, the concept that we are checking clearance to avoid obstructions to the sprinkler spray seems to be slipping away, such that even some of our own TC members are starting to think that the text contains design criteria and text needed to be added to the annex to explain that "the reference to storage in 5.2.1.2 does not only apply to storage facilities; it also includes the contents of a room".

Unfortunately, the new Annex A.5.2.1.2 is incorrect. NFPA 13 does not define clearance as the distance from the top of storage to the ceiling sprinkler deflectors. The definition for "Clearance" was replaced with one for "Clearance to Ceiling" in the NFPA 13, 2013 edition. Since the text is not correct, it should be deleted. The concept that 5.2.1.2 is not just concerned with storage is better served by having something in the body, rather than the Annex.

Therefore, the proposed text, which has borrowed some things from previous versions of Section 5.2.1.2, is offered, to bring us back to the basics with a a better explanation of what to look for and why.

Related Item

- FR-61

Submitter Information Verification

Submitter Full Name: Larry Keeping
Organization: PLC Fire Safety Solutions
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 23:18:50 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: Concern over non-storage obstructions is adequately addressed in the annex material.



Public Comment No. 110-NFPA 25-2021 [Sections 5.2.1.2.2, 5.2.1.2.3]

Sections 5.2.1.2.2, 5.2.1.2.3

5.2.1.2.2

—

~~Where standards other than NFPA 13 specify greater clearance to storage minimums, they shall be followed.~~

5.2.1.2.3

*
—

Clearance between the deflector and the top of storage shall be 36 in. (914 mm) or greater for ESFR and CMSA sprinklers.

5.2.1.2.3

Where standards other than NFPA 13 specify greater clearance to storage minimums, they shall be followed.

Statement of Problem and Substantiation for Public Comment

The text of the existing 5.2.1.2.2 and the text of the proposed new Section 5.2.1.2.3 should be interchanged. With this, the deflector distances from standards other than NFPA 13 would more logically follow the text that discusses the 18" distance for spray sprinklers and the 36" distance for EMSF and CMSA sprinklers, which originate from the NFPA 13 provisions.

In conjunction with this interchange of section numbers, the existing Annex text of A.5.2.1.2.3 should be renumbered as A.5.2.1.2.2.

Related Item

- FR-70

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

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City:

State:

Zip:

Submittal Date: Fri May 07 23:54:49 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-1-NFPA 25-2021

Statement: The change will make the requirements flow in a more logical order.



Public Comment No. 6-NFPA 25-2021 [Sections 5.2.1.4, 5.2.1.5]

Sections 5.2.1.4, 5.2.1.5

5.2.1.4

The supply of spare sprinklers shall be inspected annually for the following:

- (1) The correct number and type of sprinklers as required by 5.4.1.6
- (2) A sprinkler wrench for each type of sprinkler as required by 5.4.1.6.5
- (3) The list of spare sprinklers as required by 5.4.1.6.6

~~5.2.1. x A representative sample of concealed sprinklers shall be inspected on a 5 -year basis.~~

~~5.2.1.x.1 Where historical data indicate, longer intervals between inspections shall be permitted.~~

~~5.2.1.x.2 A representative sample of concealed sprinklers for inspection per 5.2.1.x shall consist of a minimum of not less than four concealed sprinklers or 1 percent of the number of concealed sprinklers per individual sprinkler sample, whichever is greater.~~

~~5.2.1.x.3 Where one sprinkler within a representative sample fails to meet the inspection requirements, all concealed sprinklers within the area represented by that sample shall be inspected.~~

5.2.1.5

Electrically operated sprinklers shall be inspected from the floor level annually in accordance with the manufacturer's requirements.

Statement of Problem and Substantiation for Public Comment

This comment is in opposition to CI-134, the proposed language of which is indicated by the strike-throughs. During the last revision cycle, the committee agreed to new language in A.5.2.1.1 which states that cover plates do not need to be removed for inspection of concealed sprinklers but leaves it to the judgment of the inspector to decide when/if to remove them if visible signs indicate there may be a problem. This CI contradicts that committee effort. The substantiation behind A.5.2.1.1, agreed upon by the committee, was that it addressed the need to remove the plates in certain cases without imposing yet another five year schedule that must be maintained and coordinated and/or require a history of representative samplings that must be monitored/coordinated to ensure that all cover plates are addressed over time.

Additionally, A.5.2.1.1.1 (which would apply also to concealed sprinklers given this CI) states as follows: Sprinklers having limited corrosion or loading that does not impact the water distribution characteristics can continue to be used if the samples are selected for testing in accordance with 5.3.1 based on worst-case conditions and if the samples successfully pass the tests.

So, a 5-year inspection of concealed sprinklers could lead to an inspector making a judgment call on one or more concealed sprinklers with limited corrosion, and in line with the guidance in A.5.2.1.1.1, send samples for lab testing. That, in itself, is not a bad thing certainly. But given that this issue is admittedly based on just one incident where leakage occurred in a concealed area without visible evidence on the cover plate or surrounding area, is this really a problem so prevalent that it warrants mandatory language for yet another 5-year maintenance schedule for owners and service providers to try and track, along with all the added expenses and labor involved?

Related Item

- CI-134

Submitter Information Verification

Submitter Full Name: Joe Scibetta

Organization: BuildingReports

Street Address:

City:

State:

Zip:

Submittal Date: Fri Mar 26 09:04:39 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: No proposed language was provided.



Public Comment No. 97-NFPA 25-2021 [Section No. 5.2.1.5]

5.2.1.5 –

Electrically-operated sprinklers shall be inspected from the floor level annually in accordance with the manufacturer's requirements.

Statement of Problem and Substantiation for Public Comment

This new text is not necessary. From a review of the product data sheet for the TYCO Model TY720 Pendent Electronically Controlled Sprinkler, the only inspection guidance expressed are for: "ITM to be by a qualified service", and that "The owner is responsible for the ITM". Since these provisions apply to all sprinklers, and since all sprinklers are to be inspected from floor level, the proposed Section 5.2.1.5 is redundant.

Related Item

- FR-40

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 22:49:08 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: It's necessary to make reference to these new sprinklers. Inspection language was added to accompany testing requirements.



Public Comment No. 39-NFPA 25-2021 [Sections 5.2.2.2, 5.2.2.3]

Sections 5.2.2.2, 5.2.2.3

5.2.2.2

Sprinkler piping and hangers shall not be subjected to external loads by materials either resting on the pipe or hung from the pipe used to support non-system components .

5.2.2.3*

Nonmetallic sprinkler pipe shall not be subjected to non-system components touching the pipe.

Pipe and fittings installed in concealed spaces such as above suspended ceilings shall not require inspection.

Additional Proposed Changes

<u>File Name</u>	<u>Description Approved</u>
ASHE_sprinkler_pipe_support_white_paper.pdf	

Statement of Problem and Substantiation for Public Comment

The proposed change is necessary as items touching sprinkler piping do not pose the same hazard as items supported by sprinkler piping. The American Society of Healthcare Engineering's Sprinkler System Support Analysis whitepaper published in 2020 indicates that approximately 81% of items touching sprinkler piping in the 11 different facilities were cabling and flexible conduits which pose a minimal hazard to the effectiveness of the sprinkler system.

The proposed change also limits the allowance of items touching sprinkler piping to metallic piping as items touching nonmetallic sprinkler pipe are still prohibited.

Related Item

- CI 116

Submitter Information Verification

Submitter Full Name: Lennon Peake
Organization: Koffel Associates, Inc.
Affiliation: American Society of Healthcare Engineering Regulatory Affairs Committee
Street Address:
City:
State:
Zip:
Submittal Date: Thu May 06 13:26:36 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Rejected but see related SR

Action:

Resolution: [SR-3-NFPA 25-2021](#)

Statement: The reference to hangers is inappropriate in this section and opposed to what NFPA 13 allows. The subsection is addressing non-metallic pipe and incompatibility was added to address other building features that may be in contact with the pipe, intentionally or unintentionally.



Public Comment No. 49-NFPA 25-2021 [Section No. 5.2.10]

5.2.10 – Automatic Air Vents.

~~Automatic air vents installed in accordance with NFPA 13 to remove air from wet pipe sprinkler systems shall be inspected annually from the floor level to verify they are free of physical damage and show no signs of leakage.~~

5.2.10.1 –

~~Strainers, filters, and screens shall be removed and inspected every 5 years for damaged or corroded parts.~~

5.2.10.2 –

~~When removed for inspection, strainers, filters, and screens shall be flushed until clear or replaced.~~

Statement of Problem and Substantiation for Public Comment

Automatic air vents are utilized in other systems as well as sprinkler systems and this section is more appropriate to be located in Chapter 13.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 50-NFPA 25-2021 [New Section after 13.10]	
<u>Related Item</u>	
• FR-49	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
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Submission Date: Fri May 07 15:29:02 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: [SR-5-NFPA 25-2021](#)
Statement: The requirements are more appropriately located in Chapter 13.



Public Comment No. 146-NFPA 25-2021 [Section No. 5.3.1]

5.3.1* Sprinklers.

5.3.1.1*

Where required by this section, sample sprinklers shall be submitted to a recognized testing laboratory acceptable to the authority having jurisdiction for field service testing.

5.3.1.1.1

~~Test procedures shall be repeated~~

Where sprinklers have been installed for 50 years, one of the following shall occur:

- (1) The sprinklers shall be replaced.
- (2) Representative ~~samples from one or more sample areas of~~ samples of the sprinklers shall be tested .

5.3.1.1.1.1 –

- (1) and then retested every 10 years.

5.3.1.1.1.

2

Sprinklers manufactured prior to 1920 shall be replaced.

5.

3

1.1.1.3

* _

Where sprinklers manufactured using fast-response elements , except for ESFR and CSMA, have been installed for 25 years , one of the following shall occur

, except as permitted in 5.3.1.1.1.4

:

- (1) The sprinklers shall be replaced.
- (2) Representative samples from the sprinklers shall be tested and then retested every 10 years.

5.3.1.1.1.4 _

Where ESFR and CMSA sprinklers using fast-response elements have been installed for 20 years, one of the following shall occur:

- (1) The sprinklers shall be replaced.
- (2) Representative samples from the sprinklers shall be tested and then retested every 10 years.

5.3.1.1.1.5 * _

Representative samples of

Where solder-type sprinklers with a temperature classification of extra high [325°F (163°C) or greater]

that

are installed and exposed to semi-continuous to continuous maximum allowable ambient temperature conditions for 5 years, one of the following shall occur:

- (1) The sprinklers shall be tested at 5-year intervals.
replaced.
- (2) Representative samples from the sprinklers shall be tested and then retested every 5 years.

5.3.1.1.1.6 _

Where sprinklers have been installed for 75 years,

they shall be replaced or representative samples from one or more sample areas shall be submitted to a recognized testing laboratory acceptable to the authority having jurisdiction for field service testing and repeated at 5-year intervals

one of the following shall occur:

- (1) The sprinklers shall be replaced.
- (2) Representative samples from the sprinklers shall be tested and then retested every 5 years .

5.3.1.1.1.7 _

Dry sprinklers that have

Where dry sprinklers have been installed for 20 years , one of the following shall
be replaced or representative samples

occur:

(1) The sprinklers shall be replaced.

(2) Representative samples from the sprinklers shall be tested and then retested
at

every 10

-year intervals

years .

(See 3.3.44.4 .)

5.3.1.1.2 * _

Where sprinklers

are

exposed to harsh environments, including corrosive atmospheres, have been installed for 5
years, one of the following shall occur:

(1) The sprinklers shall be replaced.

(2) Representative samples from the sprinklers shall be tested and then retested every 5
years.

5.3.1.1.3 _

Listed corrosion-resistant sprinklers installed in harsh environments shall be permitted to be
tested every 10 years and then retested every 5 years .

5.3.1.1.4 _

Where historical data indicate, longer intervals between testing shall be permitted.

5.3.1.2 * _

A representative sample of sprinklers for testing in accordance with 5.3.1.1 shall consist of
either a minimum of four sprinklers or 1 percent of the number of sprinklers

per

represented by the sample

area

set , whichever is greater.

5.3.1.2.1 * _

Each sprinkler type and manufacturer in the sample area shall be represented in the sample.

5.3.1.3 _

Where one sprinkler within a representative sample fails to meet the test requirement, all
sprinklers within the area represented by that sample shall be replaced.

Statement of Problem and Substantiation for Public Comment

This section needed to be reorganized to be consistent with changes made during the first revision. Common language was added to each type of sprinklers that needs to be replaced or tested. The

section on sprinklers manufactured prior to 1920 was deleted and a separate PC was submitted to add it back under sprinkler maintenance.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 148-NFPA 25-2021 [New Section after 5.4.1.1]	
Public Comment No. 151-NFPA 25-2021 [Section No. A.5.3.1.2]	
<u>Related Item</u>	
• PI 270 • FR 51	

Submitter Information Verification

Submitter Full Name: Terry Victor
Organization: Johnson Controls
Street Address:
City:
State:
Zip:
Submittal Date: Tue May 11 13:37:47 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: [SR-8-NFPA 25-2021](#)
Statement: Changes made to provide consistency in the testing requirements. Most changes were editorial with the exception of new 5.3.1.3.2 which is needed to clarify that sprinklers that are being retested must not be the ones previously replaced.



Public Comment No. 60-NFPA 25-2021 [Section No. 5.3.1.1]

5.3.1.1 * –

Where required by this section, ~~sample sprinklers shall be submitted to a recognized testing laboratory acceptable to the authority having jurisdiction for field service testing.~~

5.3.1.1.1 –

Where ~~sprinklers have been installed for 50 years, one of the following shall occur:~~

- ~~(1) The sprinklers shall be replaced.~~
- ~~(2) Representative samples from one or more sample areas of the sprinklers shall be tested.~~

5.3.1.1.1.1 –

~~Test procedures shall be repeated every 10 years.~~

5.3.1.1.1.2 –

~~Sprinklers manufactured prior to 1920 shall be replaced.~~

5.3.1.1.1.3 * –

~~Where sprinklers manufactured using fast-response elements have been installed for 25 years, one of the following shall occur, except as permitted in 5.3.1.1.1.4 :~~

- ~~(1) The sprinklers shall be replaced.~~
- ~~(2) Representative samples from the sprinklers shall be tested and then retested every 10 years.~~

5.3.1.1.1.4 –

~~Where ESFR and CMSA sprinklers using fast-response elements have been installed for 20 years, one of the following shall occur:~~

- ~~(1) The sprinklers shall be replaced.~~
- ~~(2) Representative samples from the sprinklers shall be tested and then retested every 10 years.~~

5.3.1.1.1.5 * –

~~Representative samples of solder-type sprinklers with a temperature classification of extra high [325°F (163°C) or greater] that are exposed to semi-continuous to continuous maximum allowable ambient temperature conditions shall be tested at 5-year intervals.~~

5.3.1.1.1.6 –

~~Where sprinklers have been installed for 75 years, they shall be replaced or representative samples from one or more sample areas shall be submitted to a recognized testing laboratory acceptable to the authority having jurisdiction for field service testing and repeated at 5-year intervals.~~

5.3.1.1.1.7 –

~~Dry sprinklers that have been installed for 20 years shall be replaced or representative samples shall be tested and then retested at 10-year intervals. (See 3.3.44.4 .)~~

5.3.1.1.2 * –

~~Where sprinklers are exposed to harsh environments, including corrosive atmospheres, one of the following shall occur:~~

- ~~(1) The sprinklers shall be replaced.~~
- ~~(2) Representative samples from the sprinklers shall be tested and then retested every 5 years.~~

5.3.1.1.3 –

~~Listed corrosion-resistant sprinklers installed in harsh environments shall be permitted to be tested every 10 years.~~

5.3.1.1.4 –

~~Where historical data indicate, longer intervals between testing shall be permitted.~~

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
PC_XXX_5_3_1_Sprinkler_Testing_Requirements.docx	Proposed new organization of requirements for testing of sprinklers required by section 5.3.1	

Statement of Problem and Substantiation for Public Comment

Reorganize the requirements of this section per the attached word document.

The current section is lengthy and confusing to the average user of this document. This section should point to the inspection intervals which are already in the body of the standard and are enforceable. This would eliminate any correlating issues with the table and the requirements of this section.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 53-NFPA 25-2021 [Section No. 5.3.1.1.3]	
Public Comment No. 54-NFPA 25-2021 [Section No. 5.3.1.1.4]	
Public Comment No. 51-NFPA 25-2021 [Section No. 5.3.1.1 [Excluding any Sub-Sections]]	
<u>Related Item</u>	
• FR-51	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 16:10:27 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-8-NFPA 25-2021](#)

Statement: Changes made to provide consistency in the testing requirements. Most changes were editorial with the exception of new 5.3.1.3.2 which is needed to clarify that sprinklers that are being retested must not be the ones previously replaced.



Public Comment No. 51-NFPA 25-2021 [Section No. 5.3.1.1 [Excluding any Sub-Sections]]

Where required by this section, sample sprinklers shall be submitted to ~~a recognized testing laboratory acceptable to the authority having jurisdiction for~~ an approved testing laboratory for field service testing.

Statement of Problem and Substantiation for Public Comment

"Approved" is the appropriate term as it is defined as an NFPA official definition.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 60-NFPA 25-2021 [Section No. 5.3.1.1]	
<u>Related Item</u>	
• FR-51	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submission Date: Fri May 07 15:39:15 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-6-NFPA 25-2021
Statement: Referencing an approved lab reinforces this requirement for field testing of sprinklers. Approved is a defined term whereas the term "recognized" is not.



Public Comment No. 8-NFPA 25-2021 [Section No. 5.3.1.1 [Excluding any Sub-Sections]]

Where required by this section, sample sprinklers shall be submitted to ~~a recognized testing~~ an ISO-17025 accredited testing laboratory acceptable to the authority having jurisdiction for field service testing.

Statement of Problem and Substantiation for Public Comment

The committee resolved a similar public input in the first draft stating there has not been a problem to date with the current wording (i.e. letting the AHJ decide). While it has not been an issue yet, I would like this NFPA committee to reconsider this issue and be proactive rather than reactive on this issue. Unchecked improper laboratory practices could lead to a loss of life or property which cannot be replaced after the fact - by the time it becomes an issue, it could be too late. There certainly have been other laboratories in other industries that have cut corners to save a buck and compromised the integrity of their results in doing so. It could certainly happen here too. Unfortunately, the AHJ may not always be properly equipped to fully evaluate a laboratory and uncover any insufficient laboratory practices. Is the lab's equipment properly calibrated? Do they participate in proficiency studies? How do they know the result they are getting is accurate? I suggest a minimum benchmark, such as ISO 17025 "General requirements for the competence of testing and calibration laboratories", be referenced to give some guidance to the AHJ and put the burden of answering these questions and properly evaluating a laboratory on those truly equipped to do so. ISO 17025 is a general competency standard and is applicable to all organizations performing tests and/or calibrations. It is typically viewed across the world as the standard to which a laboratory must meet to be deemed competent. Laboratories with an ISO 17025 accreditation are audited regularly to ensure they are competently doing what they say which gives those that utilize the laboratory some peace of mind. Note that other NFPA standards, such as NFPA 1989 "Standard on Breathing Air Quality for Emergency Services Respiratory Protection" (2019 edition, 4.1.1), have required laboratories to be ISO 17025 accredited for some time. This would not be the first time an NFPA standard has set a qualification for a laboratory. Furthermore, also note that I believe two of the major players currently completing the field service test, UL and Dyne Fire Protection Labs, are already ISO 17025 accredited laboratories. This would not be a burden on those already accredited.

Related Item

- Public Input No. 60

Submitter Information Verification

Submitter Full Name: Grant Lobdell
Organization: Dyne Fire Protection Labs
Street Address:
City:
State:
Zip:
Submittal Date: Fri Apr 02 11:11:07 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Rejected but see related SR

Action:**Resolution:** [SR-7-NFPA 25-2021](#)**Statement:** It's important that guidance be provided to ensure uniform testing procedures. This reference is better placed in the annex as there may be other accreditations that would be acceptable.



Public Comment No. 120-NFPA 25-2021 [Section No. 5.3.1.1.1.2]

5.3.1.1.1.2

Sprinklers manufactured prior to 1920 shall be replaced in accordance with section 5.4.

Statement of Problem and Substantiation for Public Comment

Current requirement for straight up replacement of sprinklers manufactured prior to 1920 is in "testing" section, but should be in "maintenance" section 5.4. PC directs user to appropriate section.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 121-NFPA 25-2021 [New Section after 5.4.1]	

Related Item

- FR-51

Submitter Information Verification

Submitter Full Name: Cary Webber

Organization: Reliable Automatic Sprinkler

Street Address:

City:

State:

Zip:

Submittal Date: Mon May 10 08:54:41 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-8-NFPA 25-2021

Statement: Changes made to provide consistency in the testing requirements. Most changes were editorial with the exception of new 5.3.1.3.2 which is needed to clarify that sprinklers that are being retested must not be the ones previously replaced.



Public Comment No. 56-NFPA 25-2021 [Section No. 5.3.1.1.1.2]

5.3.1.1.1.2 –

~~Sprinklers manufactured prior to 1920 shall be replaced.~~

Statement of Problem and Substantiation for Public Comment

This requirement is a maintenance activity and should be located in section 5.4. It is included in a list of sprinklers requiring replacement (See PC-55)

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 55-NFPA 25-2021 [Section No. 5.4.1.1]	Relocating requirements of current section
<u>Related Item</u>	
• FR-51	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 15:56:56 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-8-NFPA 25-2021
Statement: Changes made to provide consistency in the testing requirements. Most changes were editorial with the exception of new 5.3.1.3.2 which is needed to clarify that sprinklers that are being retested must not be the ones previously replaced.



Public Comment No. 53-NFPA 25-2021 [Section No. 5.3.1.1.1.3]

5.3.1.1.1.3*

Where sprinklers manufactured using fast-response elements have been installed for 25 years , one of the following shall occur, except as permitted in 5.3.1.1.1.4:

- (1) The sprinklers shall be replaced.
- (2) Representative samples from one or more sample areas of the sprinklers shall be tested ~~and then retested~~ .

5.3.1.1.1.3.1 _

Test procedures shall be repeated every 10 years. _

Statement of Problem and Substantiation for Public Comment

The requirements of this section should mirror the language in 5.3.1.1.1 and 5.3.1.1.1.1 for consistency.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 60-NFPA 25-2021 [Section No. 5.3.1.1]	
<u>Related Item</u>	
• FR-51	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 15:44:31 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-8-NFPA 25-2021
Statement: Changes made to provide consistency in the testing requirements. Most changes were editorial with the exception of new 5.3.1.3.2 which is needed to clarify that sprinklers that are being retested must not be the ones previously replaced.



Public Comment No. 119-NFPA 25-2021 [Sections

5.3.1.1.1.5, 5.3.1.1.1.6, 5.3.1.1.1.7]

Sections 5.3.1.1.1.5, 5.3.1.1.1.6, 5.3.1.1.1.7

5.3.1.1.1.5*

~~Representative samples of~~ Where solder-type sprinklers with a temperature classification of extra high [325°F (163°C) or greater] that are exposed to semi-continuous to continuous maximum allowable ambient temperature conditions have been installed for 5 years one of the following shall occur:

(1) The sprinklers shall be tested at 5-year intervals.
replaced.

(2) Representative samples from the sprinklers shall be tested and then retested every 5 years.

.

5.3.1.1.1.6

~~Where sprinklers have been installed for 75 years, they shall be replaced or representative samples from one or more sample areas shall be submitted to a recognized testing laboratory acceptable to the authority having jurisdiction for field service testing and repeated at 5-year intervals. one of the following shall occur:~~

(1) The sprinklers shall be replaced.

(2) Representative samples from the sprinklers shall be tested and then retested every 5 years.

.

5.3.1.1.1.7

~~Dry~~ Where dry sprinklers that have been installed for 20 years (See 3.3.44.4.) one of the following shall be replaced or representative samples occur:

(1) The sprinklers shall be replaced.

(2) Representative samples from the sprinklers shall be tested and then retested at every 10

-year intervals. (See 3.3.44.4.)
years.

Statement of Problem and Substantiation for Public Comment

In conjunction with the new format for the text of 5.3.1.1.1, 5.3.1.1.1.3 and 5.3.1.1.1.4, the text of Sections 5.3.1.1.1.5 through 5.3.1.1.1.7 should be revised to match.

Additionally, Table 5.1.1.2 needs to be revised to incorporate a reference to the new 5.3.1.1.1.4 and the associated renumbering of the following provisions.

Related Item

- FR-51

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Sat May 08 21:18:24 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-8-NFPA 25-2021](#)

Statement: Changes made to provide consistency in the testing requirements. Most changes were editorial with the exception of new 5.3.1.3.2 which is needed to clarify that sprinklers that are being retested must not be the ones previously replaced.



Public Comment No. 112-NFPA 25-2021 [Section No. 5.3.3]

5.3.3 Waterflow Alarm and Supervisory Signal _ Initiating _ Devices.

Waterflow alarm and supervisory signal _ initiating _ devices shall be tested in accordance with Chapter 13.

Statement of Problem and Substantiation for Public Comment

In conjunction with the revisions to FR-43/Section 5.2.4, the title and the contents of Section 5.3.3 should be revised to also reference the testing of supervisory signal initiating devices in accordance with Chapter 13.

Related Item

• FR-147 • FR-43

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Sat May 08 20:50:51 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-10-NFPA 25-2021

Statement: Provides consistency with 5.2.4.



Public Comment No. 141-NFPA 25-2021 [Section No. 5.3.4.4]

5.3.4.4

Except as permitted by 5.3.4.4.2 ~~through~~ 1 through 5.3.4.4.4 3 , all antifreeze systems shall utilize listed antifreeze solutions.

5.3.4.4.1*

Where used to replace nonlisted antifreeze solutions, listed antifreeze solutions shall be permitted to be used outside their listing limitations, provided the temperature range limitations are not exceeded.

5.3.4.4.2

~~An existing antifreeze solution shall be permitted to remain or be refilled in a system, provided the following conditions exist:~~

- ~~(1)* The concentration of the factory premixed antifreeze solution shall be limited to 30 percent propylene glycol by volume or 38 percent glycerine by volume.~~
- ~~(2)* Where a system requires freeze protection below the minimum use temperature of any listed solution, factory premixed glycerine antifreeze solutions with concentrations of less than 50 percent by volume shall be permitted based upon an approved deterministic risk assessment prepared by a qualified person and approved by the authority having jurisdiction.~~

5.3.4.4.3 –

Newly introduced solutions shall be factory premixed antifreeze solutions (i.e., chemically pure or USP 96.5 percent).

5.3.4.4.4 3

Premixed antifreeze solutions of propylene glycol exceeding 30 percent concentration by volume shall be permitted for use with ESFR sprinklers, provided the ESFR sprinklers are listed for such use in a specific application.

Statement of Problem and Substantiation for Public Comment

This public comment removes the ability to retain legacy (glycerin or propylene glycol) antifreeze in existing fire sprinkler systems in NFPA 25. NFPA 25 needs to have clear language to update existing systems with listed antifreeze solutions. Allowing legacy antifreeze to remain in service will defeat the purpose of requiring a sunset date set in previous editions. The NFPA Standards Council, NFPA technical committees, contractors, AHJs, laboratories, and manufacturers have made a significant investment for listed antifreeze to be the sole product used in new and existing fire sprinkler systems after September 30, 2022.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 142-NFPA 25-2021 [Section No. A.5.3.4.4.2(1)]	
Public Comment No. 143-NFPA 25-2021 [Section No. A.5.3.4.4.2(2)]	
Public Comment No. 142-NFPA 25-2021 [Section No. A.5.3.4.4.2(1)]	
Public Comment No. 143-NFPA 25-2021 [Section No. A.5.3.4.4.2(2)]	

Related Item

• PI 223

Submitter Information Verification

Submitter Full Name: Jeffrey Hugo
Organization: National Fire Sprinkler Associ
Affiliation: On behalf of NFSA's Engineering and Standards (E&S) Committee
Street Address:
City:
State:
Zip:
Submission Date: Tue May 11 12:53:47 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-11-NFPA 25-2021](#)

Statement: The lower concentration levels of 38% glycerine and 30% propylene glycol can remain in existing systems as long as they provide the needed freeze protection. The risks associated with higher concentration levels of the legacy solutions warrant replacement with a listed antifreeze solution. All allowances to replace existing glycerine and propylene glycol solutions with new glycerine and propylene glycol solutions have been removed. The allowance to perform a deterministic risk assessment to allow legacy solutions to be used as a replacement solution has been removed. Annex text has been updated and a new annex section is created to provide data related to the FPRF testing of the legacy solutions.



Public Comment No. 121-NFPA 25-2021 [New Section after 5.4.1]

TITLE OF NEW CONTENT

5.4.1..1 Sprinklers manufactured prior to 1920 shall be replaced.

Statement of Problem and Substantiation for Public Comment

Current location of this requirement in section 5.3 for testing appears incorrect. This 'hard and fast' rule should be in 5.4 maintenance.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 120-NFPA 25-2021 [Section No. 5.3.1.1.1.2]	
<u>Related Item</u>	
• FR-51	

Submitter Information Verification

Submitter Full Name: Cary Webber
Organization: Reliable Automatic Sprinkler
Street Address:
City:
State:
Zip:
Submittal Date: Mon May 10 08:58:52 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-12-NFPA 25-2021
Statement: This consolidates all of the instances when sprinklers must be replaced into one section. In addition, the requirement to replaced sprinklers manufactured before 1920 was moved to this section because it's a maintenance activity. The AHJ needs to be consulted to determine which sprinklers need to be replaced after a fire.



Public Comment No. 98-NFPA 25-2021 [Section No. 5.4.1]

5.4.1 Sprinklers.

5.4.1.1* ~~Sprinklers Replaced After Fire.~~

~~All sprinklers affected by a fire shall be replaced.~~

5.4.1.2 * –

Where a threaded sprinkler has been removed from a fitting or welded outlet for any reason, the sprinkler shall not be reinstalled.

5.4.1.2 1.1

Dry sprinklers shall be permitted to be reinstalled when removed in accordance with the manufacturer's installation and maintenance instructions.

5.4.1.2 1.2

A sprinkler shall be permitted to be reinstalled where the sprinkler being removed remains attached to the original fitting or welded outlet or can be removed by a grooved connection, provided that care is taken to ensure the sprinkler is not damaged.

–

5.4.1.2 * – Sprinklers Replaced After Fire.

All sprinklers affected by a fire shall be replaced.

5.4.1.3*

Replacement sprinklers shall have the proper characteristics for the application intended, which include the following:

- (1) Style
- (2) Orifice size and K-factor
- (3) Temperature rating
- (4) Coating, if any
- (5) Deflector type (e.g., upright, pendent, sidewall)
- (6) Design requirements

5.4.1.3.1*

Spray sprinklers shall be permitted to replace old-style sprinklers.

5.4.1.3.2*

Where replacing residential sprinklers manufactured prior to 2003 that are no longer available from the manufacturer and are installed using a design density less than 0.05 gpm/ft^2 (204 mm/min), a residential sprinkler with an equivalent K-factor (± 5 percent) shall be permitted to be used provided the currently listed coverage area for the replacement sprinkler is not exceeded.

5.4.1.3.3

Replacement sprinklers for piers and wharves shall comply with NFPA 307.

5.4.1.4

Only new, listed sprinklers shall be used to replace existing sprinklers.

5.4.1.5*

Special and quick-response sprinklers as defined by NFPA 13 shall be replaced with sprinklers of the same orifice, size, temperature range and thermal response characteristics, and K-factor.

5.4.1.6*

A supply of at least six spare sprinklers shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

5.4.1.6.1

The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

5.4.1.6.2

The stock of spare sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed the maximum ceiling temperatures specified in Table 5.4.1.6.2 for each of the sprinklers within the cabinet.

Table 5.4.1.6.2 Temperature Ratings, Classifications, and Color Codings

<u>Maximum Ceiling Temperature</u>		<u>Temperature Rating</u>		<u>Temperature Classification</u>	<u>Color Code</u>	<u>Glass Bulb Colors</u>
<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>			
100	38	135–170	57–77	Ordinary	Uncolored or black	Orange or red
150	66	175–225	79–107	Intermediate	White	Yellow or green
225	107	250–300	121–149	High	Blue	Blue
300	149	325–375	163–191	Extra high	Red	Purple
375	191	400–475	204–246	Very extra high	Green	Black
475	246	500–575	260–302	Ultra high	Orange	Black
625	329	650	343	Ultra high	Orange	Black

[13:Table 7.2.4.1]

5.4.1.6.3

Where dry sprinklers of different lengths are installed, spare dry sprinklers shall not be required, provided that a means of returning the system to service is furnished.

5.4.1.6.4

The number of spare sprinklers in the cabinet shall be based on the number of sprinklers in the protected facility as follows:

- (1) For protected facilities having under 300 sprinklers — no fewer than 6 sprinklers
- (2) For protected facilities having 300 to 1000 sprinklers — no fewer than 12 sprinklers
- (3) For protected facilities having over 1000 sprinklers — no fewer than 24 sprinklers

5.4.1.6.5*

One sprinkler wrench as specified by the sprinkler manufacturer shall be provided in the cabinet for each type of sprinkler installed to be used for the removal and installation of sprinklers in the system.

5.4.1.6.6

A list of the sprinklers installed in the property shall be posted in the sprinkler cabinet.

5.4.1.6.6.1*

The list shall include the following:

- (1) Sprinkler identification number (SIN) if equipped; or the manufacturer, model, orifice, deflector type, thermal sensitivity, and pressure rating
- (2) General description
- (3) Quantity of each type to be contained in the cabinet
- (4) Issue or revision date of the list

5.4.1.7*

Sprinklers shall not be altered in any respect or have any type of ornamentation, paint, or coatings applied after shipment from the place of manufacture.

5.4.1.8

Sprinklers and automatic spray nozzles used for protecting commercial-type cooking equipment and ventilating systems shall be replaced annually.

5.4.1.8.1

Where automatic bulb-type sprinklers or spray nozzles are used and annual examination shows no buildup of grease or other material on the sprinklers or spray nozzles, such sprinklers and spray nozzles shall not be required to be replaced.

5.4.1.9

Electrically operated sprinklers shall be maintained in accordance with the manufacturer's requirements.

5.4.1.10 Protective Coverings.**5.4.1.10.1***

Sprinklers protecting spray areas and mixing rooms in resin application areas installed with protective coverings shall continue to be protected against overspray residue so that they will operate in the event of fire.

5.4.1.10.2

Sprinklers installed as described in 5.4.1.10.1 shall be protected using cellophane bags having a thickness of 0.003 in. (0.076 mm) or less or thin paper bags.

5.4.1.10.3

Coverings shall be replaced periodically so that heavy deposits of residue do not accumulate.

Statement of Problem and Substantiation for Public Comment

Under no circumstances should a sprinkler that was affected by a fire ever be reinstalled. However, as currently written in the First Draft, it seems to be suggesting that if a sprinkler is affected by fire, it can be reinstalled as long as it isn't directly removed from its fitting/welded outlet. By moving the proposed 5.4.1.1 to 5.4.1.2, the text flows better and the possibility of misinterpretation is removed.

Related Item

• FR-57 • FR-74

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 22:53:10 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-12-NFPA 25-2021](#)

Statement: This consolidates all of the instances when sprinklers must be replaced into one section. In addition, the requirement to replaced sprinklers manufactured before 1920 was moved to this section because it's a maintenance activity. The AHJ needs to be consulted to determine which sprinklers need to be replaced after a fire.



Public Comment No. 148-NFPA 25-2021 [New Section after 5.4.1.1]

Sprinklers manufactured prior to 1920 shall be replaced.

Statement of Problem and Substantiation for Public Comment

This requirement has always been in the testing section of sprinklers, but there isn't a test that can be performed. This is a maintenance requirement and should be moved to the maintenance section of chapter 5.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 146-NFPA 25-2021 [Section No. 5.3.1]	
<u>Related Item</u>	
• PI 270	

Submitter Information Verification

Submitter Full Name: Terry Victor
Organization: Johnson Controls
Street Address:
City:
State:
Zip:
Submittal Date: Tue May 11 13:46:25 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-12-NFPA 25-2021
Statement: This consolidates all of the instances when sprinklers must be replaced into one section. In addition, the requirement to replaced sprinklers manufactured before 1920 was moved to this section because it's a maintenance activity. The AHJ needs to be consulted to determine which sprinklers need to be replaced after a fire.



Public Comment No. 55-NFPA 25-2021 [Section No. 5.4.1.1]

5.4.1.1* Replacement Sprinklers- Replaced After Fire.

~~All sprinklers affected by a fire shall be replaced.~~

•

Sprinklers with any of the following qualifications shall be replaced:

- (1) Sprinklers manufactured prior to 1920
- (2) Sprinklers showing signs described in 5.2.1.1.1
- (3) Sprinklers with unsatisfactory performance when tested in accordance with 5.3.1
- (4) Sprinklers affected by a fire

Statement of Problem and Substantiation for Public Comment

Replacement of sprinklers is a maintenance activity and should be located in section 5.4.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 56-NFPA 25-2021 [Section No. 5.3.1.1.1.2]	
Public Comment No. 57-NFPA 25-2021 [Section No. 5.4.1.1]	

Related Item

- FR-74

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 15:54:02 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-12-NFPA 25-2021
Statement: This consolidates all of the instances when sprinklers must be replaced into one section. In addition, the requirement to replaced sprinklers manufactured before 1920 was moved to this section because it's a maintenance activity. The AHJ needs to be consulted to determine which sprinklers need to be replaced after a fire.



Public Comment No. 57-NFPA 25-2021 [Section No. 5.4.1.1]

5.4.1.1* Sprinklers Replaced After Fire.

All sprinklers within a compartment affected by a fire shall be replaced.

Statement of Problem and Substantiation for Public Comment

The word "affected" is too broad and baseline prescriptive requirements need to be provided.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 55-NFPA 25-2021 [Section No. 5.4.1.1]	
<u>Related Item</u>	
• FR-74	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 15:59:43 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: A compartment is too broad an area to require replacement of all sprinklers. The AHJ must be consulted to determine which sprinklers need to be replaced after a fire.



Public Comment No. 58-NFPA 25-2021 [Sections

5.4.1.2, 5.4.1.3, 5.4.1.4, 5.4.1.5, 5.4.1.6]

Sections 5.4.1.2, 5.4.1.3, 5.4.1.4, 5.4.1.5, 5.4.1.6

5.4.1.2*

Where a threaded sprinkler has been removed from a fitting or welded outlet for any reason, the sprinkler shall not be reinstalled.

5.4.1.2.1 –

Dry sprinklers shall be permitted to be reinstalled when removed in accordance with the manufacturer's installation and maintenance instructions.

5.4.1.2.2 –

A sprinkler shall be permitted to be reinstalled where the sprinkler being removed remains attached to the original fitting or welded outlet or can be removed by a grooved connection, provided that care is taken to ensure the sprinkler is not damaged.

5.4.1.3* –

Replacement sprinklers shall have the proper characteristics for the application intended, which include the following:

- (1) Style
- (2) Orifice size and K-factor
- (3) Temperature rating
- (4) Coating, if any
- (5) Deflector type (e.g., upright, pendent, sidewall)
- (6) Design requirements

5.4.1.3.1* –

Spray sprinklers shall be permitted to replace old-style sprinklers.

5.4.1.3.2* –

Where replacing residential sprinklers manufactured prior to 2003 that are no longer available from the manufacturer and are installed using a design density less than 0.05 gpm/ft^2 (204 mm/min), a residential sprinkler with an equivalent K-factor (± 5 percent) shall be permitted to be used provided the currently listed coverage area for the replacement sprinkler is not exceeded.

5.4.1.3.3 –

Replacement sprinklers for piers and wharves shall comply with NFPA 307.

5.4.1.4 –

Only new, listed sprinklers shall be used to replace existing sprinklers.

5.4.1.5* –

Special and quick-response sprinklers as defined by NFPA 13 shall be replaced with sprinklers of the same orifice, size, temperature range and thermal response characteristics, and K-factor.

5.4.1.6* –

A supply of at least six spare sprinklers shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

5.4.1.6.1 –

The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

5.4.1.6.2 –

The stock of spare sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed the maximum ceiling temperatures specified in Table 5.4.1.6.2 for each of the sprinklers within the cabinet.

Table 5.4.1.6.2 Temperature Ratings, Classifications, and Color Codings

Maximum Ceiling Temperature	Temperature Rating	Temperature Classification	Color
Code	Glass Bulb Colors	°F °C	°F °C
100	38	135–170	57–77 Ordinary Uncolored or black Orange or red
150	66	175–225	79–107 Intermediate White Yellow or green
225	107	250–300	121–149 High Blue Blue
300	149	325–375	163–191 Extra high Red Purple
375	191	400–475	204–246 Very extra high Green Black
475	246	500–575	260–302 Ultra high Orange Black
625	329	650	343 Ultra high Orange Black

[13: Table 7.2.4.1]

5.4.1.6.3 –

Where dry sprinklers of different lengths are installed, spare dry sprinklers shall not be required, provided that a means of returning the system to service is furnished.

5.4.1.6.4 –

The number of spare sprinklers in the cabinet shall be based on the number of sprinklers in the protected facility as follows:

- (1) For protected facilities having under 300 sprinklers — no fewer than 6 sprinklers
- (2) For protected facilities having 300 to 1000 sprinklers — no fewer than 12 sprinklers
- (3) For protected facilities having over 1000 sprinklers — no fewer than 24 sprinklers

5.4.1.6.5 * –

One sprinkler wrench as specified by the sprinkler manufacturer shall be provided in the cabinet for each type of sprinkler installed to be used for the removal and installation of sprinklers in the system.

5.4.1.6.6 –

A list of the sprinklers installed in the property shall be posted in the sprinkler cabinet.

5.4.1.6.6.1 * –

The list shall include the following:

- (1) Sprinkler identification number (SIN) if equipped; or the manufacturer, model, orifice, deflector type, thermal sensitivity, and pressure rating
- (2) General description
- (3) Quantity of each type to be contained in the cabinet
- (4) Issue or revision date of the list

When sprinklers are removed or replaced in accordance with this standard, new sprinklers shall be reinstalled in accordance with NFPA 13.

Statement of Problem and Substantiation for Public Comment

All of the requirements in this section are installation requirements that should be under the scope of jurisdiction of NFPA 13. These sections should be deleted and the user should be referred back to NFPA 13

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 59-NFPA 25-2021 [Section No. A.5.4.1.2]	
<u>Related Item</u>	
• FR-51	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 16:04:46 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: It's important to have this criteria in NFPA 25 so the users have all the information they need in front of them to replace sprinklers.



Public Comment No. 61-NFPA 25-2021 [New Section after 5.4.3]

5.4.3.1

Where conditions exist such that a wet pipe system cannot be reliably maintained above freezing, the system shall be drained and placed out of service.

Statement of Problem and Substantiation for Public Comment

Given the events that occurred in Dallas, TX earlier this year, there needs to be guidance in this standard to inform the owner that wet systems need to be drained and placed out of service with appropriate impairment measures taken until the building can be properly maintained at an appropriate temperature.

Related Item

- FR-59

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submission Date: Fri May 07 16:19:37 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: NFPA 25 should not advocate taking a system out of service because of potential freezing conditions. This is also new material.



Public Comment No. 72-NFPA 25-2021 [Section No. 6.1.1.2]

6.1.1.2

Table 6.1.1.2 shall be used to determine the minimum required frequencies for inspection, testing, and maintenance.

Table 6.1.1.2 Summary of Standpipe and Hose Systems Inspection, Testing, and Maintenance

<u>Item</u>	<u>-</u>	<u>Frequency</u>	<u>Reference</u>
Inspection			
Cabinet	-	Annually	6.2.8
Control valves	- -		Chapter 13
Gauges	- -		Chapter 13
Hose	-	Annually	6.2.5
Hose connection	-	Annually	6.2.3
Hose nozzle	-	Annually and after each use	6.2.6
Hose storage device	-	Annually	6.2.7
Hydraulic design information sign	-	Annually	6.2.2
Hose valves	- -		Chapter 13
-	- -	-	
Piping	-	Annually	6.2.4
Pressure-regulating devices	- -		Chapter 13
Supervisory devices (except valve supervisory devices)	- -		Chapter 13
Valve supervisory devices	- -		Chapter 13
Test			
Control valves	- -		Chapter 13
System valves	- -		Chapter 13
Flow test	-	5 years	6.3.1
Hose	- -		NFPA 1962
Hose connection pressure regulating devices	- -		Chapter 13
Hose valves	- -		Chapter 13
Hydrostatic test	- <u>(manual dry and semiautomatic dry standpipes)</u>	5 years	6.3.2
Main drain test	- -		Chapter 13
Pressure control valve	- -		Chapter 13
Pressure-reducing valve	- -		Chapter 13
Supervisory signal devices (except valve supervisory switches)	- -		Chapter 13
Valve status test	- -		Chapter 13
Valve supervisory devices	- -		Chapter 13
Waterflow alarm devices	- -		Chapter 13
Maintenance			
Hose valves	- -		Chapter 13

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
Pressure gauges	-	Chapter 13
Valves (all types)	Annually/as needed	Chapter 13

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
NFPA_25_TG_3_-_PC_Changes_to_Table_6.1.1.2.docx	Change proposed by NFPA 25 Task Group 3.	

Statement of Problem and Substantiation for Public Comment

Clarification is needed in the table to indicate that not all standpipes are required to be hydrostatically tested every five years. This PC is being submitted on behalf of the NFPA 25 Task Group 3.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 78-NFPA 25-2021 [Section No. 5.1.1.2]	Updated table from Task Group 3.
Public Comment No. 122-NFPA 25-2021 [Section No. 7.1.1.2]	

Related Item

- First Revision 66

Submitter Information Verification

Submitter Full Name: Terry Victor
Organization: Johnson Controls
Affiliation: NFPA 25 Task Group 3
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 17:00:19 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-14-NFPA 25-2021
Statement: Changes to the table were accepted with a modification to change the hydrostatic test for manual standpipes from applying to only manual dry standpipes to applying to all manual standpipes. There is an exception for manual wet standpipes when sprinkler systems are fed from them, but the user will see that when they review the actual text of the requirement.



Public Comment No. 113-NFPA 25-2021 [Section No. 6.3.2.2.1]

6.3.2.2.1*

The ~~inside~~ standpipe piping shall show no visible signs of leakage.

Statement of Problem and Substantiation for Public Comment

While I realize that the text has been in the standard for a long period of time, I suggest that the proposed Section 6.3.2.2.1 be further revised to delete the term "inside", so that the wording will just say "The standpipe piping shall show no visible signs of leakage.". The definition of a standpipe system is "An arrangement of piping, ... installed in a building or structure, ..." so in 6.3.2.2.1 the reference to "inside is not only redundant, but also a bit confusing.

Related Item

- FR-66

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Sat May 08 20:58:03 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-15-NFPA 25-2021

Statement: Visible leakage could occur in part of the standpipe system that isn't inside the building and should be corrected.



Public Comment No. 122-NFPA 25-2021 [Section No. 7.1.1.2]

7.1.1.2

Table 7.1.1.2 shall be used to determine the minimum required frequencies for inspection, testing, and maintenance.

Table 7.1.1.2 Summary of Private Fire Service Main Inspection, Testing, and Maintenance

<u>Item</u>	<u>-</u>	<u>Frequency</u>	<u>Reference</u>
Inspection			
Backflow preventer	- -		Chapter 13
Check valve	- -		Chapter 13
Control valve	- -		Chapter 13
Fire department connection	- -		Chapter 13
Hose houses	-	Quarterly	7.2.2.8
Hydrants (dry barrel and wall)	-	Annually and after each operation	7.2.2.4
Hydrants (wet barrel)	<u>Annually and after each operation</u>	<u>7.2.2.5</u>	
-		<u>7.2.2.6, 7.2.2.6.3</u>	
Hydrants (dry)	<u>Quarterly, Annually</u>		
Mainline strainers	-	Annually and after each significant flow	7.2.2.3
Monitor nozzles	-	Semiannually	7.2.2.7
Pipe and fittings (exposed)	-	Annually	7.2.2.1
-	- -	-	
Valve supervisory devices	- -		Chapter 13
Test			
Backflow preventer	- -		Chapter 13
Control valve	- -		Chapter 13
Hydrants (flow test)	- <u>Annually</u>	<u>Flow, annually</u>	<u>7.3.2, 7.2.2.6.5</u>
Monitor nozzles	- <u>Flow, annually (range and (flow test, range, operation)</u>		<u>Annually</u> 7.3.3
Piping (exposed and underground) (flow test)	-	5 years	7.3.1
Valve status test	- -		Chapter 13
Valve supervisory devices	- -		Chapter 13
Maintenance			
Backflow preventer	- -		Chapter 13
Check valve	- -		Chapter 13
Control valve	- -		Chapter 13
-	- -	-	
Hydrants	- <u>Dry hydrant (water supply, clearance)</u>		<u>Quarterly</u> <u>7.2.2.6.1, 7.2.2.6.2</u>
Hydrants	<u>Annually</u>	<u>7.4.2</u>	

<u>Item</u>		<u>Frequency</u>	<u>Reference</u>
Mainline strainers	-	Annually and after each operation	7.2.2.3
Monitor nozzles	-	Annually	7.4.3

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
NFPA_25_TG_3_-_PC_Changes_to_Table_7.1.1.2.docx	Changes from NFPA 25 Task Group 3	

Statement of Problem and Substantiation for Public Comment

Table 7.1.1.2 needs to be updated with first revisions and with proposed second revisions. These changes are submitted on behalf of NFPA 25 task group 3.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 78-NFPA 25-2021 [Section No. 5.1.1.2]	
Public Comment No. 72-NFPA 25-2021 [Section No. 6.1.1.2]	

Related Item

- First Revision 150

Submitter Information Verification

Submitter Full Name: Terry Victor
Organization: Johnson Controls
Affiliation: NFPA 25 Task Group 3.
Street Address:
City:
State:
Zip:
Submittal Date: Mon May 10 10:34:46 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-16-NFPA 25-2021
Statement: Changes made during the first revision were incorporated into Table 7.1.1.2.



Public Comment No. 84-NFPA 25-2021 [Section No. 7.3.1.1]

7.3.1.1

Any flow test results that indicate deterioration of available water flow ~~and~~ or pressure shall be investigated to the complete satisfaction of the authority having jurisdiction to ensure that the required flow and pressure are available for fire protection.

Statement of Problem and Substantiation for Public Comment

If either the flow or pressure are not capable of supplying the fire protection system, the water supply is inadequate.

Related Item

- FR-67

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:23:16 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-17-NFPA 25-2021

Statement: If flow or pressure are not capable of supplying the fire protection system an investigation is needed.



Public Comment No. 11-NFPA 25-2021 [Section No. 8.1.1.2 [Excluding any Sub-Sections]]

The minimum frequency of inspection, testing, and maintenance shall be in accordance with the manufacturer's recommendations and Table 8.1.1.2.

Table 8.1.1.2 Summary of Fire Pump Inspection, Testing, and Maintenance

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
Inspection	-	-
Alignment	Annually	8.3.6.4
Cable/wire insulation	Annually	8.1.1.2.5
Diesel engine system	Weekly	8.2.2(4)
Electric system	Weekly	8.2.2(3)
Engine crankcase breather	Quarterly	8.1.1.2.12
Exhaust system, drain condensate trap, and silencers	Annually	8.1.1.2.13
Flexible hoses and connections	Annually	8.1.1.2.11
Fuel tank vents and overflow	Annually	8.1.1.2.10
Plumbing parts — inside and outside of panels	Annually	8.1.1.2.6
Printed circuit board (PCB) corrosion	Annually	8.1.1.2.4
Pump	Weekly	8.2.2(2)
Pump house/room	Weekly	8.2.2(1)
Shaft movement or endplay while running	Annually	8.1.1.2.1
Steam pump system	Weekly	8.2.2(5)
Suction screens	Annually	8.3.3.15
Test	-	-
Automatic transfer switch	Annually	8.3.3.6, 12.2
Automatic transfer switch and emergency/standby generators	Per NFPA 110	8.3.6.1, 8.3.6.2
Diesel engine-driven fire pump (no flow)	Weekly	8.3.1.1
Diesel fuel testing	Annually	8.3.4.1
Electric motor-driven fire pump (no flow)	Weekly/monthly	8.3.1.2
Electronic control module (ECM)	Annually	8.3.3.16
Fire pump alarm signals	Annually	8.3.3.13
Flow meters	Annually	8.3.3.5.3
Fuel tank, float switch, and supervisory signal for interstitial space	Quarterly	8.1.1.2.7
Gauges, transducers, and other devices used for testing	Annually	8.3.3.5.2
Main pressure relief valve	Annually	8.3.3.14, 12, 13.5.6.2.3
-	-	-
Pump house/room environmental conditions	-	8.3.6.3
Pump operation (no flow)	Weekly/monthly	8.3.2, 8.3.5
Pump performance (flow)	Annually	8.3.3, 8.3.5
Supervisory signal for high cooling water temperature	Annually	8.1.1.2.8
-	-	-
Maintenance	-	-
Batteries	Annually	8.1.1.2.15

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
Circulating water filter	Annually	8.1.1.2.21
Control and power wiring connections	Annually	8.1.1.2.16
Controller and all other components of the pump assembly	Per manufacturer	8.5
Diesel active fuel maintenance system	Annually or per manufacturer	8.3.4.3
-	-	-
Diesel engine system	Per manufacturer	8.5
Electric motor and power system	Per manufacturer	8.5
Electrical connections	Annually	8.1.1.2.2
Engine lubricating oil	50 operating hours or annually	8.1.1.2.17
Engine oil filter	50 operating hours or annually	8.1.1.2.18
Fuel filter	50 operating hours or annually	8.1.1.2.19
Fuel tank — check for water and foreign materials	Annually	8.1.1.2.9
Measure back pressure on engine turbo	Annually	8.1.1.2.14
Power transmission components with elastomeric materials (including torsional couplings)	5 years or per manufacturer	8.1.1.2.23
Pressure gauges and sensors	Annually	8.1.1.2.22
Pump and motor bearings and coupling	Annually or as required	8.1.1.2.3
<u>Sacrificial anode</u>	Annually	8.1.1.2.20

Statement of Problem and Substantiation for Public Comment

Table correction based TG 5 review.

Related Item

- Table correction

Submitter Information Verification

Submitter Full Name: Bruce Clarke

Organization: American International Group,

Street Address:

City:

State:

Zip:

Submittal Date: Tue Apr 20 16:25:33 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-71-NFPA 25-2021](#)

Statement: The table references have been updated to align with the requirements.



Public Comment No. 89-NFPA 25-2021 [Section No. 8.1.1.2.19]

8.1.1.2.19

Fuel filters shall be ~~changed at least annually and more frequently where necessary.~~ changed annually.

8.1.1.2.19.1

When necessary, fuel filters shall be changed more frequently in accordance with the manufacturer's recommendations

Statement of Problem and Substantiation for Public Comment

The intent of the current language was unclear. A subsection is added to state that fuel filters may need to be replaced more frequently in accordance with the manufacturer's recommendations.

Related Item

- FR-71

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 18:16:24 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-57-NFPA 25-2021

Statement: The number was changed to comply with the manual of style. Editorial changes were made to clarify that the fuel filter must be changed once per year and only changed more frequently if recommended by the manufacturer.



Public Comment No. 90-NFPA 25-2021 [Section No. 8.3.2.1.1.2]

8.3.2.1.1.2*

The circulation relief valve shall not operate when the flow through the main pressure relief valve is greater than weeping.

Statement of Problem and Substantiation for Public Comment

As written, this whole section is confusing. No proposed language at this time.

Related Item

- FR-73

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 18:23:26 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: No proposed language and explanation of confusion, was not clear enough to address.



Public Comment No. 114-NFPA 25-2021 [Section No. 8.3.2.10.4]

8.3.2.10.4

A qualified person(s) shall be able to respond to the pump location upon abnormal condition within ~~8 hours~~ 5 minutes .

Statement of Problem and Substantiation for Public Comment

Eight hours is not a 'reasonable' time frame to respond to an abnormal condition that could adversely affect the operation of a fire pump. For example, if a pump is overheating the response time must be in minutes, not hours.

It must be realized that for a weekly/monthly no-flow test with an automatic timer, a qualified person must still be present during the test. Why therefore can other tests allow an 8-hour interval for a qualified person's response.

Related Item

- FR-78

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Sat May 08 21:00:24 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-58-NFPA 25-2021

Statement: Allowing an 8 hour response time for an abnormal fire pump condition is too long as this could lead to an impaired fire protection system. Lowering to 4 hours will raise the priority and is ample time for a response.



Public Comment No. 132-NFPA 25-2021 [Section No. 8.3.2.10.4]

8.3.2.10.4

A ~~qualified person(s) shall~~ Qualified personnel shall be able to respond to the pump location upon abnormal condition within 8 hours.

Statement of Problem and Substantiation for Public Comment

See substantiation for PC 127

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]	
<u>Related Item</u>	
• FR-78	

Submitter Information Verification

Submitter Full Name: Joe Scibetta
Organization: BuildingReports
Street Address:
City:
State:
Zip:
Submittal Date: Mon May 10 16:19:01 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-24-NFPA 25-2021
Statement: Personnel can be both singular and plural. It better aligns with how the term is used throughout the standard.



Public Comment No. 17-NFPA 25-2021 [Section No. 8.3.2.10.4]

8.3.2.10.4

A qualified person(s) shall be able- notified promptly to respond to the pump location upon abnormal condition- ~~within 8 hours~~ .

Statement of Problem and Substantiation for Public Comment

The reasoning by the committee for accepting this time frame so as not to "have to eliminate a time frame requirement completely from this section" should not be acceptable. Changing the time frame from 5 minutes to 8 hrs. should also be an unacceptable change. Also making this change to quantify or justify the reasoning behind remote testing and stating that this is acceptable to allow a "remote monitoring company" to "notify appropriate parties so that corrective action can be taken within a reasonable time frame" we are stating that in no instance is there anything that can occur during a test that would require a response quicker than 8 hrs. I'm sure that that is not the intent.

If a specific time frame cannot be agreed on then just maybe the requirement should be to notify a responsible party "immediately or promptly" and allow the exact time frame for the response up to the owner and or AHJ for specific incidents or occurrences.

Related Item

- FR 78

Submitter Information Verification

Submitter Full Name: David Baron

Organization: Global Fire Protection Company

Street Address:

City:

State:

Zip:

Submittal Date: Fri Apr 30 11:44:10 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-58-NFPA 25-2021

Statement: Allowing an 8 hour response time for an abnormal fire pump condition is too long as this could lead to an impaired fire protection system. Lowering to 4 hours will raise the priority and is ample time for a response.



Public Comment No. 23-NFPA 25-2021 [Section No. 8.3.2.10.4]

8.3.2.10.4

A qualified person(s) shall be able to respond to the pump location upon abnormal condition within 8- 4 hours.

Statement of Problem and Substantiation for Public Comment

Allowing an 8 hour response time for an abnormal fire pump condition is too long as this could lead to an impaired fire protection system. Lowering to 4 hours will raise the priority and is ample time for a response. Review the 4 negative comments regarding the 8 hour response time in the public input stage.

Related Item

- FR-78

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 04 10:19:57 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-58-NFPA 25-2021](#)

Statement: Allowing an 8 hour response time for an abnormal fire pump condition is too long as this could lead to an impaired fire protection system. Lowering to 4 hours will raise the priority and is ample time for a response.



Public Comment No. 91-NFPA 25-2021 [Section No. 8.3.2.10.4]

8.3.2.10.4

A qualified person(s) shall be able to respond to the pump location upon abnormal condition within ~~8 hours~~ 5 min .

Statement of Problem and Substantiation for Public Comment

Increasing the allowed response time by 9,500 percent seems unwarranted without a more technical explanation. The technical committee's statement provided no technical reason or justification to support the large increase in the time allowance was given, just the word "reasonable."

Related Item

- FR-78

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 18:25:14 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-58-NFPA 25-2021

Statement: Allowing an 8 hour response time for an abnormal fire pump condition is too long as this could lead to an impaired fire protection system. Lowering to 4 hours will raise the priority and is ample time for a response.



Public Comment No. 85-NFPA 25-2021 [Section No. 8.3.4.1.1]

8.3.4.1.1*

Fuel degradation testing shall include, at a minimum, fuel quality testing for stored fuel as specified in ASTM D975, *Standard Specification for Diesel Fuel*, - or ASTM D6751, *Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels*, depending on the fuel type, as as approved by the engine manufacturer.

Statement of Problem and Substantiation for Public Comment

Biodeisel is not recommended by the NFPA 20 technical committee and is not appropriate to be referenced in the body of this standard.

Related Item

- FR-81

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:27:51 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: ASTM D6751 is an appropriate test if biodiesel is approved for use.



Public Comment No. 124-NFPA 25-2021 [New Section after 8.3.5.7]

8.3.5.8 Annual Activation Test for Water Mist Positive Displacement Pumping Units

8.3.5.8.1 Annually, an automatic activation test for systems shall be conducted using a test connection that simulates the smallest system nozzle in the hydraulically most remote area discharged at system maintenance pressure/standby pressure.

8.3.5.8.2 The pumping unit shall achieve the system design discharge pressure within the time specified in the listing but not greater than 60 seconds after the start of flow from the smallest nozzle.

Statement of Problem and Substantiation for Public Comment

As Chair of the NFPA 750 Technical Committee, I am submitting a Public Comment on behalf of the NFPA 750 Technical Committee. The Public Comment being submitted is for the revision to add Section 8.3.5.8, Annual Activation Test for Water Mist Positive Displacement Pumping Units as documented in Committee Input 118. The attached Public Comment passed ballot with the majority stated in NFPA regulations.

Our substantiation is based upon a NFPA 750 Task Group with consensus from the NFPA 750 Technical Committee worked with the NFPA 20 Technical Committee, Installation of Stationary Pumps for Fire Protection in developing the performance and maintenance requirements for positive displacement pumps. Those requirements have been balloted for inclusion in NFPA 20, 2022 edition as identified in Section 8.4.9 (SR-13), Section 14.2.6.6.11.1 and 14.2.6.6.11.2 (SR-36). The testing requirements stated in the NFPA 25 Committee input No. 118 are consistent with those developed by NFPA 750 and NFPA 20 Technical Committees and reflect the best practices for ensuring proper operation of positive displacement pump units.

Please be advised though based upon feedback received during the ballot period from the NFPA 750 Technical Committee possible language will be discussed with the Technical Committee to provide further clarity to the requirement. Unfortunately due to the deadline for this submission there was insufficient time to address this matter. A communication with any action to be taken from those discussions will be transmitted to the Chair of the NFPA 25 Technical Committee as deemed appropriate.

Related Item

- CI-118

Submitter Information Verification

Submitter Full Name: Robert Kasiski

Organization: FM Global

Affiliation: NFPA 750 Technical Committee - Chair

Street Address:

City:

State:

Zip:

Submittal Date: Mon May 10 13:18:37 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-60-NFPA 25-2021](#)

Statement: These testing requirements are consistent with those developed by NFPA 750 and NFPA 20 Technical Committees and reflect the best practices for ensuring proper operation of positive displacement pump units. The 60 second requirement follows NFPA 20 and the frequency needs to be specified in the standard.



Public Comment No. 43-NFPA 25-2021 [New Section after 8.3.5.7]

8.3.5.8 Annual Activation Test for Water Mist Positive Displacement Pumping Units

8.3.5.8.1

Annually, on a Automatic activation test shall be conducted using a test connection that simulates the smallest system nozzle in the hydraulically most remote area or the smallest system nozzle on the system, which ever represents the greatest demand, discharged at system maintenance pressure/standby pressure. Testing shall occur after all system modifications and as required by the AHJ.

8.3.5.8.2

The pumping unit shall achieve the system design discharge pressure within the time specified in the listing but not greater than 60 seconds after the start of flow from the smallest nozzle.

Statement of Problem and Substantiation for Public Comment

This should not be included in this standard as performing this test on an annual basis is not necessary since the pump is already required to operate during the forward flow test that is annually required by section 8.3.5.1. Additionally, the required inspection, testing, and maintenance for other system components, i.e. valves and water flow devices, are still applicable and are covered by this code.

The only NFPA standard which requires this type of testing is NFPA 13, specifically sections 25.2.3.1 & 25.2.3.2, which require the activation of system water flow devices by flowing water through the inspector's test connection. However, these sections are only applicable to newly installed or modified systems. As such, the language of the proposed requirement should be modified as indicated above so that this type of testing is only required on newly installed or modified systems and/or as required by the AHJ.

Regarding the activation of the pump and the need to achieve system design pressure within 60 seconds, this is above and beyond what is required for other fire protection pumps and does not provide any additional validation that the pump would operate as designed.

Related Item

- Modification to Committee Input No. 118

Submitter Information Verification

Submitter Full Name: Dennis Sullivan

Organization: UTC/Marioff North America

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 14:08:41 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Rejected but see related SR

Action:

Resolution: [SR-60-NFPA 25-2021](#)

Statement: These testing requirements are consistent with those developed by NFPA 750 and NFPA 20 Technical Committees and reflect the best practices for ensuring proper operation of positive displacement pump units. The 60 second requirement follows NFPA 20 and the frequency needs to be specified in the standard.



Public Comment No. 86-NFPA 25-2021 [Section No. 8.3.7.1.1.1]

8.3.7.1.1.1

The interpretation of the gross flow test performance relative to acceptably meeting the demands of all connected fire protection systems shall be the basis for determining acceptable performance of the ~~pump assembly~~ water supply .

Statement of Problem and Substantiation for Public Comment

If fire pump can pass the net performance measures but fail the gross performance measures, that is an issue with the water supply -- not the fire pump.

Related Item

- FR-83

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 17:30:59 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-61-NFPA 25-2021

Statement: The gross flow test performance is an indicator of the pump and connected water supply.



Public Comment No. 133-NFPA 25-2021 [Section No. 8.3.7.1.2]

8.3.7.1.2

A ~~qualified person(s) shall~~ Qualified personnel shall interpret the test results.

Statement of Problem and Substantiation for Public Comment

See substantiation for PC 127

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]	
<u>Related Item</u>	
• FR-84	

Submitter Information Verification

Submitter Full Name: Joe Scibetta
Organization: BuildingReports
Street Address:
City:
State:
Zip:
Submittal Date: Mon May 10 16:20:33 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-24-NFPA 25-2021
Statement: Personnel can be both singular and plural. It better aligns with how the term is used throughout the standard.



Public Comment No. 152-NFPA 25-2021 [Section No. 11.1.1.1]

11.1.1.1*

This chapter shall provide the minimum requirements for the routine inspection, testing, and maintenance of foam systems installed in accordance with NFPA 44- 11 and NFPA 46- ~~or~~ other approved installation ~~standard~~ standards .

Statement of Problem and Substantiation for Public Comment

NFPA 16 has been withdrawn and is now included in NFPA 11.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 15:49:01 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-62-NFPA 25-2021

Statement: NFPA 16 has been withdrawn and is now included in NFPA 11. Annex text has been added to address legacy systems installed under NFPA 16.



Public Comment No. 158-NFPA 25-2021 [Section No. 11.1.1.3]

11.1.1.3 * –

~~An inspection, testing, and maintenance service program shall be implemented.~~

Statement of Problem and Substantiation for Public Comment

This section is more appropriately located in NFPA 11.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 16:30:54 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-63-NFPA 25-2021](#)

Statement: This language was included as part of ITM requirements from NFPA 11 and is not necessary in NFPA 25. It should remain in NFPA 11.



Public Comment No. 157-NFPA 25-2021 [Section No. 11.1.1.4]

11.1.1.4*

Systems- Confirmation shall be so arranged that tests and inspections checking the operation of all mechanical and electrical system components can be made without discharging foam solution to the system piping provided that the system configuration is arranged in such a manner that any inadvertant discharge of foam solution into the system piping will not occur during inspection, testing, or maintenance .

Statement of Problem and Substantiation for Public Comment

Removes a design requirement that is more appropriately located in NFPA 11.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 16:19:22 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-64-NFPA 25-2021

Statement: Removes a design requirement that is more appropriately located in NFPA 11.



Public Comment No. 153-NFPA 25-2021 [Section No. 11.1.7]

11.1.7* System Changes.

If it is determined during routine inspection and testing that the system has been altered or replaced such that the foam concentrate and systems components are not compatible, the system shall be considered impaired.

Statement of Problem and Substantiation for Public Comment

Clarifies that foam concentrate and system components need to be compatible.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 15:58:54 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-65-NFPA 25-2021

Statement: Clarifies that foam concentrate and system components need to be compatible.



Public Comment No. 155-NFPA 25-2021 [Section No. 11.2.1]

11.2.1

Systems shall be inspected in accordance with the frequency specified by Table 11.1.1.2.

Statement of Problem and Substantiation for Public Comment

Verify references in Table 11.1.1.2 are correct to revised section.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 16:06:56 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-72-NFPA 25-2021](#)

Statement: The table references have been updated to align with the requirements.



Public Comment No. 160-NFPA 25-2021 [Section No. 11.2.2]

11.2.2

Where any of the ~~testing~~ inspection requirements in this section are found to be deficient, the results shall be documented, corrected, and retested in accordance with 11.1.5.

Statement of Problem and Substantiation for Public Comment

This section address inspection not testing.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 16:34:37 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-66-NFPA 25-2021

Statement: This section addresses inspection not testing.



Public Comment No. 161-NFPA 25-2021 [Section No. 11.2.4.2.5.10]

11.2.4.2.5.10 – Strainers.

~~Where equipped, strainers shall be inspected in accordance with 11.2.6 .~~

Statement of Problem and Substantiation for Public Comment

Strainers are already addressed in 11.2.6.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 16:39:04 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: This section is specific to strainers on pressure foam makers.



Public Comment No. 162-NFPA 25-2021 [Section No. 11.2.11.2.2]

11.2.11.2.2

Pressure tests of normally dry piping shall be conducted when ~~visual inspection indicates questionable strength due to~~ evidence of corrosion or mechanical damage is present .

Statement of Problem and Substantiation for Public Comment

The previous language was difficult to enforce.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 16:44:15 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-67-NFPA 25-2021

Statement: The previous language was difficult to enforce. NFPA 11 provides the pressure testing requirements. Language changed to remain consistent with other sections of NFPA 25.



Public Comment No. 156-NFPA 25-2021 [Section No. 11.2.11.7]

11.2.11.7

Aboveground foam system piping shall be examined to determine its condition and to verify proper drainage pitch is maintained.

Statement of Problem and Substantiation for Public Comment

Clarifies that piping is not subject to externally visible mechanical damage and can drain properly.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 16:12:09 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-68-NFPA 25-2021](#)

Statement: NFPA 25 does not require evaluation of pitching of pipe.



Public Comment No. 128-NFPA 25-2021 [Section No. 11.3.1.2]

11.3.1.2

Samples of foam concentrates shall be sent to the manufacturer or a ~~qualified~~ recognized testing laboratory for quality condition testing.

Statement of Problem and Substantiation for Public Comment

"Recognized testing laboratory" is a term used throughout NFPA 25. This is the only instance with references to labs in which the term "qualified" is used instead. This appears to have necessitated a tortuous attempt to address this one difference by changing the definition of "Qualified" to "Qualified Person" and then changing wording several times throughout the document to the incorrect grammatical phrase "a qualified person(s)", rather than simply changing this one instance of "qualified" to what is already being used multiple times throughout the standard with reference to labs.

This comment seeks to simplify all of this with a related comment to refine the term qualified and to eliminate this one instance where qualified applies to something other than a human carrying out a task.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]	
Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]	
<u>Related Item</u>	
• FR-143	

Submitter Information Verification

Submitter Full Name: Joe Scibetta
Organization: BuildingReports
Street Address:
City:
State:
Zip:
Submittal Date: Mon May 10 16:02:09 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: [SR-69-NFPA 25-2021](#)
Statement: Approved is a defined term in NFPA standards.



Public Comment No. 2-NFPA 25-2021 [Section No. 13.1.1.2]

13.1.1.2

Table 13.1.1.2 shall be used to determine the minimum required frequencies for inspection, testing, and maintenance.

Table 13.1.1.2 Summary of Valves, Valve Components, and Trim Inspection, Testing, and Maintenance

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
Inspection		
Alarm valves	-	-
Exterior	Quarterly	13.4.1.1
Interior	5 years	13.4.1.2
Strainers, filters, orifices	5 years	13.4.1.2
Backflow prevention assemblies	-	-
Reduced pressure	Weekly	13.7.1
Reduced-pressure detectors	Weekly	13.7.1
Interior	5 years	13.7.1.3
Check valves	-	-
Interior	5 years	13.4.2.1
Control valves	-	-
All valves except locked or supervised	Weekly	13.3.2.1
Locked or supervised	Monthly	13.3.2.1.1
Electrically supervised	Quarterly	13.3.2.1.2
Dry pipe valves/	-	-
quick-opening devices		
Enclosure (during cold weather)	-	Chapter 4
Exterior	Monthly	13.4.5.1.2
Interior	Annually	13.4.5.1.3
Strainers, filters, orifices	5 years	13.4.5.1.4
Low temperature alarm	Annually	Chapter 4
Deluge valves	-	-
Enclosure (during cold weather)	Daily/weekly	Chapter 4
Exterior	Monthly	13.4.4.1.1
Interior	Annually/5 years	13.4.4.1.2
Strainers, filters, orifices	5 years	13.4.4.1.3
Fire department connections	Quarterly	13.8.1
Gauges	Monthly/quarterly	13.2.5.4
Hose valves	Quarterly	13.6.1
Preaction valves	-	-
Enclosure (during cold weather)	-	Chapter 4
Exterior	Monthly	13.4.3.1.1
Interior	Annually/5 years	13.4.3.1.2
Strainers, filters, orifices (<u>and diaphragm chambers?</u>)	5 years	13.4.3.1.3
-	-	-

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
Pressure-regulating and relief valves	-	-
Master pressure-regulating Master pressure regulating	Weekly	13.5.4.1
Sprinkler system pressure-reducing pressure reducing	Quarterly	13.5.1.1
Hose connection pressure-regulating pressure regulating	Annually	13.5.2.1
Hose rack pressure-regulating pressure regulating	Annually	13.5.3.1
Fire pump circulation relief	With no flow test	13.5.6.2.1
Fire pump main pressure-relief	With fire pump test	13.5.6.2.1
Valve supervisory signal initiating device	Quarterly	13.3.2.1.3
Supervisory signal devices (except valve supervisory switches)	Quarterly	13.2.6.5.1
Air compressors and nitrogen generators	Monthly	13.10.2
Testing		
Backflow prevention assemblies	Annually	13.7.2
Control valves	-	-
Operation and position	Annually	13.3.3.1
Valve status test	After the control valve closed and reopened	13.3.3.4
Supervisory	Semiannually	13.3.3.5
Deluge valves	-	-
Trip test	Annually/3 years	13.4.4.2.3
Dry pipe valves/	-	-
quick-opening devices	-	-
Air leakage	3 years	13.4.5.2.9
Priming water	Quarterly	13.4.5.2.1
Low air pressure alarm	Annually	13.4.5.2.6
Quick-opening devices	Quarterly	13.4.5.2.4
Trip test	Annually	13.4.5.2.2
Full-flow trip test	3 years	13.4.5.2.2.2
Gauges	5 years	13.2.5.4.2
Main drains	Annually/quarterly	13.2.3.2
Preaction valves	-	-
Priming water	Quarterly	13.4.3.2.1
Low air pressure alarms	Quarterly	13.4.3.2.11
Trip test	Annually/3 years	13.4.3.2.2 and 13.4.3.2.3
Air leakage	3 years	13.4.3.2.6
Low temperature alarm	Annually	13.4.3.2.12
Pressure-regulating and relief valves	-	-

<u>Item</u>	<u>Frequency</u>	<u>Reference</u>
Master pressure regulating Master pressure regulating	Quarterly/annually	13.5.4.2 and 13.5.4.3
Sprinkler systems pressure reducing pressure reducing	Annually/5 years	13.5.1.3 and 13.5.1.2
Hose connection pressure regulating pressure regulating	Annually/5 years	13.5.2.3 and 13.5.2.2
Hose rack pressure regulating pressure regulating	Annually/5 years	13.5.3.3 and 13.5.3.2
Fire pump circulation relief	With churn test	13.5.6.1.2
Fire pump pressure relief valves	With fire pump test	13.5.6.2.2 <u>3</u>
Air compressors and nitrogen generators	Annually	13.10.3
Hose valves	Annually/3 years	13.6.2
Waterflow alarms	Quarterly/semiannually	13.2.4 <u>3</u>
Supervisory signal devices (except valve supervisory switches)	Annually	13.2.6 <u>5</u> .2
Maintenance		
Alarm valves	Per manufacturer	13.4.1.3
Backflow prevention assemblies	Per manufacturer	13.7.3
Check valves	Per manufacturer	13.4.2.2
Control valves (outside screw and yoke)	Annually	13.3.4
Deluge valves	Annually/5 years	13.4.4.3
Dry pipe valves/ quick-opening devices	Annually	13.4.5.3
Hose valves	As needed	13.6.3
Preaction valves	Annually/5 years	13.4.3.3
Air compressors and nitrogen generators	Per manufacturer	13.10.4

Statement of Problem and Substantiation for Public Comment

Place holder for discussion based on TG 5 table reviews.

Related Item

- Table correction

Submitter Information Verification

Submitter Full Name: Bruce Clarke

Organization: American International Group,

Street Address:

City:

State:

Zip:

Submittal Date: Tue Mar 23 14:52:46 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: [SR-74-NFPA 25-2021](#)
Statement: Table references updated.



Public Comment No. 62-NFPA 25-2021 [New Section after 13.2.3.2.2]

13.2.3.2.2.1*

Devices described in 13.2.3.2.2 that utilize a mechanical retarding device shall meet the requirements of 13.2.3.1.2

Statement of Problem and Substantiation for Public Comment

Retard chambers and alarm valves that utilize intermediate chambers are effectively mechanical waterflow alarms and are prone to blockages from debris so it is necessary to test them more frequently than semi-annually. A corresponding annex note will be submitted as a separate PC.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 63-NFPA 25-2021 [New Section after A.13.2.2]	
<u>Related Item</u>	
• PI-256	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 16:31:02 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: Testing frequency for mechanical devices is already covered elsewhere in the standard.



Public Comment No. 138-NFPA 25-2021 [New Section after 13.2.3.5.1]

13.2.3.5.2 Waterflow Alarm Device Status.

13.2.3.5.2 During testing and maintenance, vane-type waterflow alarm devices shall remain in service unless impairment procedures are followed in accordance with NFPA 72 or the adopted fire code.

13.2.3.5.2.1* Impairing vane-type waterflow alarm devices by preventing movement of the vane or stem shall be prohibited.

13.2.3.5.2.2* Interruption of the signal sent by the vane-type waterflow alarm device is permitted in accordance with Section 13.2.4.5.2.1 and 13.2.4.5.2.2.

13.2.3.5.2.3 Interruption of the waterflow alarm circuit shall be accomplished using a device listed for the purpose.

13.2.3.5.2.4 Interruption of the waterflow alarm circuit shall result in an audible and visual trouble signal in accordance with NFPA 72 or the adopted fire code, or other approved indication at the switch signal in accordance with NFPA 72 or the adopted fire alarm code, or other approved indication at the switch.

Statement of Problem and Substantiation for Public Comment

NFPA 25 contains no prohibition against impairing flow switches using screwdrivers or other objects jammed into the paddle/trip stem mechanism. These tools often get left behind rendering the flow switch out of service until it is discovered during the next inspection. It also damages the device itself. Likewise, using switches to prevent the signal from being transmitted can be just as problematic unless a trouble condition is reported to the fire alarm system or some other indication is present at the switch. Annex material is also proposed to clarify the intent and highlight the dangers of these practices.

Related Item

- pi 154 and 155

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 10:57:39 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action:	Rejected but see related SR
Resolution:	<u>SR-32-NFPA 25-2021</u>
Statement:	Language added due to discussion of repeated poor field practices in disabling flow switches.



Public Comment No. 149-NFPA 25-2021 [New Section after 13.2.5]

13.2.5 Transducers

13.2.5.1 Where transducers are accessible, they shall be inspected monthly.

13.2.5.2 Transducers shall be tested every 5 years in accordance with manufacturers instructions.

13.2.5.3 Additional maintenance as required by the manufacturer shall be provided.

Statement of Problem and Substantiation for Public Comment

Transducers are increasingly being used either in addition to, or in lieu of, gauges on water-based fire protection systems. These basic ITM provisions are a good starting point for future requirements and address the committees concerns with PI 164.

Related Item

- PI 164

Submitter Information Verification

Submitter Full Name: Jason Webb

Organization: Potter Electric Signal Company

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 14:50:38 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Transducers that are part of a fire pump controller are already tested as part of Chapter 8 requirements. Other transducers are not required for systems and should not be included within NFPA 25.



Public Comment No. 24-NFPA 25-2021 [Section No. 13.3.3.4.1]

13.3.3.4.1 –

~~The test shall be conducted every time the valve is closed.~~

Statement of Problem and Substantiation for Public Comment

A valve status test cannot be conducted when the control valve is closed. This is already addressed in the current section 13.3.3.4

Related Item

- FR-114

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 04 10:26:12 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-33-NFPA 25-2021](#)

Statement: Removed as the intent of the section is covered by 13.3.3.4.



Public Comment No. 64-NFPA 25-2021 [Section No. 13.3.3.4.1]

13.3.3.4.1 –

The test shall be conducted every time the valve is closed.

Statement of Problem and Substantiation for Public Comment

This section adds no additional requirements and restates what is required by section 13.3.3.4 which only applies to the control valve at the system riser.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 65-NFPA 25-2021 [Section No. 13.3.3.4.1]	

Related Item

- FR-114

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 16:39:44 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-33-NFPA 25-2021

Statement: Removed as the intent of the section is covered by 13.3.3.4.



Public Comment No. 65-NFPA 25-2021 [Section No. 13.3.3.4.1]

13.3.3.4.1

The valve status test ~~shall be conducted every time the valve is closed~~ required by 13.3.3.4 shall be permitted to be omitted when the control valve is installed on a system riser supplying any system other than a wet system .

Statement of Problem and Substantiation for Public Comment

Current language in the standard requires a valve status test to be conducted every time a control valve is closed. Conducting this test on a normally dry system is burdensome on the owner/inspector and may cause additional degradation to the system by tripping and filling with water unnecessarily. For example, a manual dry standpipe would require assistance from the local fire department to conduct this test.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 64-NFPA 25-2021 [Section No. 13.3.3.4.1]	Replaces deleted text
<u>Related Item</u>	
• FR-114	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 16:42:29 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: Valve status tests on dry and preaction valves can be conducted without tripping the system.



Public Comment No. 116-NFPA 25-2021 [Section No. 13.4.1.1]

13.4.1.1*

Alarm valves and system riser check valves shall be externally inspected quarterly and shall verify the following:

- (1) The gauges indicate normal supply water pressure is being maintained.
- (2) The valves and trim are free of physical damage.
- (3) All valves are in the appropriate open or closed position.
- (4) The retarding chamber or alarm drains are not leaking.
- (5) Where applicable, the valve in the connection to the pressure-type contractors or water motor-operated alarm devices are either sealed, locked, or electrically supervised in the open position.

-

Statement of Problem and Substantiation for Public Comment

In addition to adding the proposed new text to the inspection requirements for dry pipe valves, the same text from Sentence (5): "Where applicable, the valve in the connection to the pressure-type contractors or water motor-operated alarm devices are either sealed, locked, or electrically supervised in the open position" should also be added as: - 13.4.1.1(5) for alarm valves 13.4.3.1.1(5) for preaction valves, and - 13.4.4.1.1(5) for deluge valves.

Related Item

- FR-97

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Sat May 08 21:09:32 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-34-NFPA 25-2021](#)

Statement: Language added to correlate with first draft dry valve ITM requirements for valves and trim. Contractors corrected to contacts.



Public Comment No. 117-NFPA 25-2021 [Section No. 13.4.3.1.1]

13.4.3.1.1

The preaction valve shall be externally inspected monthly to verify the following:

- (1) The valve is free from physical damage.
- (2) All trim valves are in the appropriate open or closed position.
- (3) The valve seat is not leaking.
- (4) Electrical components are in service.
- (5) Where applicable, the valve in the connection to the pressure-type contractors or water motor-operated alarm devices are either sealed, locked, or electrically supervised in the open position.

Statement of Problem and Substantiation for Public Comment

In addition to adding the proposed new text to the inspection requirements for dry pipe valves, the same text from Sentence (5): "Where applicable, the valve in the connection to the pressure-type contractors or water motor-operated alarm devices are either sealed, locked, or electrically supervised in the open position" should also be added as: - 13.4.1.1(5) for alarm valves 13.4.3.1.1(5) for preaction valves, and - 13.4.4.1.1(5) for deluge valves.

Related Item

- FR-97

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

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Submittal Date: Sat May 08 21:12:17 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-35-NFPA 25-2021

Statement: Language added to correlate with first draft dry valve ITM requirements for valves and trim. Contractors corrected to contacts.



Public Comment No. 9-NFPA 25-2021 [Section No. 13.4.3.1.3]

13.4.3.1.3

Strainers, filters, and restricted orifices, ~~and diaphragm chambers~~ shall be inspected internally every 5 years unless tests indicate a greater frequency is necessary.

Statement of Problem and Substantiation for Public Comment

Created from task group 5 sections review and discussions. Remove diaphragm chamber from this section and table as this is part of valve so, already required. This is really not a separate device.

Related Item

- 1

Submitter Information Verification

Submitter Full Name: Bruce Clarke

Organization: American International Group,

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Submittal Date: Thu Apr 15 13:18:18 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-36-NFPA 25-2021

Statement: This is an integral part of the valve, so it is automatically included in the inspections for preaction valves.



Public Comment No. 136-NFPA 25-2021 [New Section after 13.4.3.2.13]

13.4.3.2.14

13.4.3.2.14* In preaction systems where nitrogen is required by NFPA 13 as a part of the system design, the nitrogen supply shall be tested semiannually to verify the nitrogen concentration is at 98% or greater.

13.4.3.2.14.1 Where the nitrogen concentration is monitored at a constantly attended location, the concentration shall be verified annually.

13.4.3.2.14.2 If nitrogen concentration is found to be below 98%, the cause of the low concentration shall be identified and corrected.

A.13.4.3.2.14 Nitrogen maintained at 98% is the requirements for corrosion control while not overtaxing generators. Higher concentrations only provide marginal increases in corrosion protection but increase wear and tear on generators and their compressors. Less than 98% the corrosion protection drops significantly. NFPA 13 allows for the use of higher C-factor pipe if using a nitrogen generator. If the system was designed and installed utilizing nitrogen, then nitrogen should be maintained for the life of the system or the water deliver times can be affected due to increased corrosion in combination with higher C-factor piping.

Statement of Problem and Substantiation for Public Comment

Using higher C factors combined with nitrogen has passed the second draft and will likely be approved in the next edition of NFPA 13. Praction systems using nitrogen as a supervisory gas will be permitted to use a higher c-value for system design. When nitrogen is used as part of system design, routine verification of the nitrogen concentration should be required. 98% is the industry standard nitrogen concentration. If the concentration of found to be lower than 98%, it is important that the cause be identified and corrected.

Related Item

- pi 143,144,137

Submitter Information Verification

Submitter Full Name: Vincent Powers

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Affiliation: NFSA Engineering and Standards Committee

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Submittal Date: Tue May 11 10:39:18 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-37-NFPA 25-2021](#)

Statement: These ITM requirements are necessary to maintain system design integrity in accordance with new NFPA 13 allowances for increased C values in dry and preaction systems using nitrogen.



Public Comment No. 18-NFPA 25-2021 [Section No. 13.4.3.3.3]

13.4.3.3.3*

Auxiliary drains in preaction systems shall be operated after each system operation, and toward the beginning of the heating season prior to the onset of freezing conditions, and thereafter as needed.

Statement of Problem and Substantiation for Public Comment

If this editorial correction is being made to "provide uniformity where inspections or tests need to be conducted prior to the onset of freezing conditions." this assumes that all or most preaction systems are installed in areas that are affected by outside temps., and they are not. By leaving the and in the sentence it at least seems to acknowledge that this would be necessary if outside temperatures are in fact a concern. This would also require the change in the annex.

Related Item

- FR31

Submitter Information Verification

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Submittal Date: Fri Apr 30 12:30:45 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-38-NFPA 25-2021](#)

Statement: Change clarifies that all three are needed, as in cases such as where systems are protecting freezers. Annex material clarifies this requirement.



Public Comment No. 118-NFPA 25-2021 [Section No. 13.4.4.1.1]

13.4.4.1.1

The deluge valve shall be externally inspected monthly to verify the following:

- (1) The valve is free from physical damage.
- (2) All trim valves are in the appropriate open or closed position.
- (3) The valve seat is not leaking.
- (4) Electrical components are in service.
- (5) Where applicable, the valve in the connection to the pressure-type contractors or water motor-operated alarm devices are either sealed, locked, or electrically supervised in the open position.

Statement of Problem and Substantiation for Public Comment

In addition to adding the proposed new text to the inspection requirements for dry pipe valves, the same text from Sentence (5): "Where applicable, the valve in the connection to the pressure-type contractors or water motor-operated alarm devices are either sealed, locked, or electrically supervised in the open position" should also be added as: - 13.4.1.1(5) for alarm valves 13.4.3.1.1(5) for preaction valves, and - 13.4.4.1.1(5) for deluge valves.

Related Item

- FR-97

Submitter Information Verification

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Organization: PLC Fire Safety Solutions

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Submittal Date: Sat May 08 21:14:09 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-39-NFPA 25-2021

Statement: Language added to correlate with first draft dry valve ITM requirements for valves and trim. Contractors corrected to contacts.



Public Comment No. 27-NFPA 25-2021 [Section No. 13.4.4.2.3 [Excluding any Sub-Sections]]

Except as provided by 13.4.4.2.3.1 and 13.4.4.2.3.2, each deluge valve shall be trip tested annually at full flow ~~in warm weather~~ only when sub-freezing temperatures are not anticipated for three months and in accordance with the manufacturer's instructions.

Statement of Problem and Substantiation for Public Comment

Trip testing in the spring needs to be moved from the Annex into the body of the standard. Technicians perform full trip tests of deluge systems in 'warm weather' in October, November, December, and January because it is 'warm' that day, or for a few days. That is not the intent. Deluge systems cannot dry out in areas where freezing temperatures are experienced in September through March as they can if the system is full trip tested in April through June. Full trip testing in September through February promotes corrosion and freeze failures. Late spring and early summer were voted down by the committee as vague. The annex explains why this is important, but because the annex is not enforceable contractors are not required to comply with filling systems in a timeframe that allows the moisture to evaporate.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 28-NFPA 25-2021 [Section No. 13.4.5.2.2 [Excluding any Sub-Sections]]	
Public Comment No. 28-NFPA 25-2021 [Section No. 13.4.5.2.2 [Excluding any Sub-Sections]]	

Related Item

- PI 113

Submitter Information Verification

Submitter Full Name: Scott Futrell
Organization: Futrell Fire Consult & Design, Inc.
Street Address:
City:
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Submittal Date: Tue May 04 15:34:27 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: The current language is adequate to address this concern. The proposed language could create enforcement issues.



Public Comment No. 87-NFPA 25-2021 [Section No. 13.4.5.1.2]

13.4.5.1.2

The dry pipe valve shall be externally inspected monthly to verify the following:

- (1) The valve is free of physical damage.
- (2) All trim valves are in the appropriate open or closed position.
- (3) Where applicable, the valve between the riser and the quick-opening device is either ~~sealed, locked, or~~ locked or electrically supervised in the open position.
- (4) The intermediate chamber is not leaking.
- (5) Where applicable, the valve in the connection to the pressure-type contractors or water motor-operated alarm devices ~~are either sealed, locked, or electrically supervised~~ are locked or electrically supervised in the open position.

13.4.5.1.2.1

The dry pipe valve shall be externally inspected weekly to verify the following:

- (1) Where applicable, the valve between the riser and the quick-opening device is sealed in the open position.
- (2) Where applicable, the valve in the connection to the pressure-type contractors or water motor-operated alarm devices are sealed in the open position.

Statement of Problem and Substantiation for Public Comment

Valves sealed in the open position should be inspected weekly in order to be considered supervised.

Related Item

- FR-97

Submitter Information Verification

Submitter Full Name: Kevin Hall

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Submittal Date: Fri May 07 17:43:42 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Valves in connections to the pressure-type contacts or water motor-operated alarm devices for water control valves are permitted to be inspected monthly.



Public Comment No. 28-NFPA 25-2021 [Section No. 13.4.5.2.2 [Excluding any Sub-Sections]]

Each dry pipe valve shall be trip tested annually during ~~warm weather~~. only when sub-freezing temperatures are not anticipated for three months

Statement of Problem and Substantiation for Public Comment

Trip testing in the spring needs to be moved from the Annex into the body of the standard. Technicians perform full trip tests of dry systems in 'warm weather' in October, November, December, and January because it is 'warm' that day, or for a few days. That is not the intent. Dry systems cannot dry out in areas where freezing temperatures are experienced in September through March as they can if the system is full trip tested in April through June. Full trip testing in September through February promotes corrosion and freeze failures. Late spring and early summer were voted down by the committee as vague. The annex explains why this is important, but because the annex is not enforceable contractors are not required to comply with filling systems in a timeframe that allows the moisture to evaporate.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 27-NFPA 25-2021 [Section No. 13.4.4.2.3 [Excluding any Sub-Sections]]	
Public Comment No. 27-NFPA 25-2021 [Section No. 13.4.4.2.3 [Excluding any Sub-Sections]]	

Related Item

- PI 112

Submitter Information Verification

Submitter Full Name: Scott Futrell
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Street Address:
City:
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Submittal Date: Tue May 04 15:49:54 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: The proposed language could create enforcement issues.



Public Comment No. 137-NFPA 25-2021 [New Section after 13.4.5.2.9]

13.4.5.2.10

13.4.5.2.10* In dry pipe systems where nitrogen is required by NFPA 13 as a part of the system design, the nitrogen supply shall be tested semiannually to verify the nitrogen concentration is at 98% or greater.

13.4.5.2.10.1 Where the nitrogen concentration is monitored at a constantly attended location, the concentration shall be verified annually.

13.4.5.2.10.2 If nitrogen concentration is found to be below 98%, the cause of the low concentration shall be identified and corrected.

A.13.4.5.2.10 Nitrogen maintained at 98% is the requirements for corrosion control while not overtaxing generators. Higher concentrations only provide marginal increases in corrosion protection but increase wear and tear on generators and their compressors. Less than 98% the corrosion protection drops significantly. NFPA 13 allows for the use of higher C-factor pipe if using a nitrogen generator. If the system was designed and installed utilizing nitrogen, then nitrogen should be maintained for the life of the system or the water deliver times can be affected due to increased corrosion in combination with higher C-factor piping.

Statement of Problem and Substantiation for Public Comment

Using higher C factors combined with nitrogen has passed the second draft and will likely be approved in the next edition of NFPA 13. Dry pipe systems using nitrogen as a supervisory gas will be permitted to use a higher c-value for system design. When nitrogen is used as part of system design, routine verification of the nitrogen concentration should be required. 98% is the industry standard nitrogen concentration. If the concentration of found to be lower than 98%, it is important that the cause be identified and corrected.

Related Item

- pi 143,144 and 137

Submitter Information Verification

Submitter Full Name: Vincent Powers

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Affiliation: NFSA Engineering and Standards Committee

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City:

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Submittal Date: Tue May 11 10:51:41 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Rejected but see related SR

Action:**Resolution:** [SR-40-NFPA 25-2021](#)**Statement:** These ITM requirements are necessary to maintain system design integrity in accordance with new NFPA 13 allowances for increased C values in dry and preaction systems using nitrogen.



Public Comment No. 36-NFPA 25-2021 [New Section after 13.5.1.2.1]

13.5.1.2.2

A tag shall be attached to the valve indicating the date of the test, the flow in gpm, the inlet pressure, and the outlet pressure recorded during the test.

13.5.1.2.3

The tag shall comply with section xx.x.x.x.

Statement of Problem and Substantiation for Public Comment

Need to add information for the tag requirements (size color or other required information), this may include adding a new section or annex section.

Related Item

- CI-129

Submitter Information Verification

Submitter Full Name: Vincent Powers

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Submittal Date: Wed May 05 14:23:25 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-41-NFPA 25-2021

Statement: Important information that needs to be available at the valve for fire fighter use and should be at both valves and hose stations. Correlates with requirements being added in NFPA 1 and NFPA 14.



Public Comment No. 134-NFPA 25-2021 [Section No. 13.7.3]

13.7.3 Maintenance.

Maintenance of all backflow prevention assemblies shall be conducted by ~~a~~ qualified person(s) ~~in~~ personnel in accordance with the manufacturer's instructions and the procedure and policies of the authority having jurisdiction.

Statement of Problem and Substantiation for Public Comment

See substantiation for PC 127

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 127-NFPA 25-2021 [Section No. 3.3.37]	
<u>Related Item</u>	
• FR-99	

Submitter Information Verification

Submitter Full Name: Joe Scibetta
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Zip:
Submittal Date: Mon May 10 16:22:10 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-24-NFPA 25-2021
Statement: Personnel can be both singular and plural. It better aligns with how the term is used throughout the standard.



Public Comment No. 50-NFPA 25-2021 [New Section after 13.10]

13.11 Automatic Air Vents.

Automatic air vents shall be inspected annually from the floor level to verify they are free of physical damage and show no signs of leakage.

13.11.1

Strainers, filters, and screens shall be removed and inspected every 5 years for damaged or corroded parts.

13.11.2

When removed for inspection, strainers, filters, and screens shall be flushed until clear or replaced.

Statement of Problem and Substantiation for Public Comment

Automatic air vents can be used on other systems than sprinkler systems and should be inspected, tested, and maintained as well. Specifically, automatic air vents can be installed on the top of manual dry standpipe risers to aid in water delivery times.

Related Public Comments for This Document

Related Comment

Public Comment No. 49-NFPA 25-2021 [Section No. 5.2.10]

Relationship

Relocation of section from the FD

Related Item

- FR-49

Submitter Information Verification

Submitter Full Name: Kevin Hall

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Submittal Date: Fri May 07 15:31:28 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-5-NFPA 25-2021

Statement: The requirements are more appropriately located in Chapter 13.



Public Comment No. 12-NFPA 25-2021 [Section No. 13.11.1]

13.11.1

Whenever a valve, valve component, and/or valve trim is adjusted, repaired, reconditioned, or replaced, the action required in Table 13.11.1 shall be performed.

Table 13.11.1 Summary of Component Action Requirements

<u>Component</u>	<u>Adjust</u>	<u>Repair/Recondition</u>	<u>Replace</u>	<u>Inspection, Test, and Maintenance Procedures</u>
Water delivery components	-	-	-	-
Post indicator and wall indicator valves	X	X	X	(1) Inspect for leaks at system pressure - - - -
Control valves other than post indicator and wall indicator valves	X	X	X	(1) Inspect for leaks at system pressure - -

<u>Component</u>	<u>Adjust</u>	<u>Repair/Recondition</u>	<u>Replace</u>	<u>Inspection, Test, and Maintenance Procedures</u>		
					-	-
					-	-
Alarm check valve	X	X	X	(1) Inspect for leaks at system pressure per 13.4.1		
					-	-
					-	-
Dry pipe valve	X	X	X	(1) Inspect for leaks at system pressure		
					-	-
					-	-
					-	-
					-	-
Deluge/preaction valve	X	X	X	(1) Inspect for leaks at system pressure per 13.4.4/13.4.3		
					-	-
					-	-
					-	-
					-	-

<u>Component</u>	<u>Adjust</u>	<u>Repair/Recondition</u>	<u>Replace</u>	<u>Inspection, Test, and Maintenance Procedures</u>
Quick-opening device	X	X	X	(1) Inspect for leaks at system pressure per 13.4.5.2.9 - - (3) Valve status test
Pressure-regulating device — hose valves	X	X	X	(1) Inspect for leaks at system pressure per 13.5.2 - - -
Pressure-regulating devices — other than hose valves	X	X	X	(1) Inspect for leaks at system pressure per Section 13.5 - - -
Hose valve	X	X	X	(1) Inspect for leaks at system pressure per Section 13.6 - -
Backflow prevention device	X	X	X	(1) Inspect for leaks at system pressure per Section 13.7 - -

<u>Component</u>	<u>Adjust</u>	<u>Repair/Recondition</u>	<u>Replace</u>	<u>Inspection, Test, and Maintenance Procedures</u>		
					-	-
					-	-
Check valves	X	X	X	(1) Inspect for leaks at system pressure per 13.4.2	-	-
					-	-
Fire department connection	X	X	-	(1) Inspect for leaks at system pressure per Section 13.8	-	-
Fire department connection — sprinkler system(s)	-	-			X	(1) Isolate and hydrostatic test for 2 hours at 150 psi (10 bar)
					-	-
Fire department connection — other than sprinkler system(s)	-	-			X	(1) Isolate and hydrostatic test for 2 hours at 50 psi (3.5 bar) above the normal working pressure [200 psi (14 bar) minimum]
					-	-
Strainers	X	X	X	Inspect and clean in accordance with		

<u>Component</u>	<u>Adjust</u>	<u>Repair/Recondition</u>	<u>Replace</u>	<u>Inspection, Test, and Maintenance Procedures</u>		
				manufacturer's instructions		
Main drain valves	X	X	X	Main drain test per 13.2.3.2		
Gauges	-	-			X	Calibrate per 13.113.2.5.4
Alarm and supervisory components						
	-	-	-	-		
Alarm device	X	X	X	Test for conformance with NFPA 13 and/or NFPA 72		
Supervisory device	X	X	X	Test for conformance with NFPA 13 and/or NFPA 72		
System protection components						
	-	-	-	-		
Pressure relief valve — fire pump installation	X	X	X	See 8.3.3.11 and 13.5.6		
Pressure relief valve — other than fire pump installation	-	-			X	Verify relief valve is listed or approved for the application and set to the correct pressure
Informational components						
	-	-	-	-		
Identification signs	X	X	X	Inspect for compliance with NFPA 13 and 13.3.1		

Statement of Problem and Substantiation for Public Comment

Corrections based on TG 5 table review.

Related Item

- Table correction

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Submitter Full Name: Bruce Clarke

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Submittal Date: Thu Apr 22 08:32:47 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-44-NFPA 25-2021](#)

Statement: Action corrects references.



Public Comment No. 19-NFPA 25-2021 [Section No. 14.3.1]

14.3.1*

An obstruction investigation shall be conducted for system or yard main piping wherever any of the following conditions exist:

- (1) Defective intake for fire pumps taking suction from open bodies of water
- (2) Discharge of obstructive material during routine water tests
- (3) Foreign materials in fire pumps, dry pipe valves, or check valves
- (4) Foreign material in water during drain tests or plugging of inspector's test connection(s)
- (5) Unknown materials are heard in the system piping during draining, refilling, or otherwise flowing water through the system
- (6) Plugged sprinklers
- (7) Foreign organic or inorganic material with the potential to obstruct pipe or sprinklers is found in the pipe
- (8) Failure to flush yard piping or surrounding public mains following new installations or repairs
- (9) Record of broken public mains in the vicinity
- (10) Abnormally frequent false tripping of a dry pipe valve(s)
- (11) System is returned to service after an extended shutdown (i.e., greater than 1 year)
- (12) Reason to believe that the sprinkler system contains sodium silicate or highly corrosive fluxes in copper systems
- (13) System has been supplied with raw water via the fire department connection
- (14) ~~Pinholes or other leaks~~ leakage caused by internal corrosion
- (15) Fifty percent increase in the time it takes water to travel to the inspector's test connection from the time the valve trips during a full flow trip test of a dry pipe sprinkler system when compared to the original system acceptance test
- (16) ~~Deterioration of the end of steel piping at grooved couplings or threaded fittings~~
- (17)

Statement of Problem and Substantiation for Public Comment

#14 Internal corrosion causes more than just pinhole leaks and all leaks should be investigated to determine what the cause of the corrosion is. #16 this would trigger an obstruction investigation from normal aging of most steel pipe and changing the wording in #14 will cover this issue. There were 6 negative comments against this issue.

Related Item

- Fr104

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Association

Affiliation: NFSA Engineering and Standards Committee
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Submittal Date: Tue May 04 08:52:54 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: [SR-76-NFPA 25-2021](#)
Statement: Wording clarifies that external corrosion would not necessitate an internal investigation. Normal deterioration from aging at couplings or fittings at the end of pipe may not be sufficient to trigger an obstruction investigation.



Public Comment No. 20-NFPA 25-2021 [Section No. 14.3.1]

14.3.1*

An obstruction investigation shall be conducted for system or yard main piping wherever any of the following conditions exist:

- (1) Defective intake for fire pumps taking suction from open bodies of water
- (2) Discharge of obstructive material during routine water tests
- (3) Foreign materials in fire pumps, dry pipe valves, or check valves
- (4) Foreign material in water during drain tests or plugging of inspector's test connection(s)
- (5) Unknown materials are heard in the system piping during draining, refilling, or otherwise flowing water through the system
- (6) Plugged sprinklers
- (7) Foreign organic or inorganic material with the potential to obstruct pipe or sprinklers is found in the pipe
- (8) Failure to flush yard piping or surrounding public mains following new installations or repairs
- (9) Record of broken public mains in the vicinity
- (10) Abnormally frequent false tripping of a dry pipe valve(s)
- (11) System is returned to service after an extended shutdown (i.e., greater than 1 year)
- (12) Reason to believe that the sprinkler system contains sodium silicate or highly corrosive fluxes in copper systems
- (13) System has been supplied with raw water via the fire department connection
- (14) Pinholes or other leaks caused by corrosion
- (15) ~~Fifty percent~~ Ten percent increase in the time it takes water to travel to the inspector's test connection from the time the valve trips during a full flow trip test of a dry pipe sprinkler system when compared to the original system acceptance test. ANNEX A.14.3.1(15) Maximum dry pipe system water delivery time is dependent on a number of variables that could include the hazard classification of the occupancy, the system piping volume, the presence of a quick opening device, and/or any special listing limitations for a particular model of automatic sprinkler. An obstruction investigation should be conducted when the maximum dry pipe system water delivery times is exceeded. In general maximum dry pipe system water delivery times are summarized in Table 14.3.1(15).
- (16) Deterioration of the end of steel piping at grooved couplings or threaded fittings

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
PC_20_annex_table.docx	PC 20 annex table 14.3.1(15)	

Statement of Problem and Substantiation for Public Comment

The 50% rule was created in the 2002 edition to initiate an obstruction investigation if there was an increase in the time it takes water getting to the inspector's test. The original text used the term "significant" but the committee felt this was too subjective and settled on an objective 50% increase in time for water delivery. The 50% was not supported by obstruction investigation or failure data but the

committee support of having the 50% increase to the original delivery time should trigger the investigation.

The committee has not contemplated the 50% since 2002. The reduction to 10% in this public comment is for two reasons. First, since the 2002 edition, NFPA 13 has added reduced delivery times for residential (dwelling unit) and calculated delivery times. For example applying 50% to the 15-second delivery time to a dwelling unit could be beyond the life safety scope for the occupants. The same 50% application to a four-sprinkler design with delivery in 40 seconds of a high-piled storage can severely delay the water reaching a fire within the storage area. Reducing to 10% is a lower threshold that applies to all delivery times and correlates to the water delivery for the main drain test. Using 10% is consistent and easy for the inspector or owner to recognize. Where an increase in dry pipe delivery time or a 10% reduction in pressure for the main drain test occurs, an action is initiated.

Related Item

- FR-104

Submitter Information Verification

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Street Address:

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Submittal Date: Tue May 04 09:33:07 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-78-NFPA 25-2021](#)

Statement: The 50% rule was created in the 2002 edition to initiate an obstruction investigation if there was an increase in the time it takes water getting to the inspector's test. The original text used the term "significant" but the committee decided this was too subjective and settled on a 50% increase in time for water delivery. The 50% was not supported by obstruction investigation or failure data.

The committee has not revisited the 50% since 2002. The proposed reduction to a 25% increase or a five second increase for portions of systems protecting dwelling units is to better correlate with reduced water delivery times added in the 2002 edition of NFPA 13 for residential (dwelling units) and calculated water delivery times.

Modified total water delivery time to correlate with acceptance requirements in NFPA 13.

Added double-interlock preaction systems to the requirement.



Public Comment No. 29-NFPA 25-2021 [Section No. 14.3.2.2]

14.3.2.2*

Internal examination shall be performed at the following minimum ~~four~~ five points:

- (1) System dry, preaction, or deluge valve
- (2) Riser
Cross
- (3) Cross main - most remote end of remote cross main
- (4) Branch line adjacent to most remote line at connection to cross main
- (5) Branch line adjacent to most remote line at end of branch line
- (6) Branch line piping directly connected to the most remote low point drain

Statement of Problem and Substantiation for Public Comment

The committee wrote that the added wording does not clarify added testing. Wording left vague with annex wording to allow more judgement.

The opposite is true. Additional guidance is necessary as contractors open easily accessible locations that are not the locations where the inspection is required. They need direction to find the sludge and products of corrosion that impede fire and life safety fire sprinkler systems and impair their operation through freeze failures and failures in fires.

1 - "System valve" is not defined and a control valve would not be a reasonable location to investigate corrosion. Corrosion, rust, scale, or sediment draining back to dry, preaction, and deluge valves is a reasonable location to investigate. 2 - "Riser" is not a reasonable location as it is one of the least likely to experience corrosion. Additionally, technicians are known to separate the riser at its connection with the dry, preaction, or deluge valve because it is convenient. The remote end of the most remote cross main must be specified to investigate one of the areas that corrosion, rust, scale, and sediment is likely to be found. The end of a cross main nearest the supply is the least likely location. 3 - Often the remote branch line is an inspector test connection line and if it plugs the investigation is required. Looking at the adjacent branch line is a more likely area of the system where corrosion, rust, scale, and sediment is likely to be found. Investigating the connection between the branch line and the cross main is a location that corrosion, rust, scale, and sediment is often found. 4 - The end of the adjacent to remote branch line is also a likely location for corrosion, rusty, scale, and sediment to be pushed by the water from system operation or full trip testing. Verifying the end and the connection of this line gives a good indication of the extent of corrosion, rust, scale, and sediment in the system. 5 - The piping to low point drains often captures the corrosion, rust, scale, and sediment and is a very likely location for this to accumulate during operation of the system, full trip testing, or drainage of moisture to the low point drain.

Related Item

- PI 114

Submitter Information Verification

Submitter Full Name: Scott Futrell

Organization: Futrell Fire Consult & Design, Inc.

Street Address:

City:

State:

Zip:**Submittal Date:** Tue May 04 16:22:35 EDT 2021**Committee:** INM-AAA

Committee Statement

Committee Rejected but see related SR**Action:****Resolution:** [SR-45-NFPA 25-2021](#)**Statement:** Wording clarifies added system points that are most susceptible to internal corrosion and obstructions.



Public Comment No. 102-NFPA 25-2021 [Section No. A.1.1.3.1]

A.1.1.3.1

The requirement to evaluate the adequacy or accuracy of the design or installation of the system or the capability of the fire protection system to protect the building or its contents is not a part of the periodic inspection, testing, and maintenance requirements of this standard. Examples of items not covered by this standard include the evaluation of unsprinklered areas and the spacing of sprinklers. However, such evaluation is the responsibility of the property owner or designated representative as indicated in 4.1.6 and 4.1.7- ~~using the hazard evaluation form in Annex E~~ .

Statement of Problem and Substantiation for Public Comment

There is no problem with the references to accuracy or installation being added to the text of Section A.1.1.3.1, but the addition of the phrase "using the hazard evaluation form in Annex E" implies that the use of the form is mandatory in conjunction with Sections 4.1.6 and 4.1.7. Since Annex E is not part of the requirements of NFPA 25, but only for informational purposes, that phrase should not be accepted.

Related Item

- FR-38

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 23:13:39 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-19-NFPA 25-2021](#)

Statement: The reference to accuracy was deleted in that it is ambiguous and information is not provided for comparative basis. Also, it was noted that Chapter 5 does include an inspection for orientation which is an evaluation as to whether the installation was accurate.

The Committee did not agree with the deletion of the reference to Annex E but did revise the language to refer to Annex E as an example.



Public Comment No. 145-NFPA 25-2021 [Section No. A.1.1.3.1]

A.1.1.3.1

The requirement to evaluate the ~~adequacy~~ adequacy of the design or accuracy of the ~~design~~ or installation of the system or the capability of the fire protection system to protect the building or its contents is not a part of the periodic inspection, testing, and maintenance requirements of this standard. Examples of items not covered by this standard include the evaluation of unsprinklered areas and the spacing of sprinklers. However, such evaluation is the responsibility of the property owner or designated representative as indicated in 4.1.6 and 4.1.7 using the hazard evaluation form in Annex E.

Statement of Problem and Substantiation for Public Comment

The current statement in the standard is correct that verifying the adequacy of the design is not the responsibility of personnel performing inspections and tests in accordance with NFPA 25, but it doesn't go far enough. It is also not the responsibility of personnel performing inspections and tests to verify the accuracy of the installation. This change to the annex text correlates with the revised text in the standard.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 144-NFPA 25-2021 [Section No. 1.1.3.1]	
<u>Related Item</u>	
• PI 240	

Submitter Information Verification

Submitter Full Name: Terry Victor
Organization: Johnson Controls
Street Address:
City:
State:
Zip:
Submittal Date: Tue May 11 13:28:27 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: The proposed language is inconsistent with the body text.



Public Comment No. 67-NFPA 25-2021 [Section No. A.3.3.12]

A.3.3.12 Exercise.

Examples of exercising components include operating control valves through their full range of motion, operating system components, or moving a valve from its seat.

Statement of Problem and Substantiation for Public Comment

Control valves need to be operated through their full range of motion

Related Item

- FR-2

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 16:51:25 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-20-NFPA 25-2021

Statement: Control valves need to be operated through their full range of motion.



Public Comment No. 7-NFPA 25-2021 [Section No. A.3.3.12]

A.3.3.12 Exercise.

Examples of exercising components include, but are not limited to, operating control valves through their range of motion, the quarter turn on an OS&Y valve, operating system components such as automatic transfer switches , isolating switches and backflow prevention valves, or moving a valve from its seat.

Statement of Problem and Substantiation for Public Comment

This annex note was added to the new definition of Exercise during the First Draft and, while not intended to be an exhaustive list, could be more helpful by including a few more examples, along with language that clarifies that this list is not limited to only these examples.

Related Item

- FR-2

Submitter Information Verification

Submitter Full Name: Joe Scibetta

Organization: BuildingReports

Street Address:

City:

State:

Zip:

Submittal Date: Fri Mar 26 10:10:43 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: The proposed language does not improve the clarity of the existing Annex note. A quarter turn of an Outside Stem and Yoke gate valve does not meet the intent of exercising the full range of motion of the valve.



Public Comment No. 95-NFPA 25-2021 [Section No. A.3.3.15]

A.3.3.15 – Floor Level. –

A normal walking surface, such as a mezzanine, should be used to get as close as is practical to the components being inspected without the use of special safety gear or apparatus, such as a safety harness. This definition is not intended to apply to flooring put down in an unoccupied attic. It is also not intended to apply to ladders, scaffolding, or lift equipment when inspecting sprinklers, water mist nozzles, pipe, tubing, fittings, hangers, braces, and supports.

Statement of Problem and Substantiation for Public Comment

I agree with the negative ballots that the new definition for floor level is not necessary and provides no added value to the standard.

Additionally, the definition states that a "floor level" must be "without the use of any special safety devices or measures", which is not correct or acceptable. Many, if not most industrial type facilities have special safety measures that must be conformed to before anyone is permitted onto the floor of a facility. The need for hard hats, safety boots, safety glasses, hearing protection, high visibility vests or other protective clothing is so common as to make this definition unworkable. Inspections of sprinklers, pipe and fittings have been successfully accomplished from "floor level" since the term was first coined in the 1995 edition of NFPA 25, so this too complicated confusing definition is not necessary. Plain language terms such as this should not need a definition.

Further to this, the text in the proposed new A.3.3.15 that says: "This definition is not intended to apply to flooring put down in an unoccupied attic" should not be accepted either. Such flooring is laid to aid with the accessibility of a space, so there is no reason to ignore this assistance. On a recent project that I was involved with, the ITM inspector did not use such attic flooring to get to the upper test port for the attic antifreeze system. This omission led to a problem with dilution of the A/F solution going undiscovered, and contributed a messy freeze up situation.

Related Item

- FR-60

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 22:41:22 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-21-NFPA 25-2021](#)

Statement:

A definition for floor level is not required. The definition of floor level was too restrictive because some safety gear may be necessary depending on the type and location of the walking surface.



Public Comment No. 70-NFPA 25-2021 [Section No. A.3.3.37]

A.3.3.37 – Qualified Person. –

See 4.1.1.3.1 for more information on a qualified person.

Statement of Problem and Substantiation for Public Comment

The user of the standard should not have to reference the annex to be referenced back to an enforceable section of the standard.

Related Item

- FR-15

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 16:58:50 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Helpful to the user of the document to locate the requirements for what constitutes qualified personnel. Qualified person was revised to qualified personnel as a Global SR.



Public Comment No. 13-NFPA 25-2021 [Section No. A.4.1.1]

A.4.1.1

Any portion of or all inspection, testing, and maintenance is permitted to be contracted out to an inspection, testing, and maintenance service company. When such a service company agrees to perform inspections, tests, and maintenance at a specific frequency required by this standard, it should perform all other required inspections, tests, and maintenance specified more frequently ~~than specified~~. For example, ~~a service~~ a service company agrees to perform required inspections, tests, and maintenance on an annual basis. The inspections, tests, and maintenance required on a daily, weekly, quarterly, and semiannual frequency should also be performed annually.

Statement of Problem and Substantiation for Public Comment

The Annex statement does not read correctly. It seems to suggest that if a frequency is required annually it should be done more frequently. somewhat clarified in the example but should be fixed.

Related Item

- FR12

Submitter Information Verification

Submitter Full Name: David Baron

Organization: Global Fire Protection Company

Street Address:

City:

State:

Zip:

Submittal Date: Fri Apr 30 10:05:23 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Rejected

Action:

Resolution: The Standard cannot mandate that “a service company” perform all other required inspection, tests, and maintenance. The contractor can perform quarterly, semi-annual, and annual tasks at the same visit when within the scope of their contract to do so. The part of Section A.4.1.1 being addressed is deleted in a separate action.



Public Comment No. 96-NFPA 25-2021 [Section No. A.4.1.1]

A.4.1.1 —

~~Any portion of or all inspection, testing, and maintenance is permitted to be contracted out to an inspection, testing, and maintenance service company. When such a service company agrees to perform inspections, tests, and maintenance at a specific frequency required by this standard, it should perform all required inspections, tests, and maintenance more frequently than specified. For example, a service company agrees to perform required inspections, tests, and maintenance on an annual basis. The inspections, tests, and maintenance required on a daily, weekly, quarterly, and semiannual frequency should also be performed annually.~~

Statement of Problem and Substantiation for Public Comment

This Annex text should be deleted, or at the very least the text should be revisited, as Mr. Koffel suggested. While the concept of incorporating daily, weekly, monthly, etc. inspections and tests into an annual ITM program makes some sense, that concept cannot be expanded to include ITM beyond the one-year mark.

For example, if a service company is hired to conduct the 5-year water flow test for a standpipe system, it should not obligate the service provider to conduct all ITM requirements for frequencies of annual or less. Neither should it oblige the service provider to conduct a 5-year check valve maintenance, a 5-year internal inspection or a 5-year hydrostatic test. All that would be beyond the scope of the requirement to conduct a flow test.

As noted in 4.1.1, the owner is responsible for ITM, so this annex text should not obligate a service provider for any specific tasks. The scope of the work needs to be laid out in the contractual agreement, not in the NFPA 25 Annex.

Related Item

- FR-101

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 22:44:58 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-48-NFPA 25-2021](#)

Statement: While the concept of incorporating daily, weekly, monthly, etc. inspections and tests into an annual ITM program makes some sense, that concept cannot be expanded to include ITM beyond the one-year mark. For example, if a service company is hired to conduct the 5-year water flow test for a standpipe system, it should not obligate the service provider to conduct all ITM requirements for frequencies of annual or less. Neither should it oblige the service provider to conduct a 5-year check valve maintenance, a 5-year internal inspection or a 5-year hydrostatic test. All that would be beyond the scope of the requirement to conduct a flow test.

As noted in 4.1.1, the owner is responsible for ITM, so this annex text should not obligate a service provider for any specific tasks. However, the first sentence was retained to clarify that the owner has the ability to contract out to a service company. The scope of the work needs to be laid out in the contractual agreement.



Public Comment No. 48-NFPA 25-2021 [Section No. A.4.1.5.1.1]

A.4.1.5.1.1 —

~~For an example of a reference source containing a list of links to manufacturers' information regarding components that are recalled or part of a replacement program, see www.nfsa.org.~~

Statement of Problem and Substantiation for Public Comment

Delete this annex note as the parent section has been proposed to be deleted.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 47-NFPA 25-2021 [Section No. 4.1.5.1.1]	
<u>Related Item</u>	
• PI-273	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 14:57:51 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR
Resolution: SR-50-NFPA 25-2021
Statement: Removed website and added manufacturer's website since the link only includes those that have voluntarily reported the recall to maintainer of the site.



Public Comment No. 31-NFPA 25-2021 [New Section after A.4.1.5.1.2]

A.4.1.5.1.2 The process of correcting or repairing a critical deficiency should begin as soon as it is discovered and

with a sense of urgency. If the necessary parts are on hand the correction or repair can be accomplished in a

matter of a few hours. However, in many cases it make take several days to order repair parts, have them shipped,

and schedule manpower to make the repair. There are very few instances when a critical deficiency cannot be

corrected or repaired within 30 days. If the correction or repair can't be accomplished within 30 days, the AHJ

should be notified and permission obtained for an exception to this requirement.

Statement of Problem and Substantiation for Public Comment

Annex text for new section 4.1.5.1.2 explaining the need for a sense of urgency to correct a critical deficiency,
dependent on the availability of parts and labor.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 30-NFPA 25-2021 [New Section after 4.1.5.1.1]	
<u>Related Item</u>	
• PI 275	

Submitter Information Verification

Submitter Full Name: Vincent Powers
Organization: National Fire Sprinkler Associ
Affiliation: NFSA Engineering and Standards Committee
Street Address:
City:
State:
Zip:
Submittal Date: Wed May 05 09:08:18 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: Not applicable to current language.



Public Comment No. 32-NFPA 25-2021 [New Section after A.4.1.5.1.2]

A.4.1.5.1.2.1 The AHJ can establish a different time frame for repairing critical deficiencies. Some AHJs want

repairs performed sooner than within 30 days, while others want to allow longer time frames.

Statement of Problem and Substantiation for Public Comment

This PI was resolved with comment that the AHJ has final say, and we agree the AHJ does have the final say, but there should be some sort of time frame in NFPA 25. Often repairs are not completed for several years.

This annex text for new section 4.1.5.1.2.1 explaining that AHJs may want different time frames than those specified,
and giving them the authority to do so.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 30-NFPA 25-2021 [New Section after 4.1.5.1.1]	
<u>Related Item</u>	
• PI 276	

Submitter Information Verification

Submitter Full Name: Vincent Powers
Organization: National Fire Sprinkler Associ
Affiliation: NFSA Engineering and Standards Committee
Street Address:
City:
State:
Zip:
Submittal Date: Wed May 05 09:17:46 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: No need to tell the AHJ that they can establish timeframes. Not applicable to current language.



Public Comment No. 33-NFPA 25-2021 [New Section after A.4.1.5.1.2]

A.4.1.5.1.3 Non-critical deficiencies do not have an effect on system performance and therefore correcting or

repairing them is allowed to take longer. If the correction or repair can't be accomplished within 90 days, the AHJ

should be notified and permission obtained for an exception to this requirement.

Statement of Problem and Substantiation for Public Comment

This PI was resolved with comment that the AHJ has final say, and we agree the AHJ does have the final say, but there should be some sort of time frame in NFPA 25. Often repairs are not completed for several years. This annex text for new section 4.1.5.1.3 explaining that non-critical deficiencies are allowed to have a longer time frame for repair or correction.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 30-NFPA 25-2021 [New Section after 4.1.5.1.1]	
<u>Related Item</u>	
• PI 277	

Submitter Information Verification

Submitter Full Name: Vincent Powers
Organization: National Fire Sprinkler Associ
Affiliation: NFSA Engineering and Standards Committee
Street Address:
City:
State:
Zip:
Submittal Date: Wed May 05 09:22:06 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: Not applicable to current language.



Public Comment No. 34-NFPA 25-2021 [New Section after A.4.1.5.1.2]

A.4.1.5.1.3.1 The AHJ can establish a different time frame for repairing non-critical deficiencies. Some AHJs want

repairs performed sooner than within 90 days, while others want to allow longer time frames.

Statement of Problem and Substantiation for Public Comment

This PI was resolved with comment that the AHJ has final say, and we agree the AHJ does have the final say, but there should be some sort of time frame in NFPA 25. Often repairs are not completed for several years. This annex text for new section 4.1.5.1.3.1 explaining that AHJs can require different time frames than those specified

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 30-NFPA 25-2021 [New Section after 4.1.5.1.1]	
<u>Related Item</u>	
• Pi 278	

Submitter Information Verification

Submitter Full Name: Vincent Powers
Organization: National Fire Sprinkler Associ
Affiliation: NFSA Engineering and Standards Committee
Street Address:
City:
State:
Zip:
Submittal Date: Wed May 05 09:25:41 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: Not applicable to current language.



Public Comment No. 109-NFPA 25-2021 [Section No. A.4.9.7.3]

A.4.9.7.3 — 4 _

Although some specific tasks might be delayed, it is not the intent that all activities under the scope of this standard be deferred. A reasonable attempt should be made to verify that the system is operational. Inspection and testing of equipment and components in other areas where personnel safety is not compromised should still be performed.

Statement of Problem and Substantiation for Public Comment

This Comment is offered in conjunction with the revisions proposed for Section 4.9.7.

There is a typo in the proposed new text of Section 4.9.7.2. Since Section 4.9.7.1 discusses the subject of inspections, the phrase in 4.9.7.2 that "... testing of equipment ... shall be inspected ..." needs to be revised to say that "... testing ... shall be conducted ...".

Additionally, addition text should be added to address the maintenance of equipment that is installed in areas that are inaccessible for safety considerations.

Related Item

- FR-13

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 23:48:57 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: No need to renumber based on current language.



Public Comment No. 103-NFPA 25-2021 [Section No. A.5.2.1.2]

A.5.2.1.2 —

~~The storage definitions in NFPA 13 define clearance as the distance from the top of storage to the ceiling sprinkler deflectors. Other obstruction rules are impractical to enforce under this standard. However, if obstructions that might cause a concern are present, the owner is advised to have an engineering evaluation performed. The reference to storage in 5.2.1.2 does not only apply to storage facilities; it also includes the contents of a room.~~

Statement of Problem and Substantiation for Public Comment

This Comment is offered in conjunction with the changes proposed for Section 5.2.1.2.

With all the revisions to Section 5.2.1.2 over a great number of cycles, the concept that we are checking clearance to avoid obstructions to the sprinkler spray seems to be slipping away, such that even some of our own TC members are starting to think that the text contains design criteria and text needed to be added to the annex to explain that "the reference to storage in 5.2.1.2 does not only apply to storage facilities; it also includes the contents of a room".

Unfortunately, the new Annex A.5.2.1.2 is incorrect. NFPA 13 does not define clearance as the distance from the top of storage to the ceiling sprinkler deflectors. The definition for "Clearance" was replaced with one for "Clearance to Ceiling" in the NFPA 13, 2013 edition. Since the text is not correct, it should be deleted. The concept that 5.2.1.2 is not just concerned with storage is better served by having something in the body, rather than the Annex.

Therefore, the proposed text, which has borrowed some things from previous versions of Section 5.2.1.2, is offered, to bring us back to the basics with a a better explanation of what to look for and why.

Related Item

- FR-61

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 23:16:49 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: This annex text provides needed guidance related to clearance below sprinklers.



Public Comment No. 111-NFPA 25-2021 [Section No. A.5.2.1.2.3]

A.5.2.1.2.3 — 2 .

CMSA sprinklers also include large drop sprinklers.

Statement of Problem and Substantiation for Public Comment

This Comment is offered in conjunction with the renumbering proposed for Sections 5.2.1.2.2 and 5.2.1.2.3.

The text of the existing 5.2.1.2.2 and the text of the proposed new Section 5.2.1.2.3 should be interchanged. With this, the deflector distances from standards other than NFPA 13 would more logically follow the text that discusses the 18" distance for spray sprinklers and the 36" distance for EMSF and CMSA sprinklers, which originate from the NFPA 13 provisions.

In conjunction with this interchange of section numbers, the existing Annex text of A.5.2.1.2.3 should be renumbered as A.5.2.1.2.2.

Related Item

- FR-70

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 23:58:20 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-1-NFPA 25-2021](#)

Statement: The change will make the requirements flow in a more logical order.



Public Comment No. 52-NFPA 25-2021 [Section No. A.5.3.1.1]

A.5.3.1.1

Sprinklers should be first given a visual inspection in accordance with 5.2.1.1.1 to determine if replacement is required. Sprinklers that have passed the visual inspection should then be laboratory tested for sensitivity and functionality. ~~The waterway should clear when sensitivity and functionality is tested at 7 psi (0.5 bar) or the minimum listed operating pressure for dry sprinklers.~~

~~The thermal sensitivity should be such that the RTI does not exceed 350 (meters-seconds)^{1/2} for standard-response sprinklers, 65 (meters-seconds)^{1/2} for quick-response and residential sprinklers, and 50 (meters-seconds)^{1/2} for ESFR sprinklers.~~

~~Sprinklers that have been installed for years should not be expected to have the performance qualities of a new sprinkler. However, if there is any question about their continued satisfactory performance, the sprinklers should be replaced.~~

Statement of Problem and Substantiation for Public Comment

This provides no benefit to the user (owner) of NFPA 25. This is a requirement of the testing standard and is not necessary to be provided and maintained by this technical committee.

Related Item

- FR-51

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 15:41:52 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: This information provides the necessary criteria for a testing lab to perform the test. It also provides laboratory approval criteria for the AHJ.



Public Comment No. 151-NFPA 25-2021 [Section No. A.5.3.1.2]

A.5.3.1.2

Within an environment, similar sidewall, upright, and pendent sprinklers produced by the same manufacturer can be considered part of the same sample, but additional sprinklers would be included within the sample area if produced by a different manufacturer.

The sample ~~area can~~ set can represent any group of sprinklers that is practical, keeping in mind that if one sprinkler from the sample ~~area fails~~ set fails, then all sprinklers ~~in the sample area~~ represented by that sample set are to be replaced. The owner or their designated representative should determine the sprinklers to be represented in each sample ~~area~~ set in consultation with the contractor performing the work.

The following is an example of ~~sample groups of~~ sprinklers chosen for testing that make up one or more sample sets.

A warehouse has five overhead systems with 300 sprinklers per system, and an office area with 200 sprinklers. The warehouse sprinklers are all subject to the same ambient environment and all of the office area sprinklers are subjected to the same ambient environment.

Sprinkler Sample Area Option Sets - Option #1: All warehouse sprinklers ~~as~~ represent one sample ~~area set~~ (1 percent of 1500 = 15 sprinklers).

All office sprinklers ~~as a~~ are a separate sample ~~area set~~ (1 percent of 200 = 2, but a minimum of 4 sprinklers must be tested).

Total of 19 sprinklers tested.

Sprinkler Sample Area Option Sets - Option #2: Each warehouse system is a separate sample ~~area set~~ (1 percent of 300 = 3, but a minimum of 4 sprinklers must be tested; $4 \times 5 = 20$ sprinklers).

All office sprinklers ~~as one~~ are one sample set (1 percent of 200 = 2, but a minimum of 4 sprinklers must be tested).

Total of 24 sprinklers tested.

As shown, the number of sprinklers to be tested would be different depending on the ~~sample areas chosen~~ sprinklers chosen to be represented by each sample set.

Statement of Problem and Substantiation for Public Comment

The changes made during the first revision caused additional confusion on how to determine the groups of sprinklers being represented by a test. Using the term "sample set" helps to clarify the intent.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 146-NFPA 25-2021 [Section No. 5.3.1]	
<u>Related Item</u>	
• PI 270 • FR 51	

Submitter Information Verification

Submitter Full Name: Terry Victor

Organization: Johnson Controls

Street Address:

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Submittal Date: Tue May 11 15:41:02 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-82-NFPA 25-2021](#)

Statement: Revised text helps clarify that a sample set of sprinklers for testing and can be selected to best represent the conditions of sprinklers in an entire system, or in a select group of sprinklers.



Public Comment No. 142-NFPA 25-2021 [Section No. A.5.3.4.4.2(1)]

A.5.3.4.4.2(1) —

Factory premixed solutions are required because the pure concentrate (which is heavier than water) in improperly mixed solutions could separate from the water, drop out of the solution, and collect in drops or low points in the system. Such concentrations are combustible and could present problems during fires. the properties of glycerine and propylene glycol are shown in Table A.5.3.4.4.2(1) .

Table A.5.3.4.4.2(1) Properties of Glycerine and Propylene Glycol
Material Solution

(% by Volume) Specific

Gravity at 77°F

(25°C) Freezing Point °F °C Glycerine (C.P. or U.S.P.

grade) 0 1.000 32 0 5 1.014 31 -0.5 10 1.029 28 -2.2 - 15 1.043 25 -3.9 - 20 1.059 20 -6.7 - 25 1.071

glycol 0 1.000 32 0 5 1.004 26 -3 - 10 1.008 25 -4 - 15 1.012 22 -6 - 20 1.016 19 -7 - 25 1.020 15 -10

Statement of Problem and Substantiation for Public Comment

Removing annex text per PC 141.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 141-NFPA 25-2021 [Section No. 5.3.4.4]	
Public Comment No. 143-NFPA 25-2021 [Section No. A.5.3.4.4.2(2)]	
Public Comment No. 141-NFPA 25-2021 [Section No. 5.3.4.4]	
Public Comment No. 143-NFPA 25-2021 [Section No. A.5.3.4.4.2(2)]	

Related Item

- PI 223

Submitter Information Verification

Submitter Full Name: Jeffrey Hugo

Organization: National Fire Sprinkler Associ

Affiliation: On behalf of NFSA's Engineering and Standards (E&S) Committee

Street Address:

City:

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Submittal Date: Tue May 11 13:12:26 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-11-NFPA 25-2021](#)

Statement: The lower concentration levels of 38% glycerine and 30% propylene glycol can remain in existing systems as long as they provide the needed freeze protection. The risks associated with higher concentration levels of the legacy solutions warrant replacement with a listed antifreeze solution. All allowances to replace existing glycerine and propylene glycol solutions with new glycerine and propylene glycol solutions have been removed. The allowance to perform a deterministic risk assessment to allow legacy solutions to be used as a replacement solution has been removed. Annex text has been updated and a new annex section is created to provide data related to the FPRF testing of the legacy solutions.



Public Comment No. 143-NFPA 25-2021 [Section No. A.5.3.4.4.2(2)]

A.5.3.4.4.2(2) —

Antifreeze solutions with a maximum concentration of 38 percent glycerine or 30 percent propylene glycol do not require a deterministic hazard analysis. The risk assessment should be prepared by an individual(s) who can demonstrate an ability to prepare a risk assessment with education and experience and who can demonstrate an understanding of the issues associated with antifreeze sprinkler systems, including the available related fire tests. For additional information regarding the risk assessment process, documentation to be submitted, and the AHJ's role, refer to NFPA 551 and the SFPE *Engineering Guide: Fire Risk Assessment*.

Propylene glycol and glycerine antifreeze solutions discharged from sprinklers have the potential to ignite under certain conditions. Research and testing has indicated that several variables might influence the potential for large-scale ignition of antifreeze solution discharged from a sprinkler. These variables include, but are not limited to, the concentration of antifreeze solution, sprinkler discharge characteristics, inlet pressure at the sprinkler, ceiling height, and size of the fire at the time of sprinkler discharge. All relevant data and information should be carefully reviewed and considered in the deterministic risk assessment. As appropriate, the risk assessment should consider factors such as the following:

- (1) Occupancy use group in accordance with NFPA 13
- (2) Ceiling height
- (3) Antifreeze solution concentration and type
- (4) Maximum system pressure (i.e., normal static pressures)
- (5) Sprinkler type, including K-factor
- (6) Potential and actual fuel load (e.g., Christmas trees)
- (7) Type of structure (i.e., construction types)
- (8) Size of structure
- (9) Ability of the sprinkler system to control the fire
- (10) Occupied spaces versus unoccupied spaces such as trash enclosures and dust collectors as follows:
 - (11) Adjacent occupancies (i.e., spaces adjacent to the area protected by antifreeze systems)
 - (12) Separation between areas protected with an antifreeze system and other areas
 - (13) Ventilation of areas protected with an antifreeze system to prevent damage to adjacent areas
 - (14) Duration of antifreeze discharge

Tests summarized in Table A.5.3.4.4.2(2) show that large-scale ignition of the sprinkler spray did not occur in tests with 50 percent glycerine and 40 percent propylene glycol antifreeze solutions discharging onto a fire having a nominal HRR of 1.4 MW. A deterministic risk assessment that demonstrates that the HRR for reasonably credible fire scenarios will be less than 1.4 MW at the time of sprinkler activation should be acceptable. The risk assessment should also address issues associated with management of change, such as change in occupancy and temporary fuel loads. A natural Christmas tree can result in an HRR well above

1.4 MW at the time of sprinkler activation. In addition to the previously identified variables, the deterministic risk assessment should include occupancy, quantity of solution, impact on life safety, and potential increase in HRR.

Subsequent to research conducted from 2010 to 2012, UL conducted additional research on legacy glycerine and propylene glycol antifreeze solutions to assist in the development of requirements included in UL 2901, Antifreeze Solutions for Use in Fire Sprinkler Systems. This research is described in UL's report, Comparative Fire Performance Tests Using Water and Antifreeze Solutions Discharged from Standard Spray Sprinklers. This report includes test data and information on 30 percent propylene glycol and 38 percent glycerine antifreeze solutions, as well as additional test data on the 50 percent glycerine solution. This also report includes test data related to the following:

- (1) Fire exposure tests to investigate the ignition potential of 30 percent propylene glycol and 38 percent glycerine antifreeze solutions
- (2) Firefighting effectiveness of 30 percent propylene glycol and 38 percent glycerine antifreeze solutions discharged onto light and ordinary hazard type fires as compared to water
- (3) Firefighting effectiveness of 50 percent glycerine antifreeze solution discharged onto light hazard type fires as compared to water.

A summary of the tests results for these solutions as compared to the requirements for listing are described in Table 3 through Table 8 of the UL report.

The following is a list of research reports that have been issued by the Fire Protection Research Foundation (FPRF) related to the use of antifreeze in sprinkler systems that should be considered in the development of the deterministic risk assessment:

- (1) "Antifreeze Systems in Home Fire Sprinkler Systems — Literature Review and Research Plan,"
- (2) "Antifreeze Systems in Home Fire Sprinkler Systems — Phase II Final Report,"
- (3) "Antifreeze Solutions Supplied through Spray Sprinklers — Interim Report,"

Table A.5.3.4.4.2(2) provides an overview of the testing conducted by the FPRF.

Table A.5.3.4.4.2(2) FPRF Testing Summary

Topic Information Scope of sprinklers tested The following sprinklers were used during the residential sprinkler research program described in "Antifreeze Systems in Home Fire Sprinkler Systems — Phase II Final Report": - (1) Residential pendent style having nominal K-factors of 3.1, 4.9, and 7.4 gpm/psi $\frac{1}{2}$ - (2) Residential concealed pendent style having a nominal K-factor of 4.9 gpm/psi $\frac{1}{2}$ - (3) Residential sidewall style having nominal K-factors of 4.2 and 5.5 gpm/psi $\frac{1}{2}$ - The following sprinklers were used during the spray sprinkler research program described in "Antifreeze Solutions Supplied through Spray Sprinklers — Interim Report": - (1) Residential pendent style having a nominal K-factor of 3.1 gpm/psi $\frac{1}{2}$ - (2) Standard spray pendent style having nominal K-factors of 2.8, 4.2, 5.6, and 8.0 gpm/psi $\frac{1}{2}$ - (3) Standard spray concealed pendent style having a nominal K-factor of 5.6 gpm/psi $\frac{1}{2}$ - (4) Standard spray upright style having a nominal K-factor of 5.6 gpm/psi $\frac{1}{2}$ - (5) Standard spray extended coverage pendent style having a nominal K-factor of 5.6 gpm/psi $\frac{1}{2}$ Antifreeze solution concentration <50% glycerine and <40% propylene glycol antifreeze solutions — solutions were not tested. - 50% glycerine and 40% propylene glycol antifreeze solutions — large scale ignition of the sprinkler spray did not occur in tests with sprinkler discharge onto a fire having a nominal HRR of 1.4 MW. Large scale ignition of the sprinkler spray occurred in multiple tests with sprinkler discharge onto a fire having a nominal HRR of 3.0 MW. - 55% glycerine and 45% propylene glycol antifreeze solutions — large scale ignition of the sprinkler spray occurred in tests with sprinkler discharge onto a fire having a nominal HRR of 1.4 MW. - >55% glycerine and >45%

propylene glycol antifreeze solutions — large-scale ignition of the sprinkler spray occurred in tests with sprinkler discharge onto a fire having an HRR of less than 500 kW. - 70% glycerine and 60% propylene glycol antifreeze solutions — maximum antifreeze solution concentrations tested. Sprinkler inlet pressure Large-scale ignition of the sprinkler discharge spray was not observed when the sprinkler inlet pressure was 50 psi or less for tests using 50% glycerine or 40% propylene glycol. Ceiling height When discharging 50% glycerine and 40% propylene glycol antifreeze solutions onto fires having an HRR of 1.4 MW, no large-scale ignition of the sprinkler spray was observed with ceiling heights up to 20 ft. - When discharging 50% glycerine and 40% propylene glycol antifreeze solutions onto fires having an HRR of 3.0 MW, large-scale ignition of the sprinkler spray was observed at a ceiling height of 20 ft. Fire control The test results described in “Antifreeze Systems in Home Fire Sprinkler Systems — Phase II Final Report” and “Antifreeze Solutions Supplied through Spray Sprinklers — Interim Report” indicated that discharging glycerine and propylene glycol antifreeze solutions onto a fire can temporarily increase the fire size until water is discharged. - As a part of the residential sprinkler research described in “Antifreeze Systems in Home Fire Sprinkler Systems — Phase II Final Report,” tests were conducted to evaluate the effectiveness of residential sprinklers to control fires involving furniture and simulated furniture. The results of these tests indicated that 50% glycerine and 40% propylene glycol antifreeze solutions demonstrated the ability to control the furniture-type fires in a manner similar to water. - For standard spray-type sprinklers, no tests were conducted to investigate the ability of these sprinklers to control the types and sizes of fires that these sprinklers are intended to protect.

Statement of Problem and Substantiation for Public Comment

Removing annex per PC 141.

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 141-NFPA 25-2021 [Section No. 5.3.4.4]	
Public Comment No. 142-NFPA 25-2021 [Section No. A.5.3.4.4.2(1)]	
Public Comment No. 141-NFPA 25-2021 [Section No. 5.3.4.4]	
Public Comment No. 142-NFPA 25-2021 [Section No. A.5.3.4.4.2(1)]	

Related Item

- PI 223

Submitter Information Verification

Submitter Full Name: Jeffrey Hugo

Organization: National Fire Sprinkler Associ

Affiliation: On behalf of NFSA's Engineering and Standards (E&S) Committee

Street Address:

City:

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Submittal Date: Tue May 11 13:13:52 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Rejected but see related SR

Action:

Resolution: [SR-11-NFPA 25-2021](#)

Statement: The lower concentration levels of 38% glycerine and 30% propylene glycol can remain in existing systems as long as they provide the needed freeze protection. The risks associated with higher concentration levels of the legacy solutions warrant replacement with a listed antifreeze solution. All allowances to replace existing glycerine and propylene glycol solutions with new glycerine and propylene glycol solutions have been removed. The allowance to perform a deterministic risk assessment to allow legacy solutions to be used as a replacement solution has been removed. Annex text has been updated and a new annex section is created to provide data related to the FPRF testing of the legacy solutions.



Public Comment No. 99-NFPA 25-2021 [Section No. A.5.4.1.1]

A.5.4.1.1 — 2 _

In the event of a fire, all sprinklers within the fire area should be inspected after the incident. In situations where the fire was quickly controlled or extinguished by one or two sprinklers, it might be necessary only to replace the activated sprinklers. Replacement sprinklers should be of the same make and model or have compatible performance characteristics (see 5.4.1.2 3). Soot-covered sprinklers should be replaced because deposits can result in the corrosion of operating parts. In the event of a substantial fire, special consideration should be given to also replacing the first ring of sprinklers surrounding the activated sprinklers due to the potential for excessive thermal exposure, which could weaken the response mechanisms.

Statement of Problem and Substantiation for Public Comment

This Comment is offered in conjunction with the changes proposed for Section 5.4.1.

Under no circumstances should a sprinkler that was affected by a fire ever be reinstalled. However, as currently written in the First Draft, it seems to be suggesting that if a sprinkler is affected by fire, it can be reinstalled as long as it isn't directly removed from its fitting/welded outlet. By moving the proposed 5.4.1.1 to 5.4.1.2, the text flows better and the possibility of misinterpretation is removed.

Related Item

• FR-57 • FR-74

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

City:

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Submittal Date: Fri May 07 22:59:17 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-75-NFPA 25-2021

Statement: This ties this annex text to the correct section number.



Public Comment No. 100-NFPA 25-2021 [Section No. A.5.4.1.2]

A.5.4.1.2 — 1 _

Flexible hose connections are considered a fitting.

Statement of Problem and Substantiation for Public Comment

This Comment is offered in conjunction with the changes proposed for Section 5.4.1.

Under no circumstances should a sprinkler that was affected by a fire ever be reinstalled. However, as currently written in the First Draft, it seems to be suggesting that if a sprinkler is affected by fire, it can be reinstalled as long as it isn't directly removed from its fitting/welded outlet. By moving the proposed 5.4.1.1 to 5.4.1.2, the text flows better and the possibility of misinterpretation is removed.

Related Item

• FR-57 • FR-74

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

Street Address:

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Submittal Date: Fri May 07 23:03:51 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: This section number is correct.



Public Comment No. 59-NFPA 25-2021 [Section No. A.5.4.1.2]

A.5.4.1.2

Flexible hose connections are considered a fitting. Unless significant modifications are being made that would make the AHJ apply the retroactivity clause, the replacement sprinklers should be installed based on the edition of NFPA 13 that was used at the time of system acceptance.

Statement of Problem and Substantiation for Public Comment

Updates the annex language to apply to the new language proposed by PC-58

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 58-NFPA 25-2021 [Sections 5.4.1.2, 5.4.1.3, 5.4.1.4, 5.4.1.5, 5.4.1.6]	
<u>Related Item</u>	
• FR-51	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
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Submittal Date: Fri May 07 16:08:10 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: This annex text adds valuable information on flexible hose connections.

**Public Comment No. 147-NFPA 25-2021 [Section No. A.8.1.1.2.1]****A.8.1.1.2.1 —**

Shaft movement should be less than $\frac{1}{8}$ in. (3 mm).

Statement of Problem and Substantiation for Public Comment

This annex note implies that a measurement should be taken. The requirement of section 8.1.1.2.1 is to inspect which just includes a visual observation.

Related Item

- PI-36

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

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City:

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Zip:

Submittal Date: Tue May 11 13:43:28 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-56-NFPA 25-2021](#)

Statement: This annex note implies that a measurement should be taken. The requirement of section 8.1.1.2.1 is to inspect which just includes a visual observation.



Public Comment No. 115-NFPA 25-2021 [Section No. A.8.3.3.5]

A.8.3.3.5 —

For vertical turbine fire pumps installed in a well shaft, see 7.3.5.3 and A.7.3.5.2 of NFPA 20 for requirements on determining net pump pressures.

Statement of Problem and Substantiation for Public Comment

There is an apparent typo in the proposed new text of text of A.8.3.3.5. The reference to "see 7.3.5.3 and A.7.3.5.2 of NFPA 20 for requirements on determining net pump pressures" is not applicable. Section 7.3.5.3 contains the requirements for water level detection and there is no A.7.3.5.2. There is no discussion of net pump pressure in either section, and I could not determine what sections were meant to referenced, regarding the determination of net pump pressure.

Related Item

- FR-79

Submitter Information Verification

Submitter Full Name: Larry Keeping

Organization: PLC Fire Safety Solutions

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City:

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Zip:

Submittal Date: Sat May 08 21:05:23 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-59-NFPA 25-2021](#)

Statement: There is an apparent typo in the proposed new text of A.8.3.3.5. The reference to "see 7.3.5.3 and A.7.3.5.2 of NFPA 20 for requirements on determining net pump pressures" is not applicable. Section 7.3.5.3 contains the requirements for water level detection and there is no A.7.3.5.2. There is no discussion of net pump pressure in either section.



Public Comment No. 66-NFPA 25-2021 [Section No. A.8.3.4.1]

A.8.3.4.1 —

~~Biodiesel fuel might need to be tested for degradation more frequently.~~

Statement of Problem and Substantiation for Public Comment

Biodiesel is not recommended for use per NFPA 20 and is not appropriate to be referenced in this document.

Related Item

- FR-82

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association

Street Address:

City:

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Submittal Date: Fri May 07 16:48:01 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected

Resolution: Biodiesel is only referenced in the Annex. The annex note is to highlight to the user that biodiesel may degrade more readily. While biodiesel may not be recommended by engine manufacturer's, if present, it may need more frequent testing.



Public Comment No. 159-NFPA 25-2021 [Section No. A.11.1.1.3]

A.11.1.1.3 —

~~The goal of the inspection, testing, and maintenance service should be to ensure that the system is in full operating condition and that it remains in such condition until the next inspection. See A.3.3.27 for more information.~~

Statement of Problem and Substantiation for Public Comment

This annex note is more appropriately located in NFPA 11.

Related Item

- First Revision No. 143

Submitter Information Verification

Submitter Full Name: Mark Fessenden

Organization: Johnson Controls

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Zip:

Submittal Date: Tue May 11 16:32:24 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-63-NFPA 25-2021

Statement: This language was included as part of ITM requirements from NFPA 11 and is not necessary in NFPA 25. It should remain in NFPA 11.



Public Comment No. 41-NFPA 25-2021 [Section No. A.12.3.1.1]

A.12.3.1.1

Water mist nozzles should be first given a visual inspection for signs of mechanical damage, cleaning, painting, leakage in service, or severe loading or corrosion, all of which are causes for immediate replacement.

Automatic nozzles that have passed the visual inspection should be laboratory tested for sensitivity (RTI), functionality, and K-factor. Thermal sensitivity should be not less than that permitted in post-corrosion testing of new automatic water mist nozzles of the same type. Automatic water mist nozzles should be tested for functionality at their minimum operating pressure specified by the manufacturer. Automatic water mist nozzles should have a K-factor within ~~±5 percent~~ ±10 percent of the value published by the manufacturer.

Some example testing standards include EN 12259-1, *Fixed firefighting systems — Components for sprinkler and water spray systems — Part 1: Sprinklers*; UL 2167, *Water Mist Nozzles for Fire Protection Service*; and FM Approvals Standard 5560, *Water Mist Systems*.

Water mist nozzles that have been in service for a number of years should not be expected to have all of the performance measurements of a new water mist nozzle. However, if there is any question about their continued satisfactory performance, the water mist nozzles should be replaced.

Statement of Problem and Substantiation for Public Comment

This public comment is to incorporate the change proposed in committee input 119. As noted in CI-119 the ±10 percent tolerance allows for a limited change in the K-factor after being subjected to environmental conditions in the field. In addition, the latest edition of UL2167 which covers Water Mist Nozzles for Fire Protection has been revised to allow a +/- 10 percent tolerance on manufacturer's published K-factor. Water Mist nozzles have K-factors that are typically much smaller than those of automatic fire sprinklers and in some cases the K-factors are so small that +/- 5 percent is so small to account for the accuracy of the pressure gage or flow meter using during the test.

Related Item

- CI-119

Submitter Information Verification

Submitter Full Name: Manuel Silva

Organization: Johnson Controls

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 11:19:22 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-31-NFPA 25-2021](#)

Statement: The current tolerance is considered too restrictive. Increasing the tolerance to ± 10 percent allows for a limited change in the K-factor and provides consistency with the post corrosion requirements currently included in UL 2167 (Water Mist Nozzles).



Public Comment No. 42-NFPA 25-2021 [Section No. A.12.3.1.1]

A.12.3.1.1

Water mist nozzles should be first given a visual inspection for signs of mechanical damage, cleaning, painting, leakage in service, or severe loading or corrosion, all of which are causes for immediate replacement.

Automatic nozzles that have passed the visual inspection should be laboratory tested for sensitivity (RTI), functionality, and K-factor. Thermal sensitivity should be not less than that permitted in post-corrosion testing of new automatic water mist nozzles of the same type. Automatic water mist nozzles should be tested for functionality at their minimum operating pressure specified by the manufacturer. Automatic water mist nozzles should have a K-factor within ~~±5 percent~~ ±10 percent of the value published by the manufacturer.

Some example testing standards include EN 12259-1, *Fixed firefighting systems — Components for sprinkler and water spray systems — Part 1: Sprinklers*; UL 2167, *Water Mist Nozzles for Fire Protection Service*; and FM Approvals Standard 5560, *Water Mist Systems*.

Water mist nozzles that have been in service for a number of years should not be expected to have all of the performance measurements of a new water mist nozzle. However, if there is any question about their continued satisfactory performance, the water mist nozzles should be replaced.

Statement of Problem and Substantiation for Public Comment

The current tolerance is considered too restrictive. Increasing the tolerance to ± 10 percent allows for a limited change in the K-factor and provides consistency with the post corrosion requirements currently included in UL 2167 (Water Mist Nozzles).

Related Item

- Committee Input 119

Submitter Information Verification

Submitter Full Name: Kerry Bell

Organization: UL LLC

Street Address:

City:

State:

Zip:

Submittal Date: Fri May 07 13:10:54 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: [SR-31-NFPA 25-2021](#)

Statement: The current tolerance is considered too restrictive. Increasing the tolerance to ± 10 percent allows for a limited change in the K-factor and provides consistency with the post corrosion requirements currently included in UL 2167 (Water Mist Nozzles).



Public Comment No. 139-NFPA 25-2021 [New Section after A.13.2.2]

A.13.2.3.5.2.1 Using screwdrivers or other means to jam paddle-type waterflow alarm devices into position can damage the device and should be avoided. Tools and devices being used in this manner often get left behind rendering the waterflow alarm out of service until they are discovered.

A.13.2.3.5.2.2 Whenever the signal between the waterflow alarm device and the fire alarm control panel or bell is interrupted, there should be an indication either at the fire alarm control panel or the device, or both. Without some sort of indication, the signal can be left interrupted after the test to maintenance essentially impairing the device itself. There are many ways to indicate signal interruption, including but not limited to initiation of audible and visual trouble condition, or a light near the waterflow alarm device.

Statement of Problem and Substantiation for Public Comment

A new prohibition against rendering a vane-type waterflow alarm out of service is proposed for chapter 13. This annex language is intended to help clarify the intent and inherent dangers of these practices.

Related Item

- pi 154 and 155

Submitter Information Verification

Submitter Full Name: Vincent Powers

Organization: National Fire Sprinkler Associ

Affiliation: NFSA Engineering and Standards Committee

Street Address:

City:

State:

Zip:

Submittal Date: Tue May 11 11:09:33 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-32-NFPA 25-2021

Statement: Language added due to discussion of repeated poor field practices in disabling flow switches.



Public Comment No. 63-NFPA 25-2021 [New Section after A.13.2.2]

A.13.2.3.2.2.1

Examples of mechanical retarding devices would include retard chambers and the intermediate chamber of alarm check valves.

Statement of Problem and Substantiation for Public Comment

Retard chambers and alarm valves that utilize intermediate chambers are effectively mechanical waterflow alarms and are prone to blockages from debris so it is necessary to test them more frequently than semi-annually.

This corresponds to the new body text proposed by PC 62

Related Public Comments for This Document

<u>Related Comment</u>	<u>Relationship</u>
Public Comment No. 62-NFPA 25-2021 [New Section after 13.2.3.2.2]	Annex note
<u>Related Item</u>	
• PI-256	

Submitter Information Verification

Submitter Full Name: Kevin Hall
Organization: American Fire Sprinkler Association
Street Address:
City:
State:
Zip:
Submittal Date: Fri May 07 16:35:20 EDT 2021
Committee: INM-AAA

Committee Statement

Committee Action: Rejected
Resolution: Testing frequency for mechanical devices is already covered elsewhere in the standard.



Public Comment No. 105-NFPA 25-2021 [Section No. A.13.7.2.1]

A.13.7.2.1

The full flow test of the backflow prevention valve can be performed with a test header or other connections downstream of the valve. A bypass around the check valve in the fire department connection line with a control valve in the normally closed position is an acceptable arrangement. When flow to a visible drain cannot be accomplished, closed loop flow is acceptable if a flowmeter or sight glass is incorporated into the system to ensure flow. Minimum rate of flow can be determined by using sensing or measuring devices such as a pitot or other capable devices. ~~It can be difficult to measure flow properly from 2 in. (50 mm) and smaller orifices.~~ If connections do not permit accurate measurement of the minimum flow rate, tests should be flowed at the maximum flow rate possible in accordance with 13.7.2.3.

Statement of Problem and Substantiation for Public Comment

I disagree with the proposed text that states that: " It can be difficult to measure flow properly from 2 in. (50 mm) and smaller orifices.". Flow testing is commonly conducted using play pipe or other test orifices or nozzles with sizes such as 1½ in. and 1¾ in. diameters. A flow outlet might need to be fitted with a short length of pipe or other "stream straightener" to reduce turbulence at the point of discharge, but the flow can easily be determined with the use of a pitot tube.

Related Item

- FR-110

Submitter Information Verification

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Submittal Date: Fri May 07 23:31:00 EDT 2021

Committee: INM-AAA

Committee Statement

Committee Action: Rejected but see related SR

Resolution: SR-43-NFPA 25-2021

Statement: Contractor can use any size orifice that can provide system demand. It can be difficult to measure flow properly from main drain and inspector's test connections.