Second Revision No. 7-NFPA 17-2022 [Global Comment]

[Create a new Annex B, move existing Annex B to Annex C.]

[See attached word document "17_A2023_SDM_TG4_AnnexB" for proposed Annex B]

Supplemental Information

File Name	Description	Approved
17_A2023_SDM_TG4_AnnexB.docx	For staff use only	
17_Global_SR-7_Annex_B-new_for_ballot.pdf	for ballot	

Submitter Information Verification

Committee: DRY-AAA

Submittal Date: Fri Dec 02 11:09:10 EST 2022

Committee Statement

Committee Statement: This annex was added to provide clarity and information regarding what could be considered as an impairment and what could be considered as a deficiency, similar to what is included in NFPA 25, Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.

Response Message: SR-7-NFPA 17-2022

Annex B Common Deficiencies and Impairments

This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

B.1

Table B.1 does not take into account every variation of the conditions needing repair or correction. Refer to the manufacturer's design, installation, and maintenance manual. Table B.1 should be used with good judgement by qualified personnel.

Table B.1 Common Deficiencies and Impairments

Item(s)	Item Finding	Impairment	Deficiency
General	System not installed or maintained per the manufacturer's design, installation, and maintenance manual	X	
Discharge nozzles	Clogged with debris or grease	X	
Discharge nozzles	Protective caps missing		X
Discharge nozzles	Wrong type for hazard or installed improperly	X	
Manual actuator	Inoperable	X	
Manual actuator	Inaccessible		X
Manual actuator	Needs adjustment		X
Manual actuator	Signage missing		X
Automatic actuation	Inoperable	X	
Automatic actuation	Improper detector	X	
Automatic actuation	Improper fixed temperature-sensing element temperature rating	X	
Shutoff devices (gas or electric)	Inoperable	X	
Manual reset relay	Inoperable	X	
Exhaust fan	Inoperable (unless not needed due to a listed component of the ventilation system or by design of the extinguishing system)		X
Pipe, fittings, tubing, and hose	Clogged with debris or grease	X	
Pipe, fittings, tubing, and hose	Minor surface corrosion, minor cracking of nonmetallic components		X
Compressed gas cartridge	Missing or incorrect size	X	
Compressed gas cartridge	Needs hydrostatic testing		X

Item(s)	Item Finding	Impairment	Deficiency
Compressed gas cartridge	Insufficient cartridge charge as indicated by weight, pressure, or periodic replacement	X	
Dry-chemical container	Empty or insufficient quantity (for nonpressurized containers)	X	
Dry-chemical container	Pressure too low (for pressurized containers)	X	
Dry-chemical container	Needs hydrostatic testing		X
Dry-chemical container	Corrosion or pitting in excess of the manufacturer's limits, structural damage, fire damage, repairs by soldering, welding, or brazing	X	
Dry-chemical container	Needs 6-year internal examination		X
Dry-chemical container	Semi-annual internal examination falls outside manufacturer's limitations	X	
Pressure regulator	Inoperable or falls outside manufacturer's design limits	X	
Selector valve	Inoperable, needs adjustment or maintenance	X	
Hazard	Hazard has changed	X	
Audible or visual indicator	Inoperable or needs adjustment		X
Connection to fire alarm system (if applicable)	Inoperable		X
Labeling	Missing, damaged, or illegible		X

Second Revision No. 3-NFPA 17-2022 [Chapter 2]

Chapter 2 Referenced Publications

2.1 General.

The documents or portions thereof listed in this chapter are referenced within this standard and shall be considered part of the requirements of this document.

2.2 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 30, *Flammable and Combustible Liquids Code,* 2024 edition.

NFPA 70®, National Electrical Code®, 2023 edition.

NFPA 72®, National Fire Alarm and Signaling Code®, 2022 edition.

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations,* 2024 edition.

2.3 Other Publications.

2.3.1 ASME Publications.

American Society of Mechanical Engineers, Two Park Avenue, New York, NY 10016-5990.

ANSI/ASME B31.1, *Power Piping*, ~~2020~~ 2022 .

Boiler and Pressure Vessel Code,~~2021~~ 2023 .

2.3.2 ASTM Publications.

ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

ASTM A53/A53M, *Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless*, ~~2020~~ 2022 .

2.3.3 IEEE Publications.

IEEE, 3 Park Avenue, 17th Floor, New York, NY 10016–5997.

National Electrical Safety Code (NESC), ~~2017~~ 2023 .

2.3.4 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

CAN/UL/ULC 300, *Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment*, 2019.

CAN/UL/ULC 1254, *Pre-Engineered and Engineered Dry and Pre-Engineered Wet Chemical Extinguishing System Units*, ~~2020~~ 2019 .

2.3.5 US Government Publications.

US Government Publishing Office, 732 North Capitol Street, NW, Washington, DC 20401-0001.

Title 29, Code of Federal Regulations, Part 1910, Subpart S.

2.3.6 Other Publications.

Merriam-Webster's Collegiate Dictionary, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

2.4 References for Extracts in Mandatory Sections.

NFPA 17A, *Standard for Wet Chemical Extinguishing Systems,* 2024 edition.

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems,* 2023 edition.

NFPA 72®, National Fire Alarm and Signaling Code®, 2022 edition.

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations,* 2024 edition.

NFPA 122, *Standard for Fire Prevention and Control in Metal/Nonmetal Mining and Metal Mineral Processing Facilities,* 2023 edition.

NFPA 820, *Standard for Fire Protection in Wastewater Treatment and Collection Facilities,* 2024 edition.

NFPA 2001, *Standard on Clean Agent Fire Extinguishing Systems,* 2022 edition.

Supplemental Information

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17_A2023_SDM_Chapter2.docx	For Staff Use Only	

Submitter Information Verification

Committee: DRY-AAA

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Committee Statement

Committee Statement: Revised to refer to the latest editions of all referenced publications. Revised CAN/UL/ULC 1254 to reflect the correct document title.

Response Message: SR-3-NFPA 17-2022

Second Revision No. 1-NFPA 17-2022 [New Section after 3.3.4]

3.3.5 Deficiency.

For inspection, testing, and maintenance of dry-chemical fire protection systems, a condition that will or has the potential to adversely affect the performance of a system or portion thereof but does not rise to the level of an impairment. *(See also, Annex B .)*

Submitter Information Verification

Committee: DRY-AAA

Submittal Date: Fri Nov 18 12:34:37 EST 2022

Committee Statement

Committee Statement: The definitions of deficiency and impairment are necessary because the terms are used in the standard and clarify how users should differentiate between the two conditions.

Response Message: SR-1-NFPA 17-2022

Second Revision No. 2-NFPA 17-2022 [New Section after 3.3.9]

3.3.11 Impairment.

Any condition where a system, component of a system, or function of a system will not perform as intended. *(See also, Annex B .)*

Submitter Information Verification

Committee: DRY-AAA

Submittal Date: Fri Nov 18 12:36:40 EST 2022

Committee Statement

Committee Statement: The definitions of deficiency and impairment are necessary because the terms are used in the standard and clarify how users should differentiate between the two conditions.

Response Message: SR-2-NFPA 17-2022

Second Revision No. 8-NFPA 17-2022 [Section No. 11.1]

11.1 General Requirements.

~~The responsibility for inspection, testing, maintenance, and recharge of the fire protection system shall ultimately be that of the owner of the system, provided that this responsibility has not been transferred in written form to a management company, tenant, or other party.~~

11.1.1 Responsibility.

11.1.1.1*

The responsibility for inspection, testing, maintenance, and recharge of the fire protection system shall ~~ultimately~~ be that of the owner(s) of the system, provided that this responsibility has not been transferred in written form to a management company, tenant, or other party.

A.11.1.1.1

Inspection of existing installations should occur when changes in ownership, tenants, or hazard occurs.

11.1.1.2*

Where the system owner is not the operator, the system owner shall be permitted to delegate the authority and responsibility for inspection, testing, maintenance, and recharging of the system to the operator, management firm, or managing individual through specific provisions in the lease, written use agreement, or management contract.

A.11.1.1.2

A service contractor with only periodic access to the equipment, such as the fire extinguishing system contractor, does not assume this responsibility.

11.1.2

Where dry-chemical pressure containers are not attached to piping or hand hose lines, the discharge outlet shall be provided with a protective diffusing safety cap to protect personnel from recoil and high-flow discharge in case of accidental actuation.

11.1.2.1

Protective caps also shall be used on empty pressure containers to protect threads.

11.1.2.2

Protective caps shall be provided by the manufacturer of the equipment.

11.1.3 Storage.

~~Storage of charging supplies of dry chemical shall be in a constantly dry area, and the dry chemical shall be contained in metal drums or other containers that will prevent the entrance of moisture even in small quantities.~~

11.1.3.1

Storage of charging supplies of dry chemical shall be in a constantly dry area *(see 11.1.3.2)* .

11.1.3.2

Dry chemical shall be contained in metal drums or other containers that will prevent the entrance of moisture even in small quantities.

11.1.3.3

Prior to the dry-chemical chamber being charged, the dry chemical shall be checked carefully to determine that it is in a flowing condition.

11.1.4*

A service technician who performs maintenance on an extinguishing system shall ~~be trained and shall have passed a written or online test that is acceptable to the authority having jurisdiction.~~ comply with both of the following:

(1) Be trained

(2) Have passed a written or online test that is acceptable to the authority having jurisdiction

11.1.4.1

The service technician shall possess a certification document confirming the requirements in 11.1.4 issued by the manufacturer or testing organization that is acceptable to the authority having jurisdiction.

11.1.5*

A service technician that has the applicable manufacturer's design, installation, and maintenance manual and service bulletins shall service the dry-chemical fire-extinguishing system at intervals no more than 6 months apart as outlined in Section 11.3.

11.1.6*

All dry-chemical extinguishing systems shall be both inspected in accordance with the owner's manual and maintained and recharged in accordance with the manufacturer's design, installation, and maintenance manual and service bulletins.

11.1.7 Recharge Agents.

11.1.7.1*

Dry chemical provided for the system shall be listed for the system.

11.1.7.1.1

Expellant gas for stored pressure cylinders shall be standard industrial-grade nitrogen with a dew point of −60°F (−51°C) or lower (CGA nitrogen specification G10.1).

11.1.7.1.2

The dry chemical provided by the equipment manufacturer and the type of expellant gas specified by the equipment manufacturer shall be required to be used.

11.1.7.1.3

Where carbon dioxide or nitrogen is used as the expellant gas, it shall be both of good commercial grade and free of water and other contaminants that might cause container corrosion.

11.1.8

System access for inspection or maintenance that requires opening panels in fire chases, ducts, or both shall not be permitted while any appliance(s) or equipment protected by that system is in operation.

Supplemental Information

File Name	Description	Approved
17_A2023_SDM_TG3_11.1.docx	For staff use only	

Submitter Information Verification

Committee: DRY-AAA

Submittal Date: Tue Dec 06 12:50:58 EST 2022

Committee Statement

Committee Statement: The revision clarifies that the owner is responsible for the inspection, testing, maintenance, and recharging

of the fire extinguishing system, except when that responsibility has been transferred by written agreement

to another party with control over the equipment. For clarity the original text was separated into two sections

based on similar language in NFPA 72®, National Fire Alarm and Signaling Code, that has been in that

document since 2013. The Annex note also clarifies that a service contractor with only periodic access to the

equipment, such as the fire extinguishing system contractor, does not assume responsibility for the ITM&R

of the equipment. The proposed changes are consistent with similar language recently accepted by the

Technical Committee on Commercial Cooking Operations, NFPA 96.

Response Message: SR-8-NFPA 17-2022

Second Revision No. 4-NFPA 17-2022 [Chapter B]

Annex C Informational References

C.1 Referenced Publications.

The documents or portions thereof listed in this annex are referenced within the informational sections of this standard and are not part of the requirements of this document unless also listed in Chapter 2 for other reasons.

C.1.1 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 10, *Standard for Portable Fire Extinguishers*, 2022 edition.

NFPA 30, *Flammable and Combustible Liquids Code*, 2024 edition.

NFPA 72®, *National Fire Alarm and Signaling Code®*, 2022 edition.

NFPA 120, *Standard for Fire Prevention and Control in Coal Mines*, 2023 edition.

NFPA 122, *Standard for Fire Prevention and Control in Metal/Nonmetal Mining and Metal Mineral Processing Facilities*, 2023 edition.

C.1.2 Other Publications.

C.1.2.1 ASME Publications.

American Society of Mechanical Engineers, Two Park Avenue, New York, NY 10016-5990.

ANSI/ASME B31.1, *Power Piping*, ~~2020~~ 2022 .

C.1.2.2 ASTM Publications.

ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

IEEE/ASTM SI 10, *American National Standard for Metric Practice,* 2016.

C.1.2.3 FSSA Publications.

Fire Suppression Systems Association, 3601 East Joppa Road, Baltimore, MD 21234.

Pipe Design Handbook for Use with Special Hazard Fire Suppression Systems, 3rd edition, August 2019.

Test Guide for Use with Special Hazard Fire Suppression Systems Containers, 2017.

C.1.2.4 MSS Publications.

Manufacturers Standardization Society (MSS) of the Valve and Fittings Industry, 127 Park Street, NE, Vienna, VA 22180-4602.

ANSI/MSS SP-58, *Pipe Hangers and Supports — Materials, Design, Manufacture, Selection, Application, and Installation*, 2018.

MSS SP-127, *Bracing for Piping Systems: Seismic — Wind — Dynamic Design, Selection, and Application*, 2014.

C.2 Informational References.

The following documents or portions thereof are listed here as informational resources only. They are not a part of the requirements of this document.

C.2.1 US Government Publications.

US Government Publishing Office, 732 North Capitol Street, NW, Washington, DC 20401-0001.

Title 49, Code of Federal Regulations, Parts 170–190.

C.3 References for Extracts in Informational Sections.

NFPA 10, *Standard for Portable Fire Extinguishers*, 2022 edition.

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17_A2023_SDM_AnnexB.docx	For staff use only	

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Committee: DRY-AAA

Submittal Date: Fri Nov 18 22:22:36 EST 2022

Committee Statement

Committee Statement: Revised to refer to latest editions of all referenced publications.

Response Message: SR-4-NFPA 17-2022