

Tuesday e-Tech Alert May 30, 2006

Inspecting Standpipe Hose Connections per NFPA 25

Table 6.1 in the current 2002 edition of NFPA 25 summarizes the inspection, testing and maintenance requirements for standpipe and hose systems. Hose connections are required to be inspected on a quarterly basis. The reference for this requirement is Table 12.1, which addresses valves. As in several prior editions of NFPA 25, hose connections are mentioned in the valve table only with regard to pressure reducing and relief valves, which raises the question of what is expected for inspection of simple hose connections without relief valves.

Table 6.1 also requires maintenance of standpipe hose connections on an annual basis. In this case, Table 6.1 cites Table 6.2.2, which lists various components or checkpoints along with corrective actions. Section 6.2.2 clarifies that the table is to be used for inspection, testing and maintenance. With regard to hose connections, the table contains the following:

Cap missing Replace Hose connection damaged Repair Valve handles missing Replace Valve leaking Close or repair Visible obstructions Remove Restricting device missing Replace Valve does not operate smoothly Lubricate or repair

(manual, semiautomatic or dry)

Because Table 6.2.2 does not distinguish between inspections, tests, and maintenance items, the issue of what is involved in the inspection of a simple standpipe connection without a pressure reducing valve was a gray area in the past. Obviously, the inspection would include a check for signs of damage due to vandalism or other causes that might prevent the use of the hose connection in a fire emergency. But does the inspection go beyond that? Should the cap be removed to check the threads? Should the hose valve be opened to ensure that it operates smoothly?

In the 2002 edition of NFPA 25, new requirements were added in sections 12.5.5.2.1 and 12.5.5.2.2, calling for an annual test of Class I and Class III standpipe system hose valves involving opening and closing the valves, and a 3-year test of Class II hose valves. The substantiation for the change was as follows:

"Hose valves are not directly addressed by the current standard except to flow the water whenever the hose is tested, every 5 years or 3 years. It has been brought to our attention by firemen that their lives are at stake should a valve be difficult to operate or be inoperable. Exercising the valve annually would help to determine if the valve needs to be repaired or replaced. A 5-year or 3-year frequency is too long a period of time to not operate a valve. We have found, also, that most valves have no indication that they have been flowed at the time the hose was tested. This item of a sprinkler system or standpipe system is probably the most overlooked."

The Committee agreed with the submitter, but changed some of the language from what was originally proposed. The Committee's statement was as follows:

"Inspection, testing and maintenance of hose valves are not presently addressed in detail by this standard. An inspection, testing and maintenance program is essential for the proper operation of these devices and is critical to the safety of the operator."

Annex sections were also added for these new requirements in the 2002 edition, clarifying that it is possible to test hose valves without a full flow by leaving the cap in place on the hose threads.

Also in the 2002 edition, the Committee provided some of the missing detail for inspection of hose valves in a new Section 12.5.5.1:

- "12.5.5.1.1 Hose valves shall be inspected quarterly
- 12.5.5.1.2 All deficiencies shall be corrected.
- 12.5.5.1.3 Hose valves shall be inspected to ensure that hose caps are in place and not damaged.
- 12.5.5.1.4 Hose threads shall be inspected for damage.
- 12.5.5.1.5 Valve handles shall be present and not damaged.
- 12.5.5.1.6 Gaskets shall be inspected for damage or deterioration.
- 12.5.5.1.7 Hose valves shall be inspected for leaks.
- 12.5.5.1.8 Hose valves shall be inspected to ensure no obstructions are present.
- 12.5.5.1.9 Hose valves shall be inspected to ensure that restricting devices are present."

In making these changes to the 2002 edition, the Committee clarified that a quarterly inspection involves removing the cap and checking the threads, and that an annual test involves opening the valve, but not necessarily flowing water except within the capped body of the valve.

In preparing the 2007 edition of NFPA 25, the Committee decided to change all "quarterly" items in Table 6.1 for standpipe systems to "annually" on the basis of historical performance. The one exception, as decided during the public comment period, will be pressure regulating valves, which will still be required to be inspected quarterly.

Upcoming NFSA Technical Tuesday Online Seminar

Topic: Water Mist Nozzles

Instructor: Victoria B. Valentine, P.E., NFSA Manager of Product Standards

Date: June 13, 2006

Water mist nozzles have many similarities to fire sprinklers. However, they are listed and installed under completely separate standards. This seminar will highlight the installation criteria and detail the listing criteria for water mist nozzles. The applicable spaces that water mist nozzles can be used will also be discussed.

Information and registration for this seminar is available at www.nfsa.org.

NFSA to Launch "Business Thursday" Online Seminars

Building on the success of the "Technical Tuesday" online seminars that the NFSA has been conducting for many years, the NFSA will be presenting a series of ten "Business Thursday" online seminars for the second half of 2006. Aimed at the contractor or project manager rather than the technician, these seminars will follow the same format, staring at 10:30 am Eastern time and continuing for 1 to 1-1/2 hours. The schedule of dates and topics is as follows:

July 6Safety and Risk ManagementJuly 20Contract Language Pitfalls

August 10 Change Orders

August 24 Insurance "Wrap-up" Programs: OCIPs and CCIPs

September 14 Pre-Job Planning
September 28 Mold Remediation
October 19 Project Scheduling
November 2 Prompt Pay and Retainage

November 16 Water Charges: Impact and Standby Fees

December 7 AHJ Relationships

Information and registration for this seminar series is available at <u>www.nfsa.org</u>. A 30 percent discount is available when signing up for all ten seminars in the series.

2006 Basic and Advanced Technician Training, NICET Inspection Seminars

The NFSA is the only organization that offers two-week basic technician training seminars, 3-day advanced technician training seminars, and NICET-oriented inspection and testing review seminars at various locations across the United States. The 2006 schedule has been set for the following dates and locations:

2-week Basic Technician Training

August 14-25, 2006 – Seattle, WA October 16-27, 2006 – Philadelphia, PA

3-day Advanced Technician Training

October 3-5, 2006 - Minneapolis, MN

3-day NICET Inspection and Testing Certification Review

June 27-29, 2006 – Sugarland, TX July 11-13, 2006 – Edwards, CO September 6-8, 2006 – Dallas, TX November 14-16, 2006 – Anchorage, AK

For more information, contact Nicole Sprague using Sprague@nfsa.org

NFSA In-Class Training Opportunities

NFSA also offers in-class training on a variety of subjects at locations across the country. Here are some upcoming seminars in the month of June:

June 13	Quogue, NY	Residential: Homes to High-Rise
June 14	Quogue, NY	Inspection, Testing & Maintenance
June 15	Quogue, NY	Standpipe Systems (1/2 day)
June 13	Lake Jackson, TX	Inspection, Testing & Maintenance
June 14	Lake Jackson, TX	Pumps for Fire Protection
June 15	Lake Jackson, TX	Sprinklers for Dwellings

June 13	Oak Ridge, TN	Pumps for Fire Protection
June 14	Oak Ridge, TN	Hydraulics for Fire Protection
June 15	Oak Ridge, TN	Inspection, Testing & Maintenance
June 20-21	Bozeman, MT	NFPA 13 Overview & Plan Review
June 22	Bozeman, MT	Hydraulics for Fire Protection
June 20	Dallas/Fort Worth, TX	Sprinkler Protection for General Storage
June 21	Dallas/Fort Worth, TX	Sprinkler Protection for Rack Storage
June 22	Dallas/Fort Worth, TX	Sprinkler Protection for Special Storage
June 27	Oak Creek, WI	Introduction to Sprinkler Systems (1/2 day)
June 28	Menomonee Falls, WI	Inspection, Testing & Maintenance
June 29	Oak Creek, WI	Residential: Homes to High-Rise
June 28	Wilmington, DE	Pumps for Fire Protection
June 29	Wilmington, DE	Standpipe Systems (1/2 day)
June 29	Wilmington, DE	Seismic Protection (1/2 day)
June 30	Wilmington, DE	Inspection, Testing & Maintenance

For more information or to register, visit www.nfsa.org or call Michael Repko at 845-878-4207.

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