



e-TechNotes

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Significant Changes to NFPA 20 Proposed

The NFPA Committee on Fire Pumps has completed its work in proposing changes for the 2013 edition of NFPA 20. The following is a summary of the major changes that have been proposed by the committee. Note that these changes are not yet final. The NFPA membership will be voting on the documents in June 2012 and may modify the rules that end up in the final version of the 2013 edition of NFPA 20. The significant proposed changes are:

- **Water Mist Pumps** - There were a number of changes throughout the document that clarified the rules for multiple small volume positive displacement pumps that are used as a single pumping unit for a water mist system with a single controller. These changes help NFPA 20 to work with NFPA 750 and listed water mist systems.
- **Within Sight of** – There are a number of locations in NFPA 20 where it specifies that two different parts of the pump installation need to be “within sight” of each other. This term was defined as each of the items being visible and not more than 50 ft distant from the other item.
- **Pumps in Series** – There were a number of changes proposed by the committee regarding the use of pumps in series. Some of these are likely to be challenged and voted on at the NFPA meeting in June. The following changes were agreed to by the committee:
 - Modified the definition of “Series Fire Pump Unit” to only apply to fire pumps located in the same building. By definition, this would mean that pumps in separate buildings would not be considered pumps in series even if one pump takes suction directly from another pump.
 - Pumps in series would be required to be installed in the same pump room unless the second pump in series would have water delivered to the suction flange at a positive gage pressure, even with the failure of the first pump to start. Communication wiring would also have to be run between the pump rooms for this installation to work correctly. This is the item that will be discussed in more detail in June and may be overturned by the NFPA membership.
- **Age of Water Supply Tests** - A new section 4.6.1.2 was added to require that water supply tests used to determine the adequacy of water supplies be done within 12 months of the submission of the working plans.
- **Accuracy of Meters** – For flow meter lines that are looped back to pump suction or water tanks, a means will need to be included downstream of the meter to test the flow so that the accuracy of the meter can be checked. This means could be a different test header from the one used to test

the pump or there could be a pipe connecting the discharge from the meter to the test header that could be used on occasion to verify that the meter is correctly sensing the flow.

- **Elbows and Tees in Suction to Horizontal Split Case Pumps** - New three dimensional (isometric) figures were added to the annex to show correct and incorrect combinations of tees and elbows at the suction flange of a horizontal split case fire pump. Judging from the number of questions that the NFPA receives on this issue, as well as many committee members, it was felt that the public needed more help in determining what the effect of the text of the standard actually said.
- **High Rise** - The new chapter 5 that was inserted last cycle was modified to clarify a number of the ambiguous requirements. For example, there were competing statements in the previous edition about the number of automatic refill valves required for tanks. The requirement was clarified to be just a single automatic refill valve. In addition, all of the requirements for very tall buildings were brought together in a new section 5.7.
- **Reliable Power to Electric Motors** – The annex note that discusses the attributes of a “reliable” power supply was modified to remove the discussion of power outages during storms. The new text makes it clear that it is not the intent of NFPA 20 to require stand-by power for all fire pumps and that the impairment procedures of NFPA 25 could be used when power outages occurred rather than forcing everyone with an electric motor driven fire pump to install a generator.
- **Limited Service Controllers** – Rather than eliminate the limited service controller (as they did last cycle), the committee just made it more expensive to manufacturer a limited service controller by forcing the manufacturers to put the same kind of circuit breaker in the limited service control that they put in other fire pump controllers. This different circuit breaker makes the limited service controller the same as any other fire pump controller except for the lack of an isolation switch, which should bring the cost of the limited service controller very close to the cost of other fire pump controllers. Effectively, this might put an end to the limited service controller since there will be very little reason to use one. It is expected that this decision will be challenged and voted on at the June NFPA meeting.
- **Dikes and Double Wall Tanks** - The committee clarified a change that they tried to make last cycle to state that dikes are not required when double-wall tanks are used.
- **Fuel Maintenance System** - All diesel fuel tanks will be required to have an “active fuel maintenance system” installed. This is another change that is likely to be challenged and discussed at the NFPA June meeting.
- **Acceptance Test Form** - The form in the standard was updated with all of the new requirements since it was last updated.

Upcoming NFSA “Technical Tuesday” Seminar – April 6th

Topic: Hanging, Bracing and Protection of Standpipe System Piping

Instructors: Victoria B. Valentine, P.E.

Date: Tuesday, April 6, 2012- 10:30 am EST

Protecting the piping for any fire protection system, including standpipe systems, is important. One aspect of this is proper hanging and gravitational support of the piping system. Another aspect is protection from environmental conditions such as freezing or earthquakes. In addition, protection from mechanical damage and fire scenarios will be discussed.

To register or for more information, click [HERE](#) or contact Michael Repko at (845) 878-4207 or e-mail to seminars@nfsa.org.

Layout Technician Training Course (2-week course)

Fishkill, NY – October 8-19, 2012

For more information, contact Nicole Sprague using Sprague@nfsa.org or by calling 845-878-4200 ext. 149 or click [HERE](#).

Upcoming In-Class Training Seminars

The NFSA training department also offers in-class training on a variety of subjects at locations across the country, and in recognition of the current recession has adopted a new reduced fee structure. Here are some upcoming seminars:

Apr 3-4	Hillsboro, OR	NFPA 13 Overview
Apr 5	Hillsboro, OR	Sprinkler Protection for General Storage
Apr 10 (SPECIAL RATE!!)	Hayward, CA	Inspection, Testing & Maintenance for the AHJ
Apr 10-12 Industry	Libertyville, IL	3-Day Inspection & Testing for the Sprinkler
April 10-11	Willoughby, OH	Two-Day NFPA 13 Overview
April 12	Willoughby, OH	Inspection, Testing & Maintenance
Apr 12 (SPECIAL RATE!!)	Roseville, CA	Inspection, Testing & Maintenance for the AHJ
Apr 17	Denver, CO	Inspection, Testing & Maintenance for the AHJ
Apr 18	Denver, CO	Pumps for Fire Protection
Apr 19 Piping	Denver, CO	Commissioning & Acceptance Testing/Underground
Apr 24	Grand Chute, WI	Hydraulics for Fire Protection
Apr 24	Richmond, CA	Sprinkler System Installation Requirements
Apr 25	Grand Chute, WI	Plan Review Procedures & Policies
Apr 25	Richmond, CA	Sprinklers for Dwellings
Apr 26	Richmond, CA	Underground Piping/Standpipe Systems

These seminars qualify for continuing education as required by NICET, and meet mandatory Continuing Education Requirements for Businesses and Authorities Having Jurisdiction.

To register for these in-class seminars, click [HERE](#). Or contact Michael Repko at (845) 878-4207 or e-mail to seminars@nfsa.org for more information.

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About the National Fire Sprinkler Association

Established in 1905, the National Fire Sprinkler Association (NFSA) is the voice of the fire sprinkler industry. NFSA leads the drive to get life-saving and property protecting fire sprinklers into all buildings; provides support and resources for its members – fire sprinkler contractors, manufacturers and suppliers; and educates authorities having jurisdiction on fire protection issues. Headquartered in Patterson, N.Y., NFSA has regional operations offices throughout the country. www.nfsa.org.