

NFPA 25 and the Influence of Liability

NFPA 25 Summit – Addison, IL
Northern Illinois Fire Sprinkler Advisory Board/
Illinois Fire Inspectors Association



Date: July 28, 2017
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Meet the Presenter

Michael J Bosma, EVP, Viking Group, Grand Rapids, MI

- 35 Years in the Fire Sprinkler Industry in Manufacturing, Marketing, R&D, and Sales.



- NFPA 25 Primary Seat Holder since 2001 – Ma
- Past Homebuilder – Early 1980's
- Not a Lawyer! So.....
- “The opinions expressed in this presentation and on the following slides are solely those of the presenter and not necessarily those of Viking. Viking does not guarantee the accuracy or reliability of the information provided herein.

Sources of Liability Issues

Why are you Inspecting?

- Compliance with an AHJ – Permit to Occupy or do business
- Compliance with Insurance policies – Maintain coverage
- Business Continuity assurance – Good business practice
- Life Safety Issue Compliance – Nursing Home,

Who is Inspecting?

- Outside Contractor – Limited system installation knowledge
- Installing Contractor – More thorough installation knowledge.
- Maintenance Staff
- Self Inspection
- Other “Qualified Person or Company”

Sources of Liability Issues

Why are you Inspecting?

- Compliance with an AHJ – Permit to Occupy or do business
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- Business Case – Good
- Life Issue Compliance – Nursing Home,

Who is Inspecting?

- Other Limited system knowledge
- Installing Contractor – More thorough installation knowledge.
- Maintenance Staff
- Self Inspection
- Other “Qualified Person or Company”

Scope of the Contract

Sources of Liability Issues

Why are you Inspecting?

- Compliance with an AHJ – Permit to Occupy or do business
- Compliance with Insurance – Maintain coverage
- Business Contract – Good
- Life Issue Compliance – Nursing Home,

Who is Inspecting?

- Other “Qualified Person or Company” – Limited knowledge
- Calling Contractor through installation
- Staff
- Inspection
- Other “Qualified Person or Company”

Scope of the Contract

Scope of the Standard

Liability Concerns

Building Owners

- Are you checking my system for problems to create work?
- The inspection company knows more than I do about these systems!
- Will the inspection cover me in the event of an issue in the future?
- Is the inspecting contractor just looking for additional work?
- Are the inspectors truly showing up or just “Driving By”
- Does a regular inspection increase my value and lower my risk?
- Chapter 4!!!
 - Responsible for properly Maintaining a water based fire protection system
- Why can't the standard require the “experts” to give my system a complete clean bill of health?



Liability Concerns

Authorities Having Jurisdiction

- How can I ensure every system is inspected, tested, and maintained?
- Are the inspection companies “Qualified”
 - 3.3.34 Qualified. A competent and capable person who has met all the requirements and training for a given field acceptable to the AHJ.
- Trade offs were given in exchange for sprinkler systems require ongoing ITM work.
- System knowledge is often not as deep as contactor
- Balancing Economic needs with proactive safety requirements
- Future disaster would point blame on their department



Liability Concerns

Contractors

Scope of Work is operational only – Expectations are often design based

Properly noting deficiencies – Implied expertise

ie.....

Spacing

Hazard Classification

Obstructions

Design Criteria

Who else has worked on the system?

Accurate records – Hydraulic data

Considered the “expert” on site when Market conditions = Newer employee

Why can't the standard make the owners responsible for everything?

Liability Concerns

Manufacturers

50+ Year life expectancy required of systems

Life Safety and property liability exposure

ITM activities are critical for ensured operation

Liability effectively goes on forever

Has the equipment been installed properly?

Can Warranty protections be contingent upon ITM?

Why can't the standard make the owners responsible for everything?



NFPA 25 Technical Committee Make Up

Represents these concerns plus more!

- Building Owners = Inspect and correct systems
- AHJ's = Comply with Code
- Insurance Companies = Ensure Functional Operation - Property Protection
- Manufacture's = Protect Equipment
- Installers = Clear definition of Scope
- Fire Service = Ensure Operation for Life Safety
- Approval authorities = Protect Approval Standards



Hot Topics

Topics that invoke Liability Discussions

- Inspecting for recalled Sprinklers
- Tagging systems(Red, Yellow, Green)
- Extending Fire pump test cycles
- 3rd Party Inspections
- Chapter 4 (Owners chapter)
- Manufactures leaning on NFPA 25 verbiage for warranties
- Responsibility to note deficiencies, obstructions, change in Hazard, slope, un sprinklered areas, etc...
- Time frame for repairs
- Inspecting all sprinklers visually
- Insurability for the installers/inspectors
- Automated Testing



Anti Freeze in NFPA 13 and 13R facilities

- Systems installed after September 30, 2012 shall utilize Listed Antifreeze solutions*
- Systems installed before September 30, 2012 can utilize the following Maximum factory pre mixed solutions
 - 30/70 Propylene Glycol (6F)
 - 38/62 Glycerin (1F)
- Solution Mixtures can be raised (Solution %'s Not to be exceeded!) with a Deterministic Risk Assessment
 - 40/60 Propylene Glycol (-6F)
 - 50/50 Glycerin (-19)
- All solutions must be replaced with listed solutions by September 20, 2022!**
- All Antifreeze systems must be tagged and tested annually.

*ESFR Systems specifically listed with Propylene Glycol are still allowed

** Expected to be addressed this cycle – Extend the deadline?

Hot Topics

Anti Freeze in NFPA 13D



- Not typically covered by NFPA 25
- Systems installed after September 30, 2012 **shall** utilize Listed Antifreeze solutions**
- Systems installed before September 30, 2012 can be retained by tested specific gravity matching samples to be confirmed at:
 - 40/60 Propylene Glycol (-6F)
 - 50/50 Glycerin (-19F)
- Factory pre mixed solutions can be used to replace older systems not passing
 - 40/60 Propylene Glycol (-6F)
 - 50/50 Glycerin (-19)
- All Antifreeze systems must be tagged and tested annually.(Minimum Info: Date, % Concentration, Type of solution, Contactor performing the work, and noted if it was replaced or successfully tested)

Key things to Expect in an ITM project*

Contractor

- Per 5.1.1.2(ITM Summary)
- **Inspect** (in the open and from floor)
 - Valves, Gauges, Hangers, Heat trace, Signage, Pipe/Ftg, Sprinklers, Escutcheons, water flow alarm, and supervisory devices
- **Test**
 - Anti Freeze, Control Valves, Main drain, Old(50 & 75 Yr) sprinklers, Dry Sprinklers(10 yr) QR Sprinklers(20 yr), High temp(5yr) & water flow alarm, and supervisory devices.
- **Maintain**
 - Low Point Drains, Nozzles, Valves, and investigate for obstructions
- **As applicable**
 - Standpipes, Private Mains, Pumps, Water tanks, Water Spray, Foam, Mist, Components, & Obstructions.
- **Impairment Procedures and Notifications of Observations(Outside the Inspection report)**

OWNER(Chapt 4)

- Properly Maintain System
- Utilize Qualified Personnel
- Co-ordinate testing to minimize water damage
- Keep System components > 40F at all times
- Provide Ready Access and system documentation
- Provide Notification of a Shut Down
- Correct Deficiencies and Impairments
- Maintain Occupancy an Hazard classification of the facility(Or Notify of changes!)
- Provide system signage
- Keep records of system information and ITM activities

*Not a complete list



Owner



Contractor



AHJ

