C+S and more

CAMPUS FIRE SAFETY CODE TALK

Campus Fire Safety e-NewZone

What's the Risk (Assessment)?

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As college and university administrators work to balance the ever changing demands on academics, athletics and student experience, the issue of campus wide safety must always be in the mix. With passage of the Cleary Act in 1990, institutions of higher learning that participate in certain financial assistance programs are obliged to collect and maintain information relating to campus security policies and crime statistics. Embedded within the substance of the act is a provision that requires "A statement of current campus polices regarding immediate emergency response and evacuation procedures…". Although this statement is grounded in security threats, the same concepts are equally applicable to other types of events such as a weather emergency.

Notifying a large number of occupants over a large span of real estate is no easy task. The town crier might be an option to consider. Although sent out to typically deliver general instructions on new laws or general announcements, their effectiveness is marginal unless you could be within earshot of their message. Enter Mass Notification Systems-MNS. Several excellent articles on MNS have appeared in the newsletter over the last 5 years, each article addressing a part of the system hardware and software selection process.

One area involving MNS relates to the method or the approach to help school security and emergency personnel select the type and deployment of MNS that best suits the needs of the campus. The 2016 edition of NFPA 72, *National Fire Alarm and Signaling Code*® requires the completion of a risk analysis to be completed for select circumstances when MNS are being considered.

NFPA 72, Section 3.3.2.4.3 defines a Risk Analysis as:

> "A process to characterize the likelihood, vulnerability, and magnitude of incidents associated with natural, technological, and manmade disasters and

other emergencies that address scenarios of concern, their probability, and their potential consequences."

The risk analysis for MNS is outlined in Chapter 24 of NFPA 72. As you would surmise, the evaluation requires consideration of multiple scenarios. They include:

- Type of emergency. Fire, security, weather, general safety.
- Urgency. Immediate danger, future occurrence.
- Severity. Impact on function and physical structure.
- Message recipient. Individuals, parts of a building, entire building, campus.
- Instructions/Actions to take. Shelter in place, leave the building.

A theme of the risk analysis is scalability. The implementation of the MNS must be capable of offering notification to specific individuals, defined zones, buildings, city blocks, the entire campus, entire city, county or even an entire state. There are extreme (and fortunately limited) circumstances where an entire country notification may be necessary.

NFPA 72 also offers a Risk Analysis Checklist. The checklist is simply an example of what to consider. The two-part checklist is divided to look at:

1. Identification of assets or operations at risk.
2. Determination of facility hazards.

The method and tools being offered in NFPA 72 to conduct the risk analysis are but one way to evaluate your campus and circumstances. Each entity who is charged with developing the campus risk assessment, MNS selection, and protocol must be thorough and consider all potential hazards.

Why is this important now? Although MNS and the associated risk assessment protocol isn't necessarily new, its utility and expanded use in codes and standards is now in play. Several changes proposed for the 2018 editions of NFPA 101, *Life Safety Code*® and NFPA 5000, *Building Construction and Safety Code*® are now looking to mandate the risk analysis process as found in NFPA 72. During the First Draft meetings of the NFPA 101/NFPA 5000 technical committees last

summer, several proposed changes were accepted. Highlight of the changes include:

-Risk analysis for certain occupancies would be required for MNS per NFPA 72.

-The risk analysis is occupancy specific – that is, the appropriate occupancy committee must mandate the risk analysis.

-The risk analysis must address:

- Fire and non-fire emergencies.
- Specific nature and anticipated risks.
- Characteristics of buildings, areas, spaces, campuses, equipment and operations.

The next step in the NFPA standards development process involves the public comment period. Open between March 7, 2016 and May 16, 2016, this period allows you to review what has been proposed and considered. The proposed changes can be found on the Document Information pages for the codes. The changes that have been accepted, as well as the proposed revisions that did not get accepted can be found at:

www.nfpa.org/101 for the *Life Safety Code*.

www.nfpa.org/5000 for the *Building Code*.

Go to the next edition tab and click on the first draft report. The following table will help guide you to the changes relating to MNS that are being contemplated for the 2018 editions.

NFPA Code Chapter	Potential Change-NFPA 101	Potential Change-NFPA 5000
Building Service and Fire Protection Equipment	FR 1006	FR 1505
New Assembly	FR 11	FR 7

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New Educational	FR 2023	FR 3008
New Hotel/Dormitory	CI 6001	CI 7004
New Apartment Building	CI 6002	CI 7011
New Mercantile Occupancies	CI 5533	CI 6501
Existing Mercantile Occupancies	CI 5534	N/A
New Business Occupancies	CI 5508	CI 6502
Existing Business Occupancies	CI 5532	N/A

Key: FR – First Revision-Change in place for now.
CI – Committee Input-change being contemplated.

The committee deliberations thus far have focused on how to deal with new vs. existing occupancies and limiting where the risk analysis should be applied. For example, should it be applied to all new hotels/dormitories or only new hotels/dormitories used in the K-12 and university environments. Be on the look-out for more updates from NFPA later this year.

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