Pre-Planning Fire Emergencies – Part 1

Background: When a property event occurs, it is too late to conduct the pre-planning that can help emergency responders act efficiently and effectively. Here are some tips for planning ahead.

Organizing Responder Tours

An important first step is to facilitate a visit to your property by the fire department that will respond to your site. Public responders often seek to visit larger facilities to develop pre-emergency plans and be better prepared to provide service. Site staff should welcome such visits as a way to better protect their assets. In order to make site visits more productive for both the responders and site staff, some key talking points should be prepared in advance, such as target hazards present, fire protection, utilities locations, and evacuation plans.

The tour is best started from the street side of the property. At the conclusion of the tour, it is helpful to have a closing session with the responders to discuss evacuation plans and other preparedness actions already in place. This interface allows the responders to ask questions and to offer suggestions based on their experience with other properties.

Improving Access

One of the greatest challenges responders face is gaining access to the specific emergency location within a building. This problem falls into three areas:

- Lack of door identification relevant to emergency location(e.g., not knowing which door is closest to the fire);
- Locked doors; and
- Insufficient width of access roads, walkways, and building perimeters.

Identifying Doors

Gaining access to a property is a critical step in controlling an emergency and reducing losses. Delays in gaining access increase losses and as such should be minimized however possible. During an emergency, time is critical. During a fire, every minute lost trying to reach the fire is another minute the fire grows. Being able to access an emergency via the closest door can save invaluable time that may be needed to bring equipment to the emergency or take an injured resident out of an area.

Traditionally, site staff has provided responders with direction via the 911 emergency dispatch systems. One piece of information often provided is where the emergency is in a building. However, that information is may be based on the site staff's knowledge of a property and not how a responder would view it. As previously discussed, responders may not know that the west side of the building is where the community room is. Moreover at 2:00 AM, which side is the west may be unknown (most responders do not carry compasses).

Solution

As much as warehouses number dock doors to facilitate truck deliveries, we can identify entry doors to speed emergency services delivery. By marking both sides of a door with the Building Side (e.g., A, B, C, or D) and the Door number, sequential from left to right, responders can quickly gain access to a building using

information provided by site management. Modern security alarms typically allow for customization of alarm initiation device titles, which can also be used to provide the police with better location information.

For example, the alarm system could be programed to identify each initiation device by its location on the property, such as Door A1 .This would be known to the responders as the 1st door, starting from the left, on the street side of the property. This type of number system saves time in gaining access and will enhance the security of the building. In a similar fashion, fire alarm pull stations and fire protection zones could also be so numbered.

Locked Doors

Locked doors are a deterrent to crime, but they slow responders trying to access buildings. At times, locked doors can also lead to increased property loss, even when no fire exists, such as false alarm trips. When responding to a fire alarm, responders must assess conditions and the circumstances surrounding the alarm to determine if it is real or a false alarm. On arrival at a property, the responder needs to decide rapidly if the alarm is real or a false trip. Several common approaches are used, including scanning the building with thermal imaging cameras, checking doors and windows for heat, and, of course, looking inside for a fire.
Waiting for site staff to arrive to unlock the building is risky. A fire could be growing unchecked in the building while waiting for a key. Thus, most fire officers opt for forcing a door to gain entry to the building. In doing so, the door that is forced open is usually damaged heavily, often beyond repair. If no fire is found, the property has sustained damage, which could have been avoided had the fire department had a key.

Solution

Providing responders with keys to access a property can save time and property damage. Public responders and manufacturers have developed key retention systems (e.g., Knox Box). In its most fundamental form, a key retention system uses a key retention box mounted to a building. The box contains the required keys for the building. Within a community, all of these boxes are keyed alike, which allows the responders to carry only one, non-duplicable master key.

However, property owners should discuss key retention systems with the local fire department before making any purchase. Many fire departments have key systems in their apparatus, or in some cases have adopted local codes requiring key systems. Boxes are available both for installation during new construction and as add-ons to existing buildings. In new construction, the box is cemented into the building near the main building entrance. Post construction installation requires the box to be bolted to the building using anchor bolts that penetrate deeply into the framing of the building.

Key Security

A master key box is mounted inside the responder's vehicle (e.g., fire engine, police, car, etc.) to secure the master key. The master keys cannot be duplicated, other than by the manufacturer. Strict controls are employed by the box manufacturer to limit who can request replacement keys, typically requiring multiple signatures and a notary's seal. The master box is secured from unauthorized access by a locking device that can be only opened using a unique combination or by a radio signal. In the combination style master box, each responding officer has a unique combination, which when entered is data logged before the box can be opened. The radio release master box functions in a similar fashion, except that a tone decoder's signal is transmitted by radio to open the in-vehicle master box, thereby releasing the master key. That signal and the person requesting the release of the key is recorded by the responder's dispatch center.

Advantages

One key allows different responders to be "first due," without waiting for the primary responder. In addition to the time saved accessing the building, key entry systems also aid in securing a property following an emergency or a false alarm. Without key systems, entrance doors that are locked will be forced open. This then leaves the building unsecured when the responders leave. By using a key, the responders can secure

the building when they leave. This is especially helpful for false alarm events and smaller incidents, which are often controlled long before the arrival of site staff.

Next month's technical bulletin will provide additional details on preplanning for fire.

If you have any questions or would like additional information, please contact your risk management consultant, or NJPHA-JIF safety director, Jim Rhoads at 610-937-2694 or by e-mail at james_rhoads@pmagroup.com.