Welcome to 2012, on behalf of the executive board of the NJ Chapter of the SFPE I wish everyone a happy, healthy, prosperous and SAFE New Year. When I hear the story of the shoemakers kids needing shoes repaired I wonder how many of our members are practicing good fire/life safety in their homes. Have you had the furnace and any fire place chimneys inspected and cleaned? Do you have all the smoke alarms or smoke detectors as required? Have they been inspected and tested? Smoke detectors require your fire alarm company to come out and inspect the system and all of its components such as the battery and any off premises connections. If you have smoke alarms are they interconnected and has that been tested? Are the batteries fresh and the circuit breaker (s) marked? What about CO detection is it properly installed and maintained?

Do you have children? Perhaps you are a caregiver for an older adult, do you have a plan in the event the alarm goes off? Do all residents in your home have at least two ways out? Ok one last question, I know that all of our members are not also members of NFPA but do you take advantage of the information offered to all by NFPA? Current topics at the NFPA website are Holiday tragedies prompt warnings on winter fires, NFPA offers tips on how to properly store and dispose of seasonal decorations, New NFPA report: Children Playing with Fire, High-rise fires cause quarter billion dollars of property damage a year. Also available on the NFPA website is access to the Fire Sprinkler Initiative which is pushing for residential sprinklers in one and two family homes. Currently there are towns that find savings in the infrastructure when new developments are built and fire sprinklers are installed in all new homes thereby reducing the size and cost to the city for the larger water mains.

Another great source for fire safety information is from the U.S. Fire Administration who is an entity of the Department of Homeland Security’s Federal Emergency Management Agency, the mission of the USFA is to provide national leadership to foster a solid foundation for our fire and emergency services stakeholders in prevention, preparedness and response. The USFA offers numerous safety bulletins, reports and weekly “Coffee Break Training” articles often found copied within the Fusible Link.

There are many places to get information on fire and life safety issues on the internet; they are there for you to use and share with other members of your communities who are not in the life safety industry.

So, again I wish you and yours a happy, healthy, prosperous and safe New Year.

Ed Amm
Chapter President
At 6:10 pm the Chapter meeting was convened by President Ed Armm followed by pledge of allegiance to the Flag. All present introduced themselves and Robin Pitt was voted in as a new chapter member. The minutes from the Oct general meeting as published in the Fusible Link were voted on and approved. Treasurer's Report – The report was read but not accepted because board hasn’t reviewed.

Phil McGrath noted they will be sponsoring a fee seminar at Seton Hall January 5, 2012 on solar systems (see insert in this edition) and in Princeton (Jan. 6th).

The NJ chapter received Bronze Award from National SFPE.

Technical meeting – John Cholin of JM Cholin Assoc.

Dust
- OSHA enforcement initiative was started a few years ago due to the significant number and severity of dust explosions and resulting injuries and deaths
- 80% of OSHA inspections result in citations (for other industries it is about 50%)
- Citations generally for housekeeping, electrical violations, dust collectors (they want it them outside) and training
- They Generally use NFPA Standards now
- OSHA is working on a dust regulation but are behind schedule
- State and local governments are not really knowledgeable on dust exposures and NFPA codes
- NFPA Dust related codes are 654, 664, 484, 61, and 655. There are also may other NFPA standards that refer to dust and the above. Note that the different NFPA Standards conflict in some areas.
- NFPA to make new standard 652 and will attempt to consolidate common issues on dust and existing dust standards. It will also refer to other standards
- The biggest dust threat is accumulated fugitive dust 1/8” and less of accumulated dust can be a problem
- Processing area cleaning costs are 10 times the cost of keeping dust within processing equipment.

Massachusetts Firefighters Back Tighter Sprinkler Code
January 4, 2012

Fire sprinklers save lives and contain property damage. That's the message some Massachusetts area fire chiefs are spreading as they join chiefs and firefighters across the state who are protesting a building code in Massachusetts that does not require sprinklers for new one- and two-family homes. Two points are stressed in their argument: technology is available and should be required, and the safety benefits far outweigh the costs.

Sprinklers, in most cases, put a fire out before it has a chance to spread. Sprinklers go off only in the area of the fire, one proponent points out. More proponents add: only the presence of a residential sprinkler system could immediately contain a fire and allow my family to escape before fire and products of combustion produce an untenable atmosphere and a sprinkler system is almost like having a firefighter at the early stages of a fire.

Officials from every major fire service organization in the state, including representatives from Fire Chiefs Association of Massachusetts, Fire Prevention Association of Massachusetts, the Massachusetts Call-Volunteer Firefighters Association, and the Professional Firefighters of Massachusetts, gathered in Boston recently to protest the new building code.

The Board of Building Regulations and Standards announced a building code for the state in August that omitted the provision carried in some other states to require home fire sprinklers.
Residential Sprinkler Systems: Consideration of Policy and Litigation Strategies for Reducing Residential Fire Injuries

Introduction

Each year in the United States, thousands of people die needlessly in house fires. Many more suffer non-fatal injuries and need to contend with the financial and emotional recovery associated with fire-related property damage. Many of these deaths and injuries can be prevented by the use of sprinkler systems, a technology that is more than a century old. But in recent decades the home building industry, with a few exceptions, has generally opposed policy efforts to mandate the inclusion of sprinkler systems in new one- and two- family homes, asserting that such a mandate would make new homes too expensive for some potential buyers.

In 2009, 2,565 people died in house fires (excluding fire service deaths); 13,050 people were treated in emergency departments for house fire-related injuries; and residential fire-related property loss cost an estimated $7.8 billion in the US. These losses are preventable.

Sprinkler Technology and Mandates for its Use

Sprinkler technology dates back to the 19th century. Early sprinkler systems were manually activated, but within decades the technology would evolve to make automatic sprinkler systems viable. The first patent for an automatic sprinkler system was issued in 1872. These early sprinkler systems were used in commercial settings where insurers offered incentives to business owners that offset the costs of installation. While the benefits of sprinklers to protect goods and property were realized early, the application to homes and the potential to prevent fire deaths is a late 20th century contribution. With the residential application of sprinkler technology, sprinkler systems have emerged as a very important strategy among fire prevention professionals for preventing fire-related death and injury and reducing fire loss. Modern sprinkler systems respond automatically and require minimal maintenance once installed. Unlike smoke alarms that alert occupants to the presence of smoke, sprinkler systems extinguish or control fires. Residential sprinkler systems have been field tested for decades and have a solid track record of providing a consistent, effective response to fire that results in dramatic reductions in property loss and the risk of fire-related death.

In the United States, most states and/or municipalities have adopted codes that require fire sprinkler systems in new commercial structures, high rise buildings, hotels and multi-family residences. Some also require retrofit provisions in these types of buildings. However, one- and two-family homes -- where most residential fires occur -- are currently subject to few or no sprinkler mandates. Without a national requirement to include sprinkler systems in new one- and two-family home construction, uptake of this life saving technology has lagged. The Home Fire Sprinkler Coalition estimates that 2 percent of one- and two-family homes in the United States are sprinkler-equipped. Recently, some gains have been made to expand the current policies to include one- and two-family homes. At the local level, over 300 ordinances now require sprinkler systems in new construction.

In 2008, the International Code Council (ICC) bolstered these local level advocacy efforts with a vote to include a sprinkler requirement for new townhouses and one- and two-family homes in the 2009 edition of the International Residential Code (IRC), effective January 2011. With this code change, all national model building codes require sprinklers in one- and two-family homes. (The National Fire Protection Association’s 2006 editions of NFPA 1, Uniform Fire Code, NFPA 101, Life Safety Code and NFPA 5000, Building Construction & Safety Code require fire sprinkler systems in one- and two-family homes.) These codes offer a minimum standard for building safety, and provide a foundation for residential building codes nationwide. In some states, such as California, Maryland and South Carolina, policy-makers adopted the 2009 version of the IRC.

Other states have not embraced the code changes, and instead have taken action to explicitly prohibit adoption of the sprinkler requirement as part of the building code. For example, Florida passed a law that prohibits incorporation of the residential sprinkler mandate into the Florida Building Code. A recent decision in Missouri requires builders to offer purchasers the option of including sprinklers as part of their new home. This “mandatory option” is also policy in some localities, but such an approach falls short of requiring the technology in new homes.
Preemption has also emerged as a strategy for rejecting the sprinkler mandate. Recently, homebuilders and others who oppose residential sprinkler mandates have supported the introduction of preemption bills at the state level to prevent localities from adopting laws or regulations that would require sprinklers in homes. As noted previously, hundreds of communities have used local authority to require sprinklers in new home construction. Several states have adopted into law preemptive language, and additional bills are pending. These policies do not impact an individual’s voluntary choice to install sprinklers. They would, however, make it impossible for localities to ensure that all residents of new single family homes benefit from sprinklers.

Research to understand public opinion on residential sprinkler policy, and how to effectively mobilize support for residential sprinkler mandates in light of these new strategies, is needed. The decades of advocacy work on this issue hold valuable lessons for future public health policy advocacy. There is a need to better understand past successes in order to inform future strategies that address the new challenges posed by preemption and policies that exempt jurisdictions from the residential sprinkler requirement of current code. In the absence of new approaches to legislating and regulating residential sprinklers, litigation is a promising option.

**Litigation as a Strategy for Change**

Trial law has a history of intervening to protect the public, especially when legislation and regulation, on their own, have been ineffective. In fact, Prosser mentions the use of tort law as a tool for preventing and not just compensating injury. In the matter of house fire deaths and injuries, litigation can be an effective tool to foster the widespread use of sprinklers in one- and two-family, newly constructed homes.

A home designer’s and builder’s failure to provide sprinklers or to offer a sprinkler system as an option in the construction of a new home arguably could create liability, given the foreseeability of house fires and the effectiveness of sprinklers as a lifesaving intervention. If a lawsuit is brought against a one- or two-family home designer or builder who did not provide or offer a sprinkler system in a newly constructed home, resulting in fire-related injuries to the occupants, the cause of action could be negligence per se if it is in a jurisdiction requiring the inclusion or an offer to include sprinklers. Negligence per se refers to situations in which liability arises through the violation of a law. In jurisdictions that have not legally required the offering or inclusion of sprinklers in newly constructed homes, ordinary negligence or strict liability likely would be the theory on which an action is based. In these instances, negligence would be established by demonstrating that the home designer or builder had failed to exercise the standard of care that a reasonable person would have used in similar circumstances. A strict liability theory would argue that the home designer or builder had an absolute duty to use sprinklers to make the residence safe.

One might expect that a defense in such a negligence action would be that few, if any, designers and builders in that jurisdiction provide sprinkler systems in newly constructed one- or two-family homes. Such a defense could be countered with the holding in the famous *T.J. Hooper* case in which Judge Learned Hand wrote:

> Indeed in most cases reasonable prudence is in fact common prudence, but strictly it is never its measure. A whole calling may have unduly lagged in the adoption of new and available devices....Courts must in the end say what is required. There are precautions so imperative that even their universal disregard will not excuse their omission.

Another defense that could be anticipated is an aspect of preemption, in which a defendant argues that the state’s or locality’s decision not to mandate sprinkler systems in newly constructed homes is dispositive of policy-making on the subject and therefore prevents a court’s imposition of liability. But the Supreme Court ruled in 2002 that lawsuits are not preempted simply because government has considered an issue and chosen not to take regulatory action in a particular area.

Media sources indicate that lawsuits against home builders and managers of residences, which allege that the lack of a sprinkler system contributed to injuries or deaths, have been filed. We could not, however, identify any reported cases in this area as of 2010. However, in a number of other product injury areas, litigation against manufacturers has led to changes in products to make them safer.

The wisdom of residential sprinklers is clear. Unfortunately, the policy landscape on this issue has become increasingly polarized, leaving many communities powerless to mandate sprinklers as a strategy to protect their residents against the harms associated with residential fires. The courthouse offers an alternate path within states where localities are prohibited from making policy on this issue. The courthouse can also serve as a venue for assuring that residential sprinkler mandates are realized. Where state and local governments require residential sprinkler systems, litigation can provide an incentive for compliance as well as a mechanism for punishing non-compliance. Where such systems are not required by law, designers and builders who omit a safety feature that is mandated by nationally recognized codes and standards may also provide an avenue for action. In this way, litigation can offer a new strategy for realizing the tremendous lifesaving potential of a technology that has for too long remained outside of the residential codes that set the standards for safety in the buildings that millions will call home.
Downward Trend in High-rise Fires
January 1, 2012

According to the NFPA report, “High-Rise Building Fires,” there has been a downward trend in high-rise fires over the last few decades. The trend appears to track with growing use of fire prevention systems including wet pipe sprinklers in tall buildings and changes in building codes and standards. Fires in high-rise buildings cause about $230 million in property damage and take more than 50 lives a year.

But the report still concludes: “By most measures of loss, the risks of fire and of associated fire loss are lower in high-rise buildings than in other buildings of the same property loss.”

But high-rise buildings tend to present a lower risk of fire and associated losses than lower-rise building, according to a report by the National Fire Protection Association (NFPA). Overall, an estimated 2.6 percent of all 2005-2009 reported structure fires were in high-rise buildings.

According to the report, “High-Rise Building Fires,” in 2005-2009, there were an average of 15,700 reported structure fires in high-rise buildings per year and associated losses of 53 civilian deaths, 546 civilian injuries, and $235 million in direct property damage per year. Four property classes accounted for roughly half of high-rise fires: office buildings, hotels, apartment buildings, and facilities that care for the sick. In these four property classes for the 2005-2009 period, there were 7,800 reported high-rise structure fires, 30 civilian deaths and 352 civilian injuries per year.

Structure fires in these four property classes resulted in $99 million in direct property damage per year. The NFPA report emphasizes these four property classes and notes that some other property uses—such as stores and restaurants—may represent only a single floor in a tall building primarily devoted to other uses. Also, some property uses—such as grain elevators and factories—can be as tall as a high-rise building but without a large number of separate floors or stories.

Other findings from the report:
• Most high-rise building fires begin on floors no higher than the sixth story. The fraction of 2005-2009 high-rise fires that began on the seventh floor or higher was 32 percent for apartments, 22 percent for hotels and motels, 21 percent for facilities that care for the sick, and 39 percent for office buildings. The risk of a fire start is greater on the lower floors for apartments, hotels and motels, and facilities that care for the sick, but greater on the upper floors for office buildings.

• High-rise apartments have a slightly larger share of their fires originating in means of egress than do their shorter counterparts (4% vs. 3%) but in all four property classes, the differences are so small that there really is no evidence that high-rise buildings have a bigger problem with fires starting in means of egress.
MEETING NOTICE

Date: January 9, 2012
Place: 400 Interpace Parkway
Parsippany, NJ 07054
Price: $30.00
Dinner: 5:00-6:00 (Cash bar for mixed drinks)
Dinner at 6 PM
Topic: Ignitable liquids—results of the recent FM testing—
Speaker: John Leblanc FM Research Corporation

Please note for this meeting:
All officers, directors and committee chairman are requested to attend a meeting at 4:00 p.m. at the Hanover Manor.
# Meeting Dates/Programs 2011-2012

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<td>January 9</td>
<td>Ignitable liquids—results of the recent FM testing—John Leblanc who is from FM Research Corporation</td>
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<tr>
<td>February 6</td>
<td>Hazards of solar panels</td>
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<td>March 5</td>
<td>Forensic view of the fire sprinkler failures</td>
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<tr>
<td>April 20</td>
<td><a href="#">3rd Annual NJSFPE/AFAANJ Symposium and Trade Show</a> a full day of presentations and vendors. CEU's to be had.</td>
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<td>May 7</td>
<td>NFPA 3</td>
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<td>June 4</td>
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<td>June 18</td>
<td>Golf Outing—West Point Big fund raiser for the joint NY &amp; NJ Scholarship.</td>
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AFSA  http://www.firesprinkler.org/
ANSI  http://web.ansi.org/
ASHRAE  http://www.ashrae.org/
Campus-Firewatch  http://www.campus-firewatch.com/
Coffee Break Training  http://www.usfa.dhs.gov/efa/coffee-break/
CPSC  http://www.cpsc.gov/
CSAA  http://www.csaaul.org/
Municipal Codes (E Codes)  http://www.generalcode.com/Webcode2.html
FM Global  http://www.fmglobal.com/
FSDANY  http://www.fsdany.org/regsl.htm
PSI  http://www.firesprinklerinitiative.org/
FSSA  http://www.fssa.net/
Fire Tech Productions—Nicet Training (FTP)  http://www.firetech.com/
Home Fire Sprklr Coalition  http://www.homefiresprinkler.org/
AFAA-NJ  http://www.afaaa.org/
National of Fire Equipment Distributors (NAFED) -  http://www.nafed.org/index.cfm

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