

**STATE FIRE PREVENTION COMMISSION  
MINUTES  
December 20, 2018**

Members Present: Joseph Scheffey, Vice Chairman  
Douglas Alexander  
Emily Devan  
Kevin Simmons  
Edward Tochterman, Jr.  
Stacy Welch

Members Absent: Charles D. Davis, Chairman  
Mark Bilger  
K.C. Harrington

Vice Chairman Scheffey presided over the meeting in the absence of Chairman Davis. Vice Chairman Scheffey called the meeting to order at the Maryland State Police Headquarters in Pikesville, Baltimore County.

A moment of silence was observed for Deputy State Fire Marshal Sander Cohen who passed away one year ago.

Commissioner Devan was appointed to the Commission on November 7, 2018, and this is her first commission meeting. Each Commissioner gave a brief self-introduction.

Motion, seconded, and unanimously carried to approve the October minutes.

**FIRE MARSHAL REPORT**

The Office of the State Fire Marshal (OSFM) currently has five sworn and six civilian vacancies. The sworn applicants are both lateral and non-lateral. The top candidates will proceed to the polygraph and background check phases of the hiring process. The civilian vacancies are in various stages of the hiring process. The Public Information Officer position has been advertised and some applications have been received. Deputy State Fire Marshal (DSFM) Martina Burton was recently hired and will attend the law enforcement academy starting in January. DSFM William Pennock has successfully completed the academy and has been assigned to the Upper Eastern Shore Region. DSFM Don Brenneman recently retired after 20 years with Maryland State Police and many years with the OSFM.

In response to an inquiry regarding longevity and recruitment, Fire Marshal Geraci responded that most DSFMs remain for the full years of service before retiring. A few move on to other agencies, such as ATF, before reaching retirement. Recruitment for sworn positions has been good particularly now that lateral applications are being accepted. A lot of the younger applicants have fire service backgrounds. The struggle is to get qualified applicants for the engineer and inspector positions. The engineer salary is an issue. The Fire Marshal will research competing salaries and contact the Department of Budget and Management to discuss salary and recruitment issues for engineers. The inspectors received a three paygrade increase in July 2018 so that should help get more qualified applicants for those positions.

Confirmed fire fatalities for 2018 stands at 62 compared to 71 in 2017. Seven deaths are still pending an official cause from the Office of the Chief Medical Examiner. Information should be forthcoming in a couple weeks.

The National Association of Fire Marshals provided training on construction site fire safety to personnel on December 4<sup>th</sup> and 5<sup>th</sup>. This is a pilot training course and was attended by approximately 60 persons between both days. The course will be updated and presented again next year.

Regional offices have been provided with an automated external defibrillator device and a bleeding control kit. Staff will be trained on how to use the kits and perform CPR in January and February.

A legislative bill has been proposed to amend the carbon monoxide law to only require detectors in rental units that utilize devices emitting carbon monoxide or is attached to an unventilated garage. There may also be a legislative challenge to the requirements for residential sprinkler systems.

Several responses have been received from organizations that were invited to participate in the Fire and Explosive Investigation Advisory Workgroup. Further contacts will be made after the holidays with an update provided at the February meeting.

## **CHIEF FIRE PROTECTION ENGINEER REPORT**

CFPE Ken Bush introduced former CFPE Larry Iseminger who was in attendance. Mr. Iseminger retired from the agency after almost 40 years of service and has returned as a part-time contractual engineer in the Western Region.

CFPE Bush reported NFPA made some changes to NFPA 1 and NFPA 101 after the Code Update Committee's review and the Commission's vote to move forward with the proposed amendments. This information was distributed to the committee and commission members via email from Secretary Ritchie. CFPE Bush provided written copies of the changes to insert into the code books previously distributed. The changes were made by NFPA as part of its Tentative Interim Amendment process and are included in official versions of the books that will be adopted as part of the State Fire Prevention Code. NFPA 101 added some new paragraphs under Section 9.11.4 so the proposed state amendment had to be modified to reflect the correct numeration. A new Section 42.12 extracted from NFPA 30A for mobile fueling was added to NFPA 1. There are no state amendments associated with this section.

The proposed amendments to the State Fire Prevention Code are currently being held at the Governor's Office. After February 11<sup>th</sup> they may be forwarded to the AELR committee for review. This will delay the adoption of the 2018 codes.

One application for the full-time engineer for the Western Region was received in the past week and an interview will be scheduled. An application has also been received for the contractual engineer position for that region. Hopefully both positions can be filled in the near future.

There is one company that is now making a listed antifreeze for fire sprinkler systems to protect it to minus 10°F.

The International Code Council is proceeding with the adoption of new codes. Official results should be available in January. One issue that was presented is trash pickup in residential buildings. Trash is being placed in hallways and there are restrictions as to the types of containers and where they can be placed. There are concerns about combustibles in and the blocking of exit passageways.

An engineer and other staff members visited with the Louisiana Fire Marshal's Office to review its electronic administrative systems to incorporate inspection and investigation forms as well as licensing and billing. They had positive comments and it would be nice for Maryland to move towards modernizing to use such systems. The cost will be a major factor. The South Carolina Fire Marshal's Office is also considering it to streamline its operations.

The OSFM has been working closely with the health department and the attorney general's office regarding addiction recovery homes. Homeowners would receive compensation to house recovering addicts in what are considered one- and two-family dwellings. Further direction from the attorney general's office is needed before determining how to classify these homes and how to apply fire code requirements. At this point it is unknown how many such homes there will be. The health department is currently developing regulations and the funding structure. The issue is how the individuals will be classified. If they will be classified as part of the family then the homes would be considered single-family and not subject to the State Fire Code. If they are classified as individuals and there are more than five outsiders plus the staff or operator, then it is considered multi-family, like a group home, and the fire code would apply. When formulating regulations for these homes, consideration will have to be given to federal guidelines and the Fair Housing Act. The 2018 building code has introduced a new classification called congregate living—relationships between the occupants are not considered; if the total number of residents exceeds five then it would be regulated by the building and fire codes.

## **VICE CHAIRMAN REPORT**

Vice Chairman Scheffey reported the Commission has received two appeals which will be heard at the February meeting commencing at 10:30 a.m. Blackwater Distilling is appealing the Queen Anne County Fire Marshal's decision to require a fire sprinkler system. The other appeal is from an individual who has been denied a fireworks shooter permit by the State Fire Marshal's Office.

## **OTHER BUSINESS**

### **Maryland Building Codes**

Mr. Matt Helminiak introduced himself. He is the Commissioner of Labor and Industry for the State of Maryland. The building code is part of the Division of Labor and Industry in the Department of Labor, Licensing, and Regulation (DLLR). Mr. Helminiak reported that the proposal to adopt the 2018 building codes is scheduled for publication in the Maryland Register on January 4, 2019. Depending on any comments received during the 30-day public comment period, final adoption should occur in March. Two sets of codes are maintained by DLLR—the Maryland Building Performance Standards (MBPS) which are the codes that the counties adopt for stick-built homes and the Maryland Performance Code (MPC) for industrialized modular construction. The MBPS will adopt the 2018 editions of the International Building Code (IBC), International Residential Code (IRC), and International Energy Conservation Code (IECC). The MPC includes these codes plus the Mechanical Code, Plumbing Code, and the 2017 edition of NFPA 70 National Electrical Code. The IRC contains provisions for tiny homes and questions have arisen regarding sprinkler requirements. Counties will have twelve months from Maryland's adoption date to at least adopt the IBC, IRC, and IECC.

Mr. Helminiak contacted Allegany County and explained that the 2018 adoptions will be forthcoming and the county administrator stated he would discuss it with the county commissioners. The last code adopted by Allegany Code are the 2009 editions. As such they have not been enforcing the residential sprinkler requirements. DLLR has no enforcement authority to compel the counties to adopt the newest edition. Although the law specifies they have to adopt the codes the State adopts, there is nothing in the law to compel them to do so. Allegany County is the only county still using old codes. CFPE Bush clarified it is a different law that prohibits counties from weakening the energy or the sprinkler requirements. Allegany County amended its code to not include residential sprinkler requirements because they adopted the 2009 IRC which did not require sprinklers, but in doing so they violated the other law. They claim the cost of sprinklers make building a home in Allegany County less affordable than in adjoining states such as West Virginia and Pennsylvania. The options for various legal and legislative actions were discussed. Mr. Helminiak will continue to monitor Allegany County's actions. CFPE Bush reported one complication the OSFM has encountered is when a licensure request to conduct a fire safety inspection is received for a family day care home or foster care home. These requests come from the licensing agency and when a home is found that should have been sprinklered the OSFM would recommend it not be licensed. The OSFM has no authority to enforce residential sprinkler requirements. Fire Marshal Geraci reported the Maryland State Fireman's Association is considering contacting the Attorney General about the lack of sprinkler enforcement since it impacts its membership's firefighting safety.

Mr. Norman Wang introduced himself. He is the Director of Building Code Administration under DLLR. The state has been requiring sprinklers in all modular homes and one- and two-family dwellings. DLLR has authority over all modular homes placed in Maryland so when documentation of a modular home is received, DLLR requires sprinklers. This results in complaints from the builder's manufacturer because Allegany County doesn't require sprinklers. Since no documentation goes through DLLR for stick-built homes, it is not aware of these homes and cannot control the county's lack of sprinkler requirements.

### **High-Rise Task Force**

Vice Chairman Scheffey reported on the progress of the High-Rise Task Force recommendations and for the benefit of newer commissioners, provided a history of the task force's work. At a previous meeting, a majority of the commission members voted to designate unsprinklered residential high-rise buildings as an inimical hazard and some members were interested in options to improve the level of safety other than retroactive sprinkler systems. Task Force members included Vice Chairman Scheffey, Commissioner Tochtermann, CFPE Bush, Ron Wineholt with the Apartment and Office Building Association, and Montgomery County Deputy Fire Chief Matthew Carrigan. These members were present for today's commission meeting. Joe Felton of Montgomery County also participated on the task force. Vice Chairman Scheffey thanked everyone for their participation who on most issues were able to agree on a consensus. Vice Chairman Scheffey will prepare a

comprehensive written report for the Commission to consider in February. Generally the task force will propose four options:

- 1) Complete retroactive automatic sprinkler protection or water mist system for situations with a low water supply. Jerry Back of Jensen Hughes verified that a water mist system in a high-rise in most situations is not a cost effective or practical solution.
- 2) Comply with NFPA 101 Chapter 31 requirements for existing high-rise residential structures which would either require sprinklers, every dwelling unit to exit directly to the outside, or an approved engineering life safety system. Most engineers will not do performance-based assessments and that option is proposed to be deleted in the next NFPA 101 code cycle.
- 3) The task force's improved level of safety recommendations based on various requirements of NFPA 101 Chapter 31. This may include standpipe systems, fire service elevators, some type of kitchen fire suppression system, exit corridor protection, protection of vertical openings and other high hazard areas in the building, rated doors, automatic fire alarm system, adequate exits, and emergency power. For nonsprinklered buildings with combustible exterior insulation, compliance with NPFA 285 is proposed.
- 4) Vice Chairman's Scheffey's option, which did not receive unanimous agreement among the task force members, is essentially Option 3 but more cost effective. It includes the most important aspects of fire department operations including standpipes and fire department elevator operation, cooking hazard protection, emergency power, fire alarm system that sounds throughout building (not necessarily an automatic system as in option 3), and compliance with NFPA 285 for nonsprinklered buildings with combustible exterior insulation.

There is some language as to what type of kitchen fire suppression system would be approved since some systems have not yet been laboratory listed. It was noted that unless determined to be an inimical hazard, existing buildings are not required under the State Fire Prevention Code to meet the requirements of NFPA 101 Chapter 31. Since the Commission has already ruled on the inimical hazard, the OSFM could begin enforcing existing requirements. High-rise buildings in Maryland have been required to be sprinklered since 1975 and standpipe systems have been around before that. It may be difficult in some older buildings to determine if code requirements were met at the time of construction.

The task force focused on residential structures, mainly apartments and condominiums. Most other high-rise occupancies in Maryland are already sprinklered. Of the jurisdictions contacted (Montgomery County, Prince George's County, Baltimore County, and Ocean City) there are approximately 124 residential high-rise complexes that are not fully sprinklered. Montgomery and Prince George's Counties have the majority. There may be additional buildings in other jurisdictions. The tallest identified is 25 stories high. A high-rise in Maryland is defined in NFPA as a building 75 feet or more above the lowest level of fire department access. The task force also looked briefly at Baltimore City but the city is not required to comply with the State Fire Prevention Code so there would be a need for some administrative or legislation action to require any upgrades to high-rises in the city.

It was difficult to glean Maryland statistical fire information since the data can't be filtered to focus only on residential high-rise structures. While the probability of a large number of high-rise fires occurring may be minimal, the impact of a high-rise fire could be significant in terms of loss of life, property, and injuries. Most large jurisdictions in the country do not require retroactive sprinklers. For example Chicago requires an engineering checklist with alternative performance-based protections such as elevator control, fire alarms, voice command systems, etc.; some jurisdictions require retroactive sprinklers unless the condominium association votes to opt out. Both options are difficult to enforce. The task force took a more regulatory approach to options since performance-based options are more difficult to enforce. Based on input from Montgomery County from a fire department aspect, elevators and emergency power are more important than an internal breathing air supply. Nationally 75% of high-rise fires originate in the kitchen and involve cooking, so the task force considered options to reduce such risks. NFPA has done a lot of research on cooking hazards resulting in the development of automatic sensors and shut offs for electric ranges when they get too hot. But such products will probably take years to be readily available on the consumer market. The task force also discussed localized water mist systems, combustible exterior insulation, smoke-proof stair towers, fire separations, and other potential options. The need for a proper cost benefit analysis was stressed by Vice Chairman Scheffey. While there is a new federal tax law for accelerated depreciation of fire sprinkler systems it most likely doesn't apply to other options.

Mr. Ron Wineholt introduced himself. He is Vice President of Government Affairs for the Apartment and Office Building Association of Metropolitan Washington. He is very appreciative of being on the task force and assisting with deliberations in this matter. While much useful information has been developed, there is still significant information that is not available such as fire deaths and injuries in Maryland high-rises. Based on the Fire Marshal's annual reports, apartment fires represent about 10% of fire deaths in Maryland in any given year. High-rise apartments would be a subset of the general apartment classification. The number of unsprinklered residential high-rise buildings is somewhat incomplete. While approximately 120 apartment communities have been identified, some may have multiple buildings thus making the actual number of buildings higher. The number of units within each building has not been identified making it difficult to determine any meaningful cost information. Mr. Wineholt would estimate a cost in the hundreds of millions just for apartment buildings—not including the increased costs to tenants in condominium associations. He also noted that the majority of the identified buildings are in jurisdictions that have elected bodies and the authority to act on this issue through local adoption of fire codes or legislation. Some such as Ocean City have done so. The State Legislature has debated and acted on issues with respect to sprinklers throughout its history. He feels that the General Assembly is the only solution to resolve this issue on a statewide basis but this may still not deal with Baltimore City. To act administratively, defined options, implementation timelines, technical procedures, and hopefully a public hearing would be in order. For an issue of this magnitude, cost, and significance, he would urge the Commission to act by way of regulation. To simply delegate the authority to the Fire Marshal to begin enforcing additional requirements on existing buildings may not be compliant with the Administrative Procedures Act.

#### **MEETING SCHEDULED**

The next meeting is scheduled for  
Thursday February 21, 2019 – 9:30 a.m.  
Laurel Municipal Building, Council Chambers  
8103 Sandy Spring Road  
Laurel, Prince George's County

There being no further business, the meeting was adjourned.

Respectfully submitted,  
(as summarized from transcript provided by Hunt Reporting),



Heidi Ritchie, Secretary

# TASK GROUP ON PROTECTION OF EXISTING NONSPRINKLERED HIGH RISE RESIDENTIAL STRUCTURES

## **RECOMMENDED PROTECTION OPTIONS**

### **OPTION 1 - Complete Building Fire Suppression System**

Compliance with one of the following:

1. Installation and continued maintenance of approved, supervised automatic sprinkler protection throughout the building in accordance with applicable standards referenced by the State Fire Prevention Code.
2. Installation and continued maintenance of approved, supervised water mist protection throughout the building in accordance with applicable standards referenced by the State Fire Prevention Code.

### **OPTION 2 - Compliance with NFPA 101 for Existing High Rise Residential Occupancies**

Compliance with all applicable requirements of NFPA 101 for Existing High-Rise Residential Occupancies as referenced by the State Fire Prevention Code.

### **OPTION 3 - TG-Developed Requirements**

Compliance with all of the following;

1. Installation and continued maintenance of an approved Class I or Class III standpipe system in accordance with applicable standards referenced by the State Fire Prevention Code. All piping for required standpipe systems shall be supervised by water or air pressure.
2. Installation and continued maintenance of an approved fire service elevator in accordance with applicable standards referenced by the State Fire Prevention Code.
3. Protection of all fixed cooking equipment by one of the following;

- a. Installation and continued maintenance of an approved hood extinguishing system in accordance with UL 300A
  - b. Installation and continued maintenance of an approved ignition prevention system in accordance with listing requirements
  - c. Installation and continued maintenance of another approved automatic fire extinguishing system which provides protection to all cooking surfaces in accordance with applicable standards referenced by the State Fire Prevention Code or other listing; or manufacturers' requirements.
4. Installation and continued maintenance of approved smoke alarms in accordance with the provisions of the Maryland Public Safety Article for existing apartment buildings.
5. Protection of all interior exit access corridors, including associated unseparated spaces, in accordance with one of the following:
  - a. Installation and continued maintenance of an approved smoke detection system in accordance with applicable standards referenced by the State Fire Prevention Code and arranged to sound a general evacuation alarm throughout the building upon activation of any detector; or
  - b. Installation and continued maintenance of an approved fire suppression system which is arranged to sound a general evacuation alarm throughout the building upon activation of any component of the suppression system.
6. Protection of all vertical openings in accordance with the applicable provisions of the State Fire Prevention Code for existing residential occupancies.
7. Protection of all areas in the building having a degree of hazard greater than that normal to the general occupancy of the building in accordance the applicable provisions of the State Fire Prevention Code for existing residential occupancies.
8. If a building has combustible exterior finish or insulation, the building owner shall determine, using representative test samples whether the finish meets the requirements of NFPA 285. If the materials do not meet

- these requirements, they shall be removed, or a risk assessment performed to determine an appropriate risk mitigation approach.
9. Means of egress designed and maintained in compliance with applicable provisions of the State Fire Prevention Code for existing residential occupancies. The provisions of Paragraph 31.2.11.1 of NFPA 101, 2015 edition for smoke proof enclosures shall not apply.
  10. Installation and continued maintenance of an approved, supervised manual fire alarm system throughout the building in accordance with the applicable provisions of the State Fire Prevention Code for existing residential occupancies, and which incorporates all of the following features:
    - a. Upon activation, provides approved audible and visual notification throughout the building.
    - b. Upon activation, provides alarm annunciation at an approved location within the building.
    - c. Upon activation, automatically transmits the alarm by an approved means for emergency services notification.
  11. Installation and continued maintenance of an approved standby power system in accordance with applicable standards referenced by the State Fire Prevention Code for all of the following;
    - a. Required emergency lighting.
    - b. Required exit markings.
    - c. Electric fire pump (if present).
    - d. Pressure maintenance pump for fire protection system (if present).
    - e. Air compressor serving dry-pipe or pre-action fire protection systems (if present).
    - f. Emergency command center equipment and lighting (if present).
    - g. Not less than one elevator serving all floors, with standby power transferable to any elevator.
    - h. Mechanical equipment for smoke control (if present).

## **OPTION 4 – Cost Effective TG-Developed Option**

Compliance with all of the following;

1. Installation and continued maintenance of an approved Class I or Class III standpipe system in accordance with applicable standards referenced by the State Fire Prevention Code. All piping for required standpipe systems shall be supervised by water or air pressure.
2. Installation and continued maintenance of an approved fire service elevator in accordance with applicable standards referenced by the State Fire Prevention Code.
3. Protection of all fixed cooking equipment by one of the following;
  - a. Installation and continued maintenance of an approved hood extinguishing system in accordance with UL 300A
  - b. Installation and continued maintenance of an approved ignition prevention system in accordance with listing requirements
  - c. Installation and continued maintenance of another approved automatic fire extinguishing system which provides protection to all cooking surfaces in accordance with applicable standards referenced by the State Fire Prevention Code or other listing; or manufacturers' requirements.
4. Installation and continued maintenance of approved smoke alarms in accordance with the provisions of the Maryland Public Safety Article for existing apartment buildings.
5. Installation of a manual fire alarm system, which, upon activation, provides approved audible notification throughout the building.
6. If a building has combustible exterior finish or insulation, the building owner shall determine, using representative test samples whether the finish meets the requirements of NFPA 285. If the materials do not meet these requirements, they shall be removed, or a risk assessment performed to determine an appropriate risk mitigation approach.
7. In buildings greater than 10 stories above grade, Installation and continued maintenance of an approved standby power system for at least one elevator which has fire department operation capabilities.