

STATE FIRE PREVENTION COMMISSION
MINUTES
October 19, 2023

Members present: Edward S. Tochterman, Chairman
Kevin Simmons, Vice Chairman
Mark Bilger
Randy Sanger
Daniel Stevens

Members Absent: Emily Devan
Michael Faust
Stacy Welch
(Vacancy)

The Fire Prevention Commission held a public meeting on October 19, 2023, at 10:00 a.m. at the Kent Island Volunteer Fire Company, 1610 Main Street, Chester, Queen Anne's County.

The Pledge of Allegiance was recited.

Chairman Tochterman called the meeting to order and recognized guests in attendance:
Mischelle Vanruesel, Department of Labor and Industry
Eric Smothers, President of the Maryland State Firemen's Association
Charles Simpson, 2nd Vice President of the Maryland State Firemen's Association
Ryan Washington, Apartment and Office Building Association
Terin Hopkins, National Fire Sprinkler Association

The Chairman thanked the Kent Island Volunteer Fire Company for the use of its facility.

FIRE MARSHAL REPORT

Chief Fire Protection Engineer Ken Bush presented the report for State Fire Marshal Brian Geraci. He welcomed all in attendance to the Eastern Shore, his hometown region.

The Fire Marshal's printed report was distributed. As of today there are 67 fire fatalities, with two being reported this morning. Details on these two fatalities are not available.

The agency participated in the Community Risk Reduction weekend in collaboration with local fire departments to install smoke alarms in homes in their communities. The Delmarva Power Company will again be providing smoke alarms for distribution to residents on the Eastern Shore.

Accelerant K-9 Kachina recently retired from service after eight years. She and her K-9 Handler Oliver Alkire performed over 600 K-9 scans and provided expert testimony in numerous cases resulting in conviction.

A new Deputy State Fire Marshal has been hired for the Western Region. Mark Grove has previous law enforcement training, transferring from the Washington County Sheriff's Department.

The agency participated in two recent events. The Phoenix Society World Burn Congress held over a four-day period at the National Harbor was attended by over 600 persons. Fire Marshal Geraci provided a welcome and the agency was present with an information booth and provided audio-visual support. The agency also assisted and participated in the Mid-Atlantic Life Safety Conference (MALSC) held in Laurel which was attended by over 200 persons.

This concluded the Fire Marshal Report.

CHIEF FIRE PROTECTION ENGINEER REPORT

CFPE Bush reported on the upcoming review process for the 2024 NFPA 1 and NFPA 101 codes. A list of committee members was distributed, representing numerous building and fire code officials throughout the jurisdictions in Maryland. Commissioner Bilger questioned why there was a spot for a Commission member with a question mark. CFPE Bush reported two members previously served on the committee, Chairman Tochtermann and Commissioner Welch. Recently Commissioner Welch was replaced on the Commission after serving beyond her two-term limit. It was hoped that another Commission member would participate. Chairman Tochtermann invited and encouraged all the Commission members to attend the meetings as it is a good way to become more familiar with the NFPA Codes. Commissioner Bilger advised he would be willing to serve as Commissioner Welch's replacement. Bi-weekly meetings are being arranged. NFPA has agreed to provide 80 copies of each code for committee members, Commission members, and the State depositories as required. Unfortunately they sent the 2021 editions by mistake so the books are being returned. Mr. Dawson with NFPA advised the 2024 editions will be shipped as soon as available. Secretary Ritchie is arranging the meeting location which hopefully will again be at the Frederick County Public Safety Training Center. Chairman Tochtermann questioned how the cost of the books will be handled, Commission funds versus Office of the State Fire Marshal Office (OSFM) funds. CFPE Bush advised the books are being provided complimentary by NFPA and there is no cost involved. It is unsure if the books and meeting location will be received and secured by the end of the month.

CFPE Bush reviewed some other incidents and projects in which the agency is involved. Recently a vehicle caught fire in the Baltimore Harbor Tunnel, which is a State venue. There was an issue with smoke evacuation from the tunnel. Deputy Chief Hodges and Fire Protection Engineer Murgatroyd have been working with the State Highway Administration to develop an emergency response plan with the Baltimore City Fire Department. They have actually conducted inspections of the tunnel to become more familiar with the system to establish a standard operating procedure. The ventilation system has been reviewed and some upgrades have been recommended. The old Baltimore City Jail is being converted to the Baltimore Therapeutic Treatment Center. The focus is to make the facility more as a treatment center instead of detention center. At least two of the three buildings will be built out of heavy timber which will be something new for the OSFM's involvement. Heavy timber, which is laminated wood, is a recent code compliant type of construction to allow for taller wood buildings. This type of construction is being used more extensively in Canada and the northwestern United States. It is one of the first heavy timber projects to be constructed in Maryland.

Tim Diehl with Howard County has been working with a committee formed under the State Fire Marshals Group to research energy storage systems, particularly residential electric vehicle (EV) charging stations. The biggest concern will be for single-family homes and what type of protection residential garages should have, i.e. separations, sprinklers, or combination.

CHAIRMAN REPORT

A list of volunteer participants for the 2024 Code Update Review Committee was distributed. Motion by Commissioner Bilger to accept the list of participants, second by Vice Chairman Simmons, and unanimously carried.

The Chairman inquired of the status of the two persons injured in the Hillandale fire. Mr. Hopkins advised they are both still in critical condition with one imminent in passing.

The Chairman attended the Maryland State Firemen's Association (MSFA) Executive Committee meeting on August 26th at which he gave an update on the 2024 code adoption.

At the request of the Governor's Appointments Office (GAO), the Chairman solicited individuals who may be interested in serving on the Commission to apply through the GAO's on-line application process. To date he has not heard anything about filling the current three vacancies and to his knowledge about ten persons have applied.

The Chairman received a request from State Delegate Charkoudian (Montgomery County) to meet with her regarding residential high-rise sprinkler retrofitting. It was scheduled for the Friday before Labor Day weekend but as it turned out the meeting location was going to be closed that day. Additional dates were provided to her to which she has not yet responded. The Chairman also received a report prepared by Jensen Hughes for the Apartment and Office Building Association (AOBA). A copy was distributed to the members. Delegate Charkoudian was inquiring about the Commission's opinion of this report. The Chairman tabled further discussion until later in the meeting.

The Commission's first quarter FY2024 expenses totaled \$909.54.

CFPE Bush previously mentioned the MALSC and thanked Commissioner Bilger for serving on the conference's steering committee. Commissioner Bilger elaborated on the conference noting that 291 individuals from Maryland, Pennsylvania, D.C., ATF, U.S. Fire Administration, NIH, Secret Service, and Department of Defense registered on-line. This does not include the conference committee members or the Commission members. Two hundred six attendees checked in in-person the day of the conference. Food costs totaled \$15,395; the plaques for the Spiker Award and the new Jimmy Jarboe award totaled \$1,391; signage was \$520; the exact cost for renting the facility is not yet known but it is usually about \$15,000. Many thanks are extended for the donations from BFPE, National Fire Sprinkler Association; Maryland Fire Chiefs, Pierce, Fire Service Research Institute, Johnson Controls, and others. The donations were a tremendous help to once again offer the conference free to attendees. Positive feedback was received but the Committee has not yet had its post-conference review meeting. Commissioner Bilger advised that his term on the Fire Prevention Commission will be expiring June 30, 2024. As such, a new Commission representative for the conference steering committee will have to be selected. He will continue to chair the steering committee until such time his replacement is selected. The committee members themselves do the majority of the work. He thanked Deputy Chief Fire Marshal Joseph Walters and Public Information Officer Teresa Crisman of the OSFM who worked very hard on organizing and assisting with preparations for the conference. Thanks were also extended to all the OSFM administrative staff for assisting with the in-person registration and Commission Chairman Tochtermann who also assisted with this year's conference. Arrangements are already underway for the 2024 conference. The new award this year was for Jimmy Jarboe who was very dedicated throughout his life to fire prevention

and life safety in Maryland. He contributed many articles to the EMS News Digest and MIEMMS. He and his wife attended many events throughout the State supporting the fire and EMS service. Two awards were presented this year; one to Mrs. Jarboe and family in honor of Jimmy's dedication and to outline the criteria for future awards and then the first Jimmy Jarboe Award was presented to current Fire Marshal Brian Geraci for his years of service in Maryland. Next year's conference will be September 24, 2024.

The Chairman entertained a motion to approve the August 17th minutes. Motion by Vice Chairman Simmons, seconded, and unanimously carried to approve the minutes.

Returning to the discussion on the Jensen Hughes report, it is the Chairman's understanding that FM Geraci and CFPE Bush are preparing a response from the OSFM. CFPE Bush confirmed he sent the Fire Marshal some comments yesterday. Although he did not have a copy of his comments with him, CFPE Bush provided an overview of his opinion. The report suggests a staged compliance only where 50% or more of the total building area is being renovated. CFPE Bush felt this was unrealistic. He suggested that if any part of the building was renovated, as meaning the area has to be vacated due to the nature of the work, that the infrastructure for a sprinkler system be installed at that point for those areas. Then when the total areas of the building achieve a 50% area, the sprinkler system would have to be placed in service for those areas that were renovated. He also noted that the OSFM is not responsible for the actions of the Commission which the report makes some recommendations towards. There were some suggestions in the report for alternative protection which seemed proprietary in nature. Typically the OSFM looks at a particular standard for compliance and not specific products. One has to be careful when making proprietary recommendations versus general recommendations that would comply with recognized standards. He also suggested that there should be some type of review of the specific buildings, at minimum an inspection to determine compliance level with the design standards at time of original construction, whether the fire protection features are active or passive, i.e. fire alarm systems, type of construction, closure of vertical openings, self-closing doors, etc. There are times when systems and features are not being properly tested and maintained, holes in communicating spaces that are not repaired, self-closers that do not work, etc. The older high-rises were designed without sprinkler protection but should have these passive features in place. The self-closing devices may have been an issue in the fatal Silver Spring fire. Another thing to consider is if any spaces in the building are being used for different purposes than it was originally designed and constructed for, such as originally an office space that turned into a storage space that introduces a higher fuel load.

Commissioner Bilger inquired if there is any data on changes in the building use or occupancy from time of original construction such as age-range changes of residents, areas that may now be used by the general public, any new low-income housing agreements, accessibility features for persons with disabilities, etc. CFPE Bush says the only control that may exist is if there is a change of use such as part of the building becoming an assisted living facility, daycare center, or family day-care home, something for which a license would be required to initiate additional enforcement of fire code requirements. Without something initiating additional action, it is difficult to ascertain the capability of the occupants.

Commissioner Sanger inquired about possible tax credits or low-income housing initiatives to assist with the cost of retrofitting. CFPE Bush said those avenues have and are being pursued as well as possible grant funding.

Chairman Tochtermann provided Mr. Washington an opportunity to comment. He advised the AOBA did receive a copy of the Jensen Hughes report and he was pleased to hear today's comments and participate in the conversation. One of the comments was to tie-in sprinkler installations with renovations. AOBA has major concerns with retrofitting existing high rise buildings with fire sprinklers due to the cost associated with installing and maintaining sprinklers in every unit. Many AOBA members do conduct significant renovations, not just cosmetic or appliance replacement type improvements. Renovations also are made to make the buildings more energy efficient and environmentally friendly due to local and state mandates. The 50% renovation recommendation in the report was to offer the ability to install retrofits in areas where a particular unit was being vacated anyway and then renovated for new occupants. This would avoid residents having to temporarily relocate. Many AOBA members do renovations during those times when units are already vacant. Another issue is when the buildings are located in a rent-stabilized jurisdiction. When re-occupied the cost of rent is only allowed to increase a certain amount and landlords are unable to increase rent to recoup cost for major capital projects. Based on the report's assessment, AOBA summarizes that the data does not show every high-rise building is an inimical hazard as declared by the Commission, the AOBA's issue is that there has not been any assessment of individual buildings to determine any hazards and ample time for the public to provide comments. Unfortunately the recent fire death would appear to indicate that building was an inimical hazard based on what occurred, but that may not be the case in other buildings. The report identifies cost-effective alternatives in deterring fires and fire deaths, such as a fire canister in the kitchens where many fires occur and smoke ventilation systems in stairwells. The AOBA intends to work with stakeholders on these alternatives and potential legislation for the upcoming legislative session.

Chairman Bilger questioned if the \$9,800 per unit cost was a high estimate, directing his question to Mr. Hopkins with the National Fire Sprinkler Association (NFSA). Mr. Hopkins began his response by stating the buildings in question are about 50 years old and while they may have met very early standards, they are vastly lacking in fire protection features, both active and passive. Contents such as modern-day furnishings and lithium battery-operated consumer products have introduced higher fire hazards resulting in more fires and fire deaths all over the country. The NFSA is not advocating these buildings meet the standard for new construction as that would be unrealistic and not cost-effective. Upgrading these buildings to a reasonable degree such as automatic notification for fire service instead of by only manual means would be one improvement that could be made without having to displace the occupants. He is aware of many projects throughout the country who accomplished this by doing one floor a day without having to displace the residents. He had some concerns with the Jensen Hughes report that he just received Monday. Jensen Hughes is a very large and reputable company based in Maryland and it works a lot with the NFSA. Some of the findings in this report do not appear to be consistent with their typical views so he reached out to the individual at Jensen Hughes who was commissioned by the AOBA to provide a report. There is a PowerPoint presentation that Jensen Hughes pulled information from which is in the AOBA report. The PowerPoint was not produced by Jensen Hughes and not specifically for AOBA. He would recommend the AOBA produce the Jensen Hughes report actually commissioned as some of the information provided in the report the Commission received may be misrepresented. The cost analysis in the report does seem to be fairly accurate. AOBA presented an estimated \$33 million per building cost when this Jensen Hughes report shows an average of \$1 to \$3 million. Many of the charts and graphs are from the original PowerPoint report and he is unsure what context Jensen Hughes put with that in the AOBA commissioned report.

OTHER BUSINESS

Commissioner Stevens inquired to CFPE Bush if there are any concerns with heavy timber construction. CFPE Bush stated both the building and fire codes now recognize this type of construction but it has not yet been dealt with in Maryland. The new structure replacing the Baltimore City Jail will be heavy timber construction for which the plans will be reviewed. These buildings are required to be sprinklered and when they are large in height or area they are required to have some type of noncombustible/limited combustible covering. As long as they are constructed according to their design requirements, there hopefully will be no issues. Two sets of tests were conducted on heavy wood construction materials, both sponsored by the American Wood Council. The first set of tests was conducted by NIST in Gaithersburg. It failed because of the type of glue used in the lamination process. The glue was failing and the char levels were dropping and exposing fresh wood causing it to continue burning. They then went through a testing process for the glue and it was determined it has to be of a certain type. The second set of tests was conducted by ATF in Beltsville. A two-story mock-up building was constructed in the test lab. They used old code books as the fuel loading source. It was set up with home-type furnishings. They achieved flashover on both levels and the building did not fail. CFPE Bush was in an upper observation room for the test which had wired glass and it cracked the wired glass. After changes were made to the standards for the wood and glue, the tests were successful. It has been used for years in Europe, Canada, and the Northwest U.S. The fires can be extinguished with water so there are no problems encountered as there are with extinguishing lithium battery fires.

Chairman Tochtermann provided guests an opportunity to make comments.

Mischelle Vanruesel's office interacts with the OSFM and other fire groups on a regular basis and the Commission meetings provide a helpful way to share information. Regulations were recently passed regarding EV charging stations but there is no enforcement mechanism. Although it passed and will take effect, there does not appear to be any authority to enforce it. Her office reached out to the Attorney General's Office regarding consumer protection to help new home builders and they basically said unless there is some type of false presentation there is nothing to mandate enforcement. It is believed the 2024 building codes will require the installation of charging stations so it should eventually be enforceable through the building codes when adopted. In response to an inquiry from Commissioner Sanger, she said legislation was introduced about three years ago for residential chargers, then language for infrastructure was introduced, and last year there was a lot of back and forth discussions. It is Public Safety Article 12-205 if anyone would like to research and read it further. CFPE Bush was unsure of the required amperage—it is State Law and not in the fire code. He noted that vehicle manufacturers recommend they be charged outside but the charging stations are being put inside the garages. It is unclear when manufacturers refer to separate garage if that means a detached separate building or just a fire-rated separation. So from a fire protection standpoint since a normal 13D sprinkler most likely will not put the fire out, the question is should attached residential garages have a rated separation, some type of early warning detection, etc. Currently residential 13D systems are not required to have flow switches so if a sprinkler goes off in the garage there may be water flow without any notification for the occupants. Commissioner Bilger reported that information he has derived from attending various seminars and meetings on EV chargers is that the persons installing them may not have the proper qualifications or license to install them.

Regarding AirBnBs, her office gets a lot of questions and complaints, and then people write their legislators who then contact her office regarding requirements for sprinklers and fire alarms, although full blown alarm systems in AirBnB's is not necessarily a requirement under the building code. The building code allows up to 10 guests in owner-occupied residential dwellings which differs

from the fire code, which is much less. Whether requirements are being applied consistently throughout the State is part of the confusion. Some type of consistent enforcement would be helpful. The question is still not resolved as to whether to follow the building code or fire code so it was suggested CFPE Bush discuss this during the fire code update committee meetings.

Her office is also starting to encounter heavy timber construction. The new Under Armor building will be heavy timber.

There is an issue with timely elevator inspections and repairs throughout the State. Some buildings do not have operating elevators due to lack of repairs or inspections. There are several contributing factors such as lack of mechanics and availability of parts. It can be a serious issue in high-rise buildings and for persons with accessibility issues. Functioning elevators are required by the livability code which is enforced by local jurisdictions. This problem may also be an issue for the fire and emergency services personnel. In response to an inquiry from Commissioner Bilger, she stated who and how elevators are inspected changed a few years ago. Her department inspects new installations, alterations, or renovations. Building owners reach out to private industry for existing elevator repairs and annual inspections which requires a third-party inspector witness the mechanic making the tests. Her office is responding to the building code units and local officials.

As discussed at a previous meeting, a unit under her department is the Maryland Occupational Safety and Health Administration (MOSH). There is concern for firefighter safety and lives when fighting vacant building fires when no apparent occupant lives need saved. Protecting property versus saving lives is a serious issue and the firefighter deaths in recent years has brought this issue to the forefront. Most recently an arson fire set by an employee after a store had closed and firefighters entered the building resulted in two mayday calls. Fortunately, no firefighters lost their lives. That incident is still under investigation. Chairman Tochtermann suggested she contact the Maryland Fire and Rescue Institute and the Maryland State Firemen's Association to discuss potential solutions to prevent injuries and loss of life to firefighters. She would like to bring a consultant and analyst to the next Commission meeting to discuss some ideas and work with the OSFM to begin reaching out to other organizations. Vice Chairman Simmons commented that some departments are starting to take a pro-active approach by inspecting and marking buildings that are vacant so that if there is a fire they may use different tactics. Chairman Tochtermann referred to the MOSH letter that was issued to the Baltimore City Fire Department after the Stricker Street fire. Some Commissioners could not recall receiving it and Secretary Ritchie will be asked to send it out again. MOSH is reviewing these incidents to consider whether any citations should be issued.

Under her department there is a Rehabilitation Commission Board to oversee existing building renovations. It is a large board that every three years reviews the newly adopted building codes. The Fire Prevention Commission has a vacancy on this Board. Chairman Tochtermann previously served on the Board and he has been contacted by the Governor's Appointment Office about it and they said he would need to apply to fill the vacancy, which he will do. The next building code cycle will be the 2024 edition. CFPE Bush advised Harry Bradley was recommended to fill the engineer vacancy.

MSFA President Eric Smothers, in attendance with Second Vice-President Charles Simpson, was not aware of the MOSH letter and will be provided a copy. The MSFA is aware it is a serious issue but many times firefighters do not know if anyone is in a building as there could be persons working late at night, homeless persons, persons in the building to commit a crime and start a fire to cover it up, etc. Emergency responders rely on information callers provide 911 on what they are observing. It is a very tough call sometimes for the Officer in Charge. He did not feel issuing citations to fire departments would be very well received. He offered to work with MOSH to discuss the issue. Vice-President Simpson agreed with Vice Chairman Simmons and President Smothers, it is a very gray area and you have to look at all the scene circumstances before making

any decisions. The fire service wants to save lives but also does not want to just watch someone's property burn down.

Regarding lithium batteries, President Smothers was in Annapolis for those legislative hearings and all kinds of ideas were presented. He would like to see some type of licensing requirement for installers. MSFA recently created a committee to discuss some of the issues about EVs and chargers. Existing buildings are not geared to EV charging stations but it certainly is coming. There will be a lot more training on fighting lithium battery fires. People are starting to charge their vehicles in their garages and a recent fire in his area from EV charging destroyed two townhouses. Not only are firefighters dealing with the structure fire, they also are dealing with extinguishing a lithium battery fire. More training and input from the manufacturers, engineers, and fire chief officers may result in some reasonable solutions. The MSFA is committed to offer its resources to help address the issue.

Regarding AirBnBs he agreed that sometimes the requirements can be problematic. He again offered any assistance to have the fire service involved with any discussions or decisions.

Commissioner Bilger asked President Smothers to discuss his conversation with Colonel Butler about the Fire Prevention Code and the Fire Laws Book. President Smothers reach out to the Colonel's Chief of Staff several times, but in the interim he ran into the Colonel. The Colonel wants to see what other states are doing regarding fire laws and regulations but said he is committed to the process and getting a new book published. The Fire Laws Book has not been published since 2019. President Smothers will continue to reach out to the Colonel during the code update process.

Mr. Hopkins commented he would be remiss if he did not point out that the six tragic recent Maryland firefighter deaths were all in unsprinklered structures. Throughout the country the fire service is experiencing injuries and maydays in structures. Unsprinklered high-rise fires present a real safety concern for firefighters and he applauds Maryland's efforts in seeking sprinkler retrofits and its concern for the safety of firefighters.

There being no further business, motion by Vice Chairman Simmons to adjourn the meeting, seconded, and unanimously carried.

Next Meeting: Thursday December 21, 2023 — 10:00 am.

**Location: Maryland State Police Headquarters
Museum Building
1201 Reisterstown Road
Pikesville, Baltimore County**

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



Heidi Ritchie, Secretary