### STATE FIRE PREVENTION COMMISSION MINUTES February 15, 2018

Members Present:	Charles D. Davis, Chairman Joseph L. Scheffey, Vice Chairman Mark A. Bilger K.C. Harrington Edward Tochterman, Jr. Stacy Welch
Members Absent:	Mark F. Hubbard
Guests in Attendance:	Dr. Craig Beyler, Jensen Hughes Dr. James Milke, University of Maryland Dept. of Fire Protection Engineering

Patrick Marlatt, Maryland Fire and Rescue Institute

Chairman Davis called the meeting to order at the Taylor Avenue Fire Station in Annapolis, Anne Arundel County. A moment of silence was observed for the victims of the Parkland, Florida, school shooting.

# PUBLIC HEARING COMAR 29.06.05 Fire Sprinkler Contractor Licensing Regulations

Chairman Davis solicited public comments on proposed amendments to 29.06.05.02 and 29.06.05.04 as published in the Maryland Register on December 22, 2017. Amendment 29.06.05.02 pertains to authorized work on specialized equipment associated with fire sprinkler systems. Amendment 29.06.05.04 pertains to the electronic submission of plans and use of digital signatures. No public comments were received either at the meeting or in writing. Motion by Commissioner Harrington, second by Commissioner Tochterman, and unanimously approved to adopt. The Commission will proceed with publishing a final notice in the Maryland Register with adoption 10 days thereafter.

# SCIENCE ADVISORY WORKGROUP PRESENTATION

Chairman Davis welcomed Craig Beyler who spoke on a proposal to improve some areas of fire and explosion investigations in the State of Maryland. Mr. Beyler is the chair of the fire and explosion investigation subcommittee for the Organization of Scientific Area Committees (OSAC) which is an organization developed by the National Institute of Justice and National Institute of Technology. The organization works to improve the 25 different forensic sciences involved in fire and explosion investigations through consensus standards. Mr. Beyler was accompanied by Doctor James Milke, professor and chair of the Department of Fire Protection Engineering at the University of Maryland, and Patrick Marlatt, associate director at the Maryland Fire and Rescue Institute (MFRI) at the University of Maryland.

For disclosure, Vice Chairman Scheffey advised that he and Mr. Beyler were business partners and probably technically still are. Mr. Scheffey no longer actively works for the same company, but he technically is still considered an employee.

Mr. Beyler advised the OSAC is creating a registry of consensus documents. NFPA 921 which is the guide for fire and explosion investigations and NFPA 1033 which deals with the professional qualifications of fire investigators are on its registry. Looking at the "quality triangle" of forensic science (standardization, certification, and accreditation), NFPA 921 provides the standardization for investigation procedures and NFPA 1033 provides the qualifications for certification of investigators. Currently two certification programs are in place through the International Association of Arson Investigators (IAAI) and the National Association of Fire Investigators (NAFI). However, there are no NFPA standards that deal with the accreditation of the investigation unit. Both the National Academy of Science and the National

Commission on Forensic Science recommend all forensic science practitioners should be certified and work in an accredited organization. Currently only one investigation unit in the country—Forensic Investigations Group in Covington, Louisiana—is accredited by A2LA, a firm out of Frederick, Maryland. But that accreditation is under ISO 1707020 which is a standard for inspections and really not a suitable basis for the accreditation of investigators. The OSAC requested NFPA develop an accreditation standard for fire and explosion investigations, which they have agreed to do. This will most likely be a three-year process which will look at how to organize the unit, facilities, equipment, maintenance, documentation, operational/safety procedures, certification/training/education of investigators, report writing, evidence collection, etc. Mr. Beyler feels this is an important development to move forward.

The OSAC also has been reviewing how individual states nationwide handle investigations; for example, the Texas Forensic Science Commission's review of the Ernest Willis fatal fire investigation. Mr. Willis was tried and convicted of murder, sentenced to death, and served 17 years in prison before the case was reviewed and dismissed. The Commission developed 20 recommendations to improve investigations, one of which called for retroactive investigation reviews. Texas Fire Marshal Connealy implemented the retroactive reviews by establishing the Texas Science Advisory Work Group (SAW), comprised of ten experts in various aspects of fire and explosion investigations. Members include ATF representation, local public and private investigators, engineers, biologists and other diverse experts relevant to investigations. For the Texas model, four quarterly open meetings are held annually, approximately six completed investigations are reviewed, the lead investigator for each case makes a presentation, SAW members ask questions and offer comments. Other investigators in attendance are then allowed to ask questions so it also offers a good training opportunity.

Mr. Beyler, a Maryland resident, is chairing a committee in Maryland to develop a similar group. He has spoken to Maryland State Fire Marshal Geraci, Maryland State Police Colonel Pallozzi, Delegate Seth Howard, and Senator John Astle. They were supportive so Mr. Beyler approached Dr. Milke to discuss the University of Maryland Fire Protection Engineer Department's possible involvement. Dr. Milke stated he discussed the idea with faculty about having the group as part of its department and they were interested and supportive. Dean of Engineering Darryl Pines and Mr. Marlatt were also approached and are supportive. Mr. Beyler and Dr. Milke attended a SAW meeting in Texas to watch the process first hand. Unfortunately Fire Marshal Geraci was unable to attend due to lack of travel funds. The meeting began with various lectures on aspects of fire investigation, followed by case reviews, questions, and comments. It was a good opportunity to talk with the actual investigators, staff of the fire marshal's office, and group members. They were very apprehensive at first but now see it as a constructive opportunity that has helped improve the quality and integrity of forensic sciences in Texas.

Based on the positive results, Mr. Beyler and Delegate Howard developed legislation under House Bill 1587 and Senate Bill 752 to pursue such a group. Senator Bates has sponsored the bill and hearings will be forthcoming in the next few weeks. The legislation establishes the group be administered in the University of Maryland's Department of Fire Protection Engineering, whose chair or designee would serve as the chair of the SAW, to include 10 members, as well as ex-officio members, the State Fire Marshal, various county/local fire marshals, representatives from MFRI and the Office of the Attorney General. It proposes quarterly annual meetings, payment of expenses of members but no salary, documentation of meetings by minutes and/or reports, etc. The purpose would be to provide training recommendations, review of completed cases to provide feedback to prosecutors, defense attorneys, attorneys general, and investigators.

Mr. Beyler, Dr. Milke, and Mr. Marlatt entertained questions from commission members:

What would MFRI's involvement be beyond being represented on the group? Texas has an explicit training component but the Maryland legislation does not require specific training other than for the group to make recommendations. Dr. Milke stated that although training won't be mandated in the legislation, it is an important component of the group. Training seminars could be set up in collaboration with MFRI to perhaps set up a series of investigator training. Mr. Marlatt advised MFRI offers basic fire investigation courses and have done various seminars upon specific requests. The engineering department and MFRI

could provide for continuing education needs so that investigators can remain certified. There are costs associated with training so a legislative approach to training could provide a modest budget. It is Mr. Beyler's understanding that the legislation would create requirements and then the Governor would have to appropriate funds. Commissioner Bilger expressed concern about passing any unfunded mandate. Dr. Milke has discussed this with the university president as there is concern about the economic impact on the university. It is hoped with a modest amount of money and positives that would result that it would be an investment on behalf of the university. Nothing has been finalized and there is definitely ongoing conversations about funding and the university's involvement.

Why is there a need for this to be a state law? It could be voluntary but Texas chose to make it a requirement. Since the City of Dallas and Houston are not under the jurisdiction of the State Fire Marshal, they do not participate and the Fire Marshal can't compel them to. In speaking with Fire Marshal Geraci, it is Mr. Beyler's understanding this would be the case in Maryland for those counties/local authorities not under his jurisdiction. Commissioner Bilger felt that with NFPA 921 and NFPA 1033 already in place as recognized standards, and with the new NFPA committee developing accreditation standards, any legislation would be an unnecessary duplication. Mr. Beyler did not feel it would be a duplication because it is the reviews of actual cases that are the critical factor in developing improved forensic techniques.

Will this legislation apply to both public and private investigators? At this point it only applies to public sector investigators. It could potentially be applied to private investigators but that is not what the committee is proposing. Commissioner Bilger expressed concern that when public investigators testify in court, private investigators are typically hired by insurance companies or by a business to challenge the fire marshal's testimony so it only seems fair that both should be held to the same standard. Mr. Beyler pointed out that the NFPA standards would be applicable to everyone. It is the case review process that is envisioned as only for the public sector. Commissioner Bilger felt strongly that it should apply to both because at some point a defense attorney may get a copy of an investigation review and then use any critique against the fire marshal investigator. Mr. Beyler rebutted that typically private investigators are dealing with civil litigation cases and anyone who testifies as an expert witness will be scrutinized at some point, whether public or private sector. Dr. Milke commented that there are private investigators that are certified fire investigators and need continuing education credits so the public versus private is a very appropriate discussion, particularly if public funds are to be used.

Has contact been made with other jurisdictions, such as Baltimore County and Baltimore City, that are not under the jurisdiction of the State Fire Marshal? Mr. Beyler stated he has not contacted others. He initially spoke to Fire Marshal Geraci and there apparently is no existing forum where all the various jurisdictions meet to discuss it as a group.

Vice Chairman Scheffey stated he did not understand the disconnect because he hears about the emphasis on NFPA 921 training and certification. For example, a recent mandatory report writing seminar for state officials under the jurisdiction of the Fire Marshal was recently held. It appears there are adequate and sufficient training opportunities. Mr. Beyler stated that in the 1990's everyone thought NFPA 921 was the solution and in the 2000's it was embraced by the IAAI. In court testimony investigators indicate they follow NFPA 921, they present a resume that shows extensive training, but when you read some reports their expertise is not being reflected. He is unsure why there is this disconnect. The workgroup concept is a constructive way to connect training with actual practice. Simply relying on NFPA 921 as a standard without reviews by supervisors and peers to ensure quality assurance may be what causes a disconnect. He stated he will continue to work with MFRI and other training organizations if the legislation fails to pass. He would like to see the workgroup implemented on a voluntary basis.

Chairman Davis thanked the guests for sharing their ideas. Although the Commission cannot take formal action as a group to either support or oppose the proposed legislation, the discussion was very informative.

### FIRE MARSHAL REPORT

Fire Marshal Brian Geraci reported that with the death of Deputy Chief Sander Cohen there have been some transfers and promotions in the Office of the State Fire Marshal (OSFM). An organizational chart was distributed. Deputy Chief (DC) Jack Waldner, who was the commander of the Bomb Squad will be retiring March 1<sup>st</sup>. DC Duane Svites from the Southern Region will become the new commander. Deputy Fire Marshal (DFM) Dale Ednock will be the Assistant Bomb Squad Commander. With DFM Ednock's history as a bomb squad commander in Prince George's County, his role in assisting DC Svites will make things run more efficiently and effectively for the bomb squad. Senior DFM John Nelson in the Southern Region will be promoted to DC for that region. DFM Derek Chapman is serving as the acting DC for the Northeast Region. There is a current promotional list but many are not in the Northeast Region which makes it difficult due to the length of travel from where they live.

There are two contractual fire protection engineer positions available for the Western Region. One contractual position was converted to an engineer when Allison Nicodemus was converted to a full-time merit employee and the Department graciously approved a second new contractual position. Some retired agency engineers have applied and are going through the application process. The full-time merit engineer for the Western Region will also be advertised in the coming weeks. The new engineer for the Lower Eastern Shore will begin employment at the end of the month, filling the position vacated when CFPE Bush was promoted. There are approximately 600 backlogged plan reviews which hopefully will be reduced when the new engineers are hired.

The Southern Region has been without a contract inspector for many months. Once that position is filled the region will have four inspectors so that deputies can hopefully concentrate on just investigations.

The Fire Marshal reported on the 2018 fire fatalities: As of this date there have been five fatalities (four in Baltimore City and one in Prince George's County) compared to twelve for 2017. Some pending deaths at the end of the year were determined to be fire related, bringing the total fatalities for 2017 to 72—12 were children and 26 were seniors (65 years or older). Forty-eight percent were in Baltimore City and Baltimore County.

In 2017 the agency conducted 974 investigations—708 fire, 211 explosive, and 55 other. Seventy-eight criminal cases were closed with the arrest of 118 individuals, of which 44 were juveniles. The arson case closure rate was 29.4%, well above the national average of 18%-19%. 12,343 inspections were performed and 1,379 plans reviewed. Statewide under all jurisdictions there were a total of 954 fires classified as incendiary, a 5.5% increase over the 904 in 2016. Smoke alarm and sprinkler activations saved 296 individuals across the state in 2017.

The smoke alarm law that was passed in 2013 went into full effect January 1, 2018. It requires all battery operated smoke alarms to be a 10-year sealed battery unit with a hush button feature on every level of a home. Jurisdictions throughout the state are receiving numerous calls regarding the new law and replacement of old alarms. Various jurisdictions are taking action with community outreach and media releases.

Effective April 1, 2018, all rental properties are required to have a carbon monoxide alarm outside each sleeping area and on every level, including the basement. The law also requires any building containing fossil fuel burning equipment or that has an enclosed garage to have carbon monoxide alarms. They are not required in dwelling units powered solely by electric power.

The Fire Marshal reviewed some proposed legislation:

• HB226/SB483 requires sprinkler systems in all public schools. There are about 300 schools throughout the state that are not fully sprinklered. Unfortunately the fiscal note estimates a half billion

dollar impact. It is the Fire Marshal's understanding the governor has created a commission to look at schools and hopefully sprinklers will be an item to consider.

• HB810/SB728 would eliminate the sale and transportation of smoke alarms that are not the 10-year sealed battery type. This hopefully will eliminate the confusion as to what alarms are legal in Maryland.

• HB694 would transfer the responsibility of adopting the statewide building code from the Department of Housing and Community Development (DHCD) to the Department of Labor, Licensing, and Regulation (DLLR). It is unclear why this change is being proposed. DHCD will adopt the building code this year, then DLLR will take it over in future years. The Fire Marshal has discussed this change with DLLR and doesn't foresee any problems. He is following the bill to make sure residential sprinklers do not get eliminated.

HB1587/SB0752 would establish a science advisory workgroup to review fire investigations. The Fire Marshal spoke to several people regarding this legislation and does not support it, and has asked some other groups to also oppose it, for several reasons. There is no need for legislation for the group to be formed and feels it could be established by the Commission voluntarily. In speaking with fire investigation unit commanders throughout the state, it is felt the group should provide peer support to look at reports before mistakes are made, unlike in Texas after the case has been adjudicated. It does not make sense to charge perpetrators and then review the investigation. There are a lot of undetermined fires that it would be beneficial to review. The bill calls for county and local jurisdictions to be involved, but all jurisdictions do not have responsibilities over fire and explosive investigations. The bill does not include any educational components to provide better and timely education and training, very important components to improve investigative techniques. The bill directs the State Fire Marshal have investigators from selected investigation units review their cases but the Fire Marshal has no authority over all units throughout the state. The Fire Marshal feels the Commission, Dr. Beyler, the University of Maryland, and MFRI could make this happen as a peer review group before the case is closed and charges filed. Unless it is an obvious serial arsonists that needs to be charged quickly, there is time to review the case to determine what additional action, if any, should be taken to solidify the case before filing charges. The Department of State Police has allowed the Fire Marshal to oppose this legislation which he will do. Commissioner Welch stated that after learning about the investigation review process today, she sees value in the process whether the legislation passes or not. Chairman Davis stated the Commission can revisit the process after the status of the legislation becomes known.

The Fire/EMS Coalition has a new chairman, Delegate Marvin Holmes from Prince George's County. It has six voting members, including the Fire Marshal, and a representative from the Maryland Fire Chiefs Association (MFCA), the Maryland State Firemen's Association (MSFA), the Maryland Fire and Rescue Institute (MFRI), the Maryland Institute for Emergency Medical Services System (MIEMSS), and the Maryland International Association of Fire Fighters (MIAFF). It takes 3/5<sup>th</sup> majority vote on legislation to either support or oppose. There are certain bills that some members have to abstain from voting. Delegate Holmes is doing a great job organizing the coalition. All commission members are invited to attend the Friday morning meetings during the legislative session at the Annapolis Taylor Avenue Fire Station at 10:00 a.m.

# CHAIRMAN REPORT

Chairman Davis reported he has attempted to contact the Governor's Appointment Office to ascertain the status of the three vacancies. He has gotten no response. The Fire Marshal suggested he write Colonel Pallozzi or his Chief of Staff Donald Lewis. Commissioner Harrington's second term expires June 30, 2018, which will create a fourth vacancy, making it more difficult to achieve a quorum.

### **OTHER BUSINESS**

Commissioner Welch inquired if carbon monoxide deaths are considered fire deaths and if they are tracked. Fire Marshal reported they are not considered fire deaths and are tracked by MIEMSS. The Fire Marshal's Office enforces the carbon monoxide detector law.

Regarding the Science Advisory Workgroup, Commissioner Welch questioned the legal ramifications of doing a review before the case is adjudicated. The Fire Marshal presumes some type of nondisclosure agreement would take care of that and he feels strongly it should not be a post investigation review. Very few cases go to trial because of plea agreements so investigators are doing a good job. Vice Chairman Scheffey was familiar with a case in Baltimore City that was thrown out on junk science. He agrees with the Fire Marshal's approach and also feels education and training are critical. The State Fire Marshal's Office has no jurisdiction in the city other than to provide assistance when requested.

Commissioner Bilger encouraged the members give thought to the future of the Mid-Atlantic Life Safety Conference. The commission is responsible under state law to provide annual training or a seminar although there is no funding to do so. Support is provided by a Commission member serving on the conference steering committee. The 2018 conference has been scheduled but several key supporters The Committee Chairman Bruce Bouch is no longer with the Fire Marshal's Office and no are being lost. one appears to be interested in being Chairman, several MFRI employees will be leaving, and it is unsure what the new director of MFRI intends to offer for support or non-support. MFRI has been doing all the printing and providing other resources. The Attorney General's Office stated there is no issue with including workshops other than those related to fire prevention or fire related topics. Other topics help improve attendance. Various organizations are represented on the steering committee-the OSFM, MFRI, MIEMMS, Health and Mental Hygiene, and others. The OSFM provides basically all the personnel to work at the conference to handle registration and other duties. The Fire and Burn Safety Coalition of Maryland (FABSCOM) collects the registration payments and then distributes it back to the steering committee. The conference lost money in 2017. The cost of lunch continues to rise each year at the Johns Hopkins facility but the rental rate is very reasonable and the facility is well arranged with small classrooms for the various workshops and also has a large auditorium to accommodate all attendees. The committee is seeking guidance from the Commission on how to move forward. Chairman Davis stated there used to be a small line-item budget for the Commission but he is unsure for what those funds may be used. He will look into that. It was noted that the code update training seminars should qualify to meet the mandate of the law.

Several suggestions were proffered:

- Sell exhibit space to vendors. However, the venue has limited space for exhibits and typically other state agencies have used the available space free of charge.
- Seek funding from sponsors. Commissioner Bilger stated the committee would like the Commission's direction and approval before soliciting any sponsors. The donations could go through FABSCOM which is a non-profit 501C3.
- Find another facility, perhaps Howard County Community College, which is very close to the current location.
- Contact MSFA to see if an event can be held at their annual convention in Ocean City.

Regarding the Fire Prevention Code update, Commissioner Tochterman reported he and Commissioner Welch have attended several meetings which were well attended by a good spectrum of participants from across the state. The process is going very well.

As a follow-up to previous discussions regarding retrofitting high-rise buildings with sprinklers, the Fire Marshal distributed federal tax reform information that provides tax incentives up to a million dollars a year through 2022 for commercial buildings, including residential and office high-rises. The tax incentive decreases after 2022. Hopefully the high-rise workgroup can promote these incentives to get sprinklers installed.

Vice Chairman Scheffey reported on the workgroup reviewing the Fire Marshal's proposal in his position paper to sprinkler all existing high-rise buildings. Vice Chairman Scheffey wrote a critique on the proposal which he has circulated. He, Commissioner Tochterman, and CFPE Ken Bush have met twice. Ron Wineholt of the Apartment and Office Building Association of Metropolitan Washington (AOBA) has also joined the group. The group is looking for a voluntary approach to accomplish retrofitting without enacting regulations or legislation. The AOBA has a high-rise safety committee that generates information

on high-rise safety for building owners to use. NFPA has some useful information and the workgroup is encouraging the association to be proactive on the educational front. The workgroup also feels a fire department operations person should participate to get a perspective of concerns relating to the ability to combat fires in high-rise buildings. An operations chief from Prince George's County has been identified to participate. Since most of the non-sprinklered high-rises are in Montgomery County, Fire Marshal Geraci suggested someone from Montgomery County could also participate. Vice Chairman Scheffey welcomed any input and the Fire Marshal will reach out to the fire chief to identify a participant. The next meeting is scheduled for February 28, 2018, at the Jensen Hughes Office. If anyone is interested in participating, they are welcomed to attend.

The workgroup has focused on the exterior combustible material issue that is problematic internationally. There have been some high-rise fires with the material in the U.S. The workgroup is investigating if there are any non-sprinklered high-rise buildings where non-compliant materials have been used. Vice Chairman Scheffey gives further details in his critique. It has been difficult with existing documentation to obtain statistical data on high-rise fire losses in Maryland so his critique provides a review on national statistics which should be comparable to Maryland trends. NFPA released a risk analysis tool last week to support this kind of investigation and the workgroup will be looking closely at that. The National Association of State Fire Marshals also has a risk analysis tool but he has been unable to access it. It is linked with the International Existing Building Code which provides options other than sprinklers. Both he and CFPE Bush have reached out to the organization but have not received a response. Since Fire Marshal Geraci is on the Board of Directors he may be able to obtain additional information at the next meeting. The Fire Marshal stated the test model is for high-rise business occupancies.

As the workgroup moves forward, buildings that are not sprinklered will need to be identified and a determination made as to whether there is a need to recommend improvements or mitigate existing conditions. At this time it is unclear how this will be achieved. There are many high-rise buildings in jurisdictions not under the authority of the Commission.

Motion by Commissioner Harrington, second by Commissioner Welch, and unanimously carried to approve the minutes of the December 2017 meeting.

### MEETING SCHEDULED

The next meeting has been scheduled for Thursday, April 26, 2018 – 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 furnished by Hunt Reporting),

Heidi Litchie

Heidi Ritchie, Secretary