

January 24, 2025

Delegate Marc Korman, Chair  
Delegate Regina T. Boyce, Vice Chair  
Environment and Transportation Committee Maryland General Assembly  
Room 251  
House Office Building  
Annapolis, Maryland 21401

Re: HB222 - Public Safety - Corrugated Stainless Steel Tubing for Gas Piping Systems  
Requirements and Prohibitions

Dear Delegate Korman and Delegate Boyce,

My name is Sara Laird, and I am the widow of Frederick County Battalion Chief Joshua Laird. My husband was killed in the line of duty on August 11, 2021, while fighting a fire in Ijamsville, Maryland. I know most of what I have to say you have heard before as this is the third time I am returning to Annapolis in an effort to pass this life saving legislation. The cause of the fire that killed my husband was determined and documented in the after-action report to be a failure of the Corrugated Stainless Steel Tubing (CSST) under lightning strike conditions. My husband served the citizens of Maryland for 21 years. He was also a loving father, husband, son, brother, fireman, and friend. His death has left an enormous void that will never be filled, nor will our grief ever be gone.

I am writing to you today in support of HB222. Since the day I learned of the cause of my husband's fire, I have been continually educating myself and researching CSST. There are no words to adequately describe my feelings when I learned that not only are the dangers of CSST well-researched and documented but they have also been known by the industry since the mid-2000s, if not before. Even more distressing was the fact that an almost identical fire was responsible for the death of Lt. Nathan Flynn of Howard County three years before my husband's death and the death of a Frederick County citizen.

The proposed bill will require CSST products sold or installed in Maryland to meet safer testing criteria. It also provides the ability to enforce the legislation by establishing a fine for violating the sale or use of products that do not satisfy the testing criteria. In 2016, the National Association of State Fire Marshalls publicly called to raise the performance standard by requiring a more vigorous testing protocol (ICC-ES PMG LC1027). Massachusetts Institute of Technology (MIT) has also conducted significant research on CSST, which supports increasing performance standards to meet the testing criteria of 36 Coulombs. Unfortunately, the industry has been slow to adopt these recommendations, prioritizing profits over safety.

Based on my research, I have documented 30 CSST fires in Maryland over the past several years; however, this number is certainly not representative of the actual number of CSST fires. Currently, there is no system to track these fires, and absent a fatality, there is often no investigation that would identify and document the connection to CSST. The danger of CSST fires grows by the year as we continue to experience more extreme weather. Based on research conducted by the University of California, Berkeley, for every 1 degree Celsius (1.8 degrees Fahrenheit) rise in the global average temperature, lightning strikes will increase by about 12%. Dr. David Rompas, a researcher at UC Berkeley, stated, "For every two lightning strikes you had at the beginning of the century, we will have three at the end of the century." The current testing criteria only ensure that CSST used in Maryland can withstand up to 1000 amps or 4.5 Coulombs but research from the Lightning Protection Institute shows that the average lightning strike ranges from 24 to 28 Coulombs. Combining this with the continued increase of population density, the question is not if there will be another CSST fire and fatality, but when. Regardless of what the industry might say or how they might try to confuse the conversation, science provides unbiased truth.

Had the testing criteria of 36 Coulombs been the law in Maryland, my husband would still be here. I would not be a widow, and my daughters would still have their father. Just as the legislative session was ending last year there was another CSST fire in Mount Airy. When I spoke to the homeowner this fall they were still not back in their home however no one was hurt fortunately the family was home and the fire department arrived quickly but this could have very easily had a different outcome. It is time to take action to protect the citizens of Maryland and firefighters. My husband was a dedicated public servant. Please do not let his death be in vain; my greatest hope is that his legacy will be to continue his service to Maryland by protecting others from the same fate.

Thank you for considering this legislation. I respectfully ask the Environment and Transportation Committee for a favorable report of HB222.

Sincerely,

*Sara Laird*

Sara Laird  
Widow of Battalion Chief Joshua Laird