



National Electrical Manufacturers Association

Senator Tim Larsen
Co-Chair, Public Safety and Security Committee

March 9, 2016

Representative Stephen Dargan
Co-Chair, Public Safety and Security Committee

Via Email: Jaime.hobart@cga.ct.gov

Dear Chairmen,

The Fire, Life Safety, Security and Emergency Communication Section of the National Electrical Manufacturers Association (NEMA) supports the aim of House Bill 5272 which, if passed, would require carbon monoxide (CO) detection in commercial establishments throughout the state. However, we also have some concerns with the bill's specific requirements which may diminish the level of life safety available to building occupants. We have outlined our proposed amendments and associated concerns below.

CO poisoning is a leading cause of accidental poisoning death in the United States. High concentrations of CO—a colorless, odorless gas that is produced when fossil fuel is incompletely burned—can cause cognitive impairment, loss of consciousness, coma, and often death. In fact, the U.S. Centers for Disease Control and prevention (CDC) reports that more than 400 people die in the U.S. each year from accidental CO poisoning and estimates that approximately 20,000 Americans seek medical attention annually due to carbon monoxide.

NEMA's support for the bills objectives notwithstanding, we respectfully recommend the following technical changes:

(b) Any carbon monoxide detection and warning equipment required pursuant to subsection (a) of this section shall (1) ~~be capable of sensing carbon monoxide,~~ (2) be installed in accordance with the manufacturer's instructions AND THE NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 720 FOR THE INSTALLATION OF CARBON MONOXIDE DETECTION AND WARNING EQUIPMENT, (3) ~~be of a type or technology that is readily available for retail sale,~~ AND (4) be tested and certified BY A NATIONALLY RECOGNIZED TESTING LABORATORY pursuant to standards 2034 OR 2075 issued by the American National Standards Institute ~~or~~ AND Underwriters Laboratories. ~~and (5) be capable of providing an alarm suitable to warn occupants when such equipment is activated.~~ Such equipment, WHEN INSTALLED IN A BUILDING WHOSE PRIMARY CONSTRUCTION WAS COMPLETED PRIOR TO THE EFFECTIVE DATE OF THIS SECTION, may be operated using batteries OR A PLUG-IN DEVICE. BUT WHEN SUCH DEVICE REACHES THE END OF ITS USEFUL LIFE, IT MUST BE REPLACED WITH A DEVICE THAT RECEIVES ITS PRIMARY POWER FROM THE BUILDING'S ELECTRICAL SUPPLY AND ITS SECONDARY POWER FROM A BATTERY. ANY BUILDING FOR WHICH CONSTRUCTION WAS NOT COMPLETED PRIOR TO THE EFFECTIVE DATE OF SECTION 1, OR WHICH UNDERGOES A SUBSTANTIAL REMODEL (AS DEFINED BY THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE), SHALL RECEIVE ITS PRIMARY POWER FROM THE BUILDING'S ELECTRICAL SUPPLY AND SECONDARY POWER FROM A BATTERY

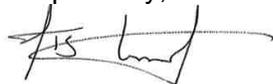
The purpose of these recommended changes is to provide the highest level of life safety for the occupants of commercial buildings in the state. Hardwired detection devices which NEMA's proposed amendments prescribe are less prone to human error than their battery-operated counterparts, which power source must be replaced by building occupants or managers. Unfortunately, in a commercial setting, this life safety necessity (replacing batteries in a CO alarm) is a chore likely to be overlooked by the occupants, and could easily be forgotten by the building managers, leaving the alarm inoperable. NEMA also recognizes the cost burden involved in requiring building owners and managers to retro-fit existing buildings with hardwired CO detection, which is why our recommendation is only to require hardwired devices in new or substantially remodeled buildings.

Commensurate with the stated purpose of the proposed amendment above, NEMA also recommends removing the requirement that the detection device "be of a type or technology that is readily available for retail sale." This language would preclude the installation and use of carbon monoxide detectors (UL 2075) that provide a very high degree of life safety and are more appropriate for use in large commercial buildings than carbon monoxide alarms (UL 2034). Detectors operate as part of a connected system that allows on-site and/or off-site monitoring by a responsible party to identify and isolate the precise location of a carbon monoxide hazard. Because CO detectors offer this and other important life safety features not available in alarms, it is imperative that building owners/managers in Connecticut be allowed to install them to protect their building occupants.

NEMA also recommends simply referencing the specific product standards – ANSI/UL 2034 and ANSI/UL 2075. A CO detection device that meets either standard will be capable of sensing CO and triggering an alarm signal, which renders the first and fifth stated requirements unnecessary. Along those same lines, we recommend adding a reference to National Fire Protection Association (NFPA) 720 which will provide very clear guidance as to recommended locations and placement for CO detection devices, particularly in large buildings. NFPA 720 is commonly referenced in state laws and regulations as the authority for the manner of installation for life safety devices.

Thank you and please do not hesitate to reach out should you have any further questions. I look forward to working with you.

Respectfully,



Jonathan Stewart
Manager, Government Relations
703-841-3245
Jonathan.stewart@nema.org

NEMA is the association of electrical equipment manufacturers, founded in 1926 and headquartered in Rosslyn, Virginia. It represents nearly 400 electrical and medical imaging manufacturers. Our combined industries account for more than 400,000 American jobs and more than 7,000 facilities across the U.S. Domestic production exceeds \$117 billion per year. NEMA Fire, Life Safety, Security and Emergency Communication members manufacture fire, smoke, and carbon monoxide detection and warning equipment.