GAS X

Product: DeNova Detect 10-Year Battery Powered Natural Gas Alarm.

Natural gas alarms help prevent natural gas explosions, serious injuries and fatalities in situations where the odorization of natural gas as the primary protection for the public from a potentially hazardous gas leak is not effective. Currently over 60% of Americans use natural gas to heat their homes, warm their water and cook their food, yet the majority is unaware that natural gas alarms exist. Too often, when these tragic events are investigated it is determined that odorization of natural gas as the final layer of protection to keep people safe from a gas leak was not effective.

People may not recognize the smell of natural gas, or believe someone else already reported the odor, or simply not acting promptly when the odor was recognized. Recently developed battery powered natural gas alarms using micro electro-mechanical system (MEMS) technology can detect natural gas at levels as low as 1% of the lower explosive limit (LEL) and alarm at 10% LEL, prompting action with an 85 decibel alarm as well as voice alerts in English and Spanish that direct occupants to evacuate and call 911. Deployment of natural gas alarms, whether by utilities to monitor jurisdictional piping upstream of a gas meter located inside buildings or by consumers in their homes will prevent events and save lives.

High profile natural gas tragedies, such as the 2014 explosion in the East Harlem neighborhood of New York City, the 2016 explosion in Silver Spring Maryland and the 2018 Dallas Texas explosions are examples of events involving fatalities. The presence of a natural gas alarm potentially could save lives. Unfortunately, these events are not anomalies. PHMSA data indicates that incidents continue to occur where odorization of natural gas was not effective in preventing the events. Notably, the NTSB added in-home methane detection to its 2021 – 2023 Most Wanted List for safety improvements because of its investigations into the Silver Spring Maryland and Dallas Texas events.

The ability to continuously monitor PHMSA and utility jurisdictional piping inside buildings with natural gas alarms has enabled regulatory relief to extend the frequency of frequent gas service line inspections, which significantly reduces inspection costs for utilities and their customers while materially improving safety.

The safety benefits of natural gas alarms could be realized through four separate channels:

(1) Building education and a culture of awareness around the availability and safety benefits of natural gas detector technologies currently available to compliment current public awareness campaigns on recognizing that distinctive 'rotten egg' smell.

(2) Through distribution of stand-alone natural gas alarms to targeted segments of a utility's customer and employee base to expand awareness and adoption.

(3) Through utility-led deployment of communication enabled natural gas alarms that continuously monitor PHMSA and utility jurisdictional piping in buildings that have gas meters inside and non-jurisdictional piping at the subsurface point-of-entry for buildings with meters outside.

(4) Regulatory Community advocacy for incorporating use of fuel gas alarms (natural gas and propane) into local building codes and standards, in similar fashion to how the State of Maine and New York City have recently done.