



## APPLICATION UPDATE

### Clear the air...the difference between fugitive and venting emissions.

Venting natural gas emissions are distinct and not to be confused with other types of leaking gas emissions as defined below:

1. Methane released into the atmosphere from unintentional leaks, called **“fugitive emissions,”** occurs from process components such as faulty valves, failed welds, leaking seals, ruptured/split piping connections, and pressurized vessels that have lost integrity.
2. Methane released into the atmosphere from designed, intentional, or control mechanisms such as vent assemblies, pressure relief valves, compressor seals, instrument gas, flares, combustors, incinerators, and the like is called “vented emissions.”

### QUANTIFICATION OF FUGITIVE EMISSIONS

**Fugitive emissions can only be detected and reported, contrary to alternative technology claims of an ability to quantify emissions accurately.** The objective behind detecting fugitive emissions is to alert or report the leak and repair, to safeguard personnel, assets, and the environment. The deployment of this mitigation protocol is termed Leak Detection and Repair (LDAR). LDAR systems involve either ground-based or aerial technologies. Instruments such as combustible gas sensors detect leaking airborne gas concentrations in terms of ppm or LEL percentages, typically using catalytic or infrared technology. Optical gas imagery (OGI) typically uses infrared-based technologies to optically record the leaking gas cloud or plume. LDAR technologies can indicate the relative severity or intensity of the leak but cannot accurately measure nor quantify the volume or release rate of gas. The high-flow sampling technique is a gas detection technology used to probe and conduct pinpoint searches for small emission leaks, in process facilities but cannot accurately quantify volumes or flow rates.

### QUANTIFICATION OF VENTING EMISSIONS

**Vented emissions can only be monitored, measured, and quantified using point-source, continuous gas metering technologies.** Vent flow verification and quantification procedures must adhere to the jurisdictional energy regulators and respective gas metering standards. Attempts to measure atmospheric vented emissions with positive displacement, differential pressure and mass flow gas meters commonly used in process gas measurement, cannot accurately quantify emissions into the atmosphere as they must have in-line pressure or back pressure to function, under known and controlled gas characteristics and flow conditions. The Ventbuster® technology was specifically designed and engineered to fill this technological gap and provide industry with the best-in-class emission quantification instrument.

*For further details and information on the most advanced technology for the most accurate, point-source emissions testing, quantification, and monitoring, please visit our website at [www.ventbusters.com](http://www.ventbusters.com)*