# **Building Better Monitoring Systems for Ethylene Oxide**

# PICARRO



New research on Ethylene Oxide (EtO) toxicity and regulatory momentum are driving the need for more sensitive EtO measurements. Legacy technologies and aging measurement infrastructures are not designed to meet this evolving need. The transition towards next-generation technologies that offer greater sensitivity at faster measurement rates, and are suitable for a variety of deployment scenarios, is overdue.

To help you make the transition, Picarro has been working closely with industry and communities to develop solutions that exceed current regulatory requirements. Our analyzers offer parts-per-trillion (ppt) sensitivity, real-time measurements, low maintenance and are easy to use. So, you can be confident that your new EtO measuring and monitoring system or service offering is robust, reliable and lasting.

#### **CEMs AND STACK TESTING SYSTEMS**



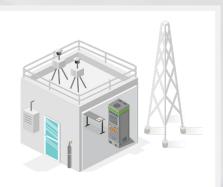
- Report more accurate and representative emissions concentrations and mass rates
- Improve process understanding and optimization of emissions controls
- Real-time data with secure access, on-site or in the cloud
- Fully automated, continuous operation with minimal maintenance

## **MULTIPOINT SAMPLING SYSTEMS**



- Facility-wide coverage with multipoint sampling and alert indicators
- Improved workforce safety with fast event detection (seconds)
- Early detection and applications in Process Safety Management (PSM) & Risk Management Plans (RMP)
- Reduction of false positives and nondetects.
- Fully automated, continuous operation with minimal maintenance

## FENCELINE AND AMBIENT MONITORING SYSTEMS



- Detection of ppt, ppb and ppm fugitive emissions
- Support for mobile surveys (LDAR) and fixed deployments
- Proven expertise with 15+ years supporting international monitoring networks
- Fully automated, continuous operation with minimal maintenance
- Mobility application with backup power supplies (i.e. UPS)



**The Heart of Next-Generation EtO Monitoring Systems** 

Using innovative, next-generation Cavity Ring-Down Spectroscopy (CRDS), Picarro has developed an Ethylene Oxide gas analyzer capable of measuring ultra-low levels of EtO in real-time (less than 2 seconds) and without the need for chromatographic separation or pre-concentration. Benefits of Picarro EtO analyzers include:

- Best-in-Class Sensitivity Wide dynamic range enables detection of EtO from ppm to ppt.
- Unrivaled Speed True, real-time analysis with a measurement interval of seconds.
- Highest Confidence Highly accurate, actionable results that do not require post-correction or reinterpretation.
- Ultimate Simplicity Easy to operate, maintain, and integrate into your system. New users can be trained in less than one day.

With a Picarro-based system, quantification of EtO from stacks, abatement systems, sterilization rooms, aeration warehouses and building ventilation has never been faster, easier or more reliable.



For more information, visit our EtO Resource Center: bit.ly/PicarroEthyleneOxide