

## ICAC Division Success Stories

### A Division Success Story: Emissions Measurements Division

Many trade associations work on behalf of its members to ensure that their collective voice is heard on Capitol Hill and beyond. ICAC delivers far more by enabling its members to share technical information with EPA and other government entities that help shape regulations based on practical, achievable and measurable emissions limitations for clean air policies. By participating in the Emissions Measurement Division, MKS Instruments Inc. was able to bring their issues and questions directly to the EPA on the issue of Continuous Emissions Monitoring (CEM).

#### The Challenge

If a customer wants to use a Fourier Transform Infrared Spectrometer (FTIR) for a Continuous Emission Monitor (CEM) for their facility emissions, they must follow Performance Specification 15 to validate their CEM system and then perform the reference method (RM), EPA M320 for the initial and on-going RATA of that system. If the user is measuring hydrogen chloride (HCl) and are a Portland Cement (PC) Kiln or Electrical Generating Utility (EGU), then they may use either PS15 or the newly developed PS18 for validation of the CEM upon installation.

CEM systems that do not use FTIR technologies may use performance specifications other than PS15 and reference method M320 that have been made technology neutral. PS15 and EPA M320 were written over 15 years ago, have several small errors, are outdated, and require many layers of unnecessary QA/QC steps that are no longer necessary with the latest FTIR advancements on the market.

These older FTIR methods have become burdensome and restrictive to FTIR instrumentation and biased against FTIR when potential customers are considering FTIR against other technologies to use in their CEM. In addition, PS15 required a quarterly submission of raw spectra of the process to EPA, which contains information about many other compounds emitted by the customer for which they may not want public, which may be used against them at a later date should new regulations be developed.

*“The ICAC gave us a voice when sitting down with EPA during one of their EPA roundtable meetings and allowed us to present the issues with FTIR CEM use.” - Dr. Peter G. Zemek*

- more -

## The Opportunity

As an ICAC member, MKS gained access to many of the EPA personnel directly responsible for writing and enforcing these regulations and standards for CEM technologies. MKS also gained input and strength in numbers from the participation of other FTIR manufacturers and users in the ICAC trying to get EPA to modify or rewrite the standards and regulations affecting the use of FTIR CEMs.

The ICAC gave us a voice when sitting down with EPA during one of their EPA roundtable meetings and allowed us to present the issues with FTIR CEM use with these outdated standards and regulations. We also have the power and support of the entire ICAC membership and board of directors when backing up our claims and requests to EPA.

This allows FTIR to remain one of the most versatile, powerful, and cost effective solutions for many existing and new users with the new capabilities in detectors, broad spectrum target compound capabilities, and new hardware and software capabilities to obtain relevant low concentration emissions information.

## The Result

After careful deliberation and listening to presentations, review of data submissions, and field trials, the EPA has informed the ICAC that they will rewrite PS15 and RM 320 and that these tasks are on their calendar and EPA has started the modification process. In addition, EPA has verbally confirmed that they will no longer require quarterly submission of raw spectral data from anyone using an FTIR as a CEM as per PS15. EPA will only require final reported concentrations like any other type CEM instrumental technology. This eliminates the ability of EPA to use any previously reported data to be used in the future against the owners of FTIR CEM technology.

## Lessons Learned

Presently, EPA's Office of Air Quality Planning and Standards (OAQPS) and Office of Air and Radiation (ORD) are short staffed and have a large work backlog. Unless you can get your voice heard with the backing of a larger organization and direct talks with EPA by leveraging the relationship ICAC has carefully crafted over the years, you will be hard pressed to get EPA to address your problem in a timely matter. ICAC gives you the tools and leadership to bring your issues and questions directly to EPA or directly to the other members with a vast knowledge base and experience. It is better to work through your needs as a team than to go it alone in the vast, tangled world of environmental regulations and standards.

###

---