



Agora Environmental Newsletter – September 2021

Have You Let Things Slip?

With everything we are dealing with and so many things being done remotely, many have found it difficult to give every task its normal level of attention, and it is easy to see how some things have just “fallen through the cracks” during the past year and a half. Don’t let compliance and the quality of your environmental program be one of those casualties. America is now trickling back into work, and this includes US EPA and your state/local regulatory agency. Are you prepared for an inspection by your regulatory agency?

EPA Field Audits

State and federal agencies conduct different types of audits to assess compliance at sources under their jurisdiction. Beyond the systematic checks done by ECMPS and a variety of ad hoc checks (e.g., CO₂ control chart evaluations) that it performs, EPA’s Clean Air Markets Division (CAMD) conducts periodic “field audits” of the CEMS programs at select sources. CAMD also encourages state and local agencies to perform field audits and prepared the *Part 75 CEMS Field Audit Manual* as a resource for individuals conducting such audits. The manual, written in 2003 with revisions now under consideration, includes checklist, summarizes many of the Part 75 requirements, and discusses how to prepare for an audit, techniques for the on-site inspection/records review, performance test observation, etc. CAMD also provides states with a Field Audit Checklist Tool (FACT) application to review monitoring plan, quality assurance, and emissions data.

Recently, CAMD has begun conducting virtual audits, which may include Zoom interviews and requests for electronic versions of many of the documents that would be reviewed on site (e.g., QA/QC Plans, maintenance logs, calibration gas certification sheets, etc.) as well as pictures of hardware such as analyzer serial numbers and the sample umbilical. The virtual nature of these audits naturally changes the focus and tends to the review more data intensive.

Agency Audit Triggers

EPA indicates that it uses a variety of “triggers” to help identify sources to audit. These audit triggers are usually indicators of potential CEMS problems that include issues such as:

- Low CEMS Availability
- RATA or Linearity Failures
- Multiple Calibration Failures
- Spans/Ranges Inconsistent with Data
- Control Chart Issues (or Shifts in Data)
- Values Reported Above MPC

Environmental Compliance Audits / CEMS Program Audits

Third party audits can help you identify the compliance issues you may have overlooked or provide ways that you can improve your monitoring program or CEMS accuracy. Remember, it is always to your advantage to self-report issues or to correct problems before they mushroom into compliance issues or significantly impact reported emissions or allowances. Audits may review all the regulatory requirements affecting a source, address just the CEMS program or specific regulations, or focus on CEMS bias or measurement issues.

Agora’s comprehensive audit services have proven to be a valuable tool for many clients to ensure that their CEMS programs are in compliance with 40 CFR Parts 75 and 60, as well as other applicable regulations and permit requirements, including the MATS Rule. During a comprehensive audit, Agora will evaluate a source’s

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air permit, QA plan, monitoring plan, relevant emission reports and QA test results. Agora also conducts an on-site visit to inspect the CEMS equipment, review records, evaluate program management, and interview plant personnel with CEM program responsibilities. With the potential for GHG regulation once again on the horizon, we have seen an uptick of interest in CEMS bias audits, where we focus on issues that may affect CEMS accuracy or cause you to over-report emissions or heat input. Let us help you get prepared, ensure your compliance status prior to an agency inspection, and improve CEMS accuracy.

DAHS/Data Audits

All CEMS components are important, but none may be as integral to ensuring the accuracy of the reported emissions as the data acquisition and handling system (DAHS). Data from the various CEMS components and plant inputs are processed through programmable logic controllers (PLCs) or dataloggers to a server which collects, processes and validates information for regulatory and internal reporting purposes. The quality of the data is dependent on many factors such as parameter setup, equation configuration, data control status, operating conditions, and regulatory requirements, just to name a few.

Agora's DAHS audits dive deep into the calculations to check emissions from raw data to hourly and multi-hour averages. Monitoring plans and QA/QC data are evaluated for appropriateness, completeness, and accuracy. Data validation is evaluated with respect to the applicable permit or regulatory requirements to verify that the data are handled properly and that all necessary conditions are being covered. The audits assess outliers and trends that can adversely affect data and verify that only accurate quality assured data are used to meet State and Federal requirements. Calibrations are evaluated to look for negative trends or non-routine adjustments. Audits are not just about ensuring the DAHS is calculating data correctly, but also ensuring that the emissions and heat input values are reasonable based on unit configuration and operating conditions.

Our previous DAHS audits have identified issues such as:

- Under-reporting due to equipment issues/leaks
- Incorrect reporting during startup or shutdown
- Improper configuration of data points
- Incorrect/missing fuel flow meter calibrations
- Misidentified fuel flow meters
- Incorrect fuel sampling results
- Excessive alarms
- Misconfigured alarms, reports, and user panels
- Under reporting heat input on CTs
- Incorrect use of non-routine adjustments
- Out of date monitoring plans
- Misreporting control status during missing data periods
- Incorrect monitor span and range settings

Question about your data? Agora provides DAHS audits to verify that your emissions data are being reported properly. Contact Mike O'Connell at (919) 791-3132 or occonnell@agoraenv.com for more information about we can verify your data are reported appropriately.

Want to assess your CEMS program? A CEMS program audit can help you identify issues you may have missed. Contact Robert Bivens at (919) 791-3133 or bivens@agoraenv.com to discuss CEMS program audit options.

Are you addressing all the requirements? Don't be caught by monitoring or reporting details that you may have overlooked and be hit with an unexpected compliance issue. Agora's comprehensive audits and CEMS bias audits can help you ensure that your monitoring programs meets the requirements. Contact Steve Norfleet at (919) 791-3123 or norfleet@agoraenv.com to talk about our audit services.

