

Abbreviated Part 75 CEMS Audit

Purpose

This document provides an outline for an abbreviated audit of a facility's continuous emission monitoring system(s) (CEMS) when a comprehensive part 75 CEMS audit is not practical.

QA/QC program

A QA/QC program or QA/QC plan is one or more documents that include, at a minimum:

- Step-by-step procedures for each of the activities listed in 40 CFR part 75, appendix B, sections 1.1 through 1.4 that are applicable to the monitoring method(s) used at the facility; and
- A CEMS maintenance log with information about all maintenance and QA/QC activities performed on the CEMS.

The QA/QC program is a living document(s) that the facility should update when any changes are made to the CEMS or QA/QC activities. The document(s) may be maintained in hardcopy or electronic format, but must be accessible and provided upon request.

Audit activities

- Review the QA/QC program to ensure that the QA/QC program (1) is accessible by the appropriate technical staff, (2) includes necessary QA/QC activities required by [40 CFR part 75, appendix B, sections 1.1 through 1.4](#), (3) is up to date with current procedures, and (4) QA/QC and maintenance activities are recorded in the CEMS maintenance log.

Analyzer serial numbers

The facility's monitoring plan(s) contain information about the components of the CEMS, including the serial numbers. When components are changed, the facility should update the monitoring plan(s) and conduct any necessary QA/QC tests.

Audit activities

- Review the serial numbers of the analyzers, fuel flow meters, and CEMS probes, to the extent possible, to ensure they match the serial numbers found in the current electronic monitoring plan. (Note: current monitoring plans are available from [EPA's monitoring plan web site](#), [FACT](#), and ECMPS software.

Calibration gases

Calibration gases, typically EPA protocol gases, are used to perform QA/QC tests on the CEMS (e.g., daily calibrations). Under part 75, calibration gases must be supplied by a gas vendor that participates in EPA's Protocol Gas Verification Program. The facility is required to properly store and manage the gases and input the information about the protocol gases and cylinders into the data acquisition and handling system (DAHS).

Audit activities

- Check the in-service cylinders to ensure the calibration gases are not expired and contain sufficient pressure (> 100 psi).
- Review the cylinder certificates to verify that each matches the:
 - Cylinder ID stamped neck the neck of each cylinder; and
 - Cylinder ID and gas concentration entered into the DAHS.

Relative accurate test audit

Part 75 requires regular relative accuracy test audits (RATAs) for CEMS. Part 75 and EPA reference methods require specific procedures. The RATA stack test reports should include information about how the test(s) was performed and the results.

Audit activities

- Review the most recent RATA stack test report to ensure the test points for the reference method(s) were sampled in accordance with [part 75, appendix A, section 6.5.6](#).
- If a gas RATA was conducted at only one sampling point, check that a 12-point stratification test was conducted prior to each RATA (i.e., a pollutant-specific 12-point stratification test is required for each pollutant prior to doing a RATA using only one sampling point.)