Method 203

Quality Assurance/Quality Control Requirements for Continuous Opacity Monitoring Systems (COMS)

Background/History

- Proposed in October, 1992
  - Addition to 40 CFR Part 51, Appendix M
- Specified quality assurance requirements/procedures
  - After initial demonstration of compliance with PS-1

Background/History, cont'd

- Minimum quality control (QC) and quality assurance (QA)
  - Assess and assure the quality of COMS performance

Requirements

- Daily checks
  - Zero and span (upscale)

Requirements, cont’d

- Quarterly performance checks
  - Optical alignment
  - Optical surface dust accumulation
  - Zero and upscale response
  - Zero compensation
  - Stack exit correlation error
  - Calibration error

Requirements, cont’d

- Annual checks
  - Zero alignment

Monitor Acceptance Criteria

- Out-of-control periods
  - Daily checks
  - Quarterly performance audits
  - Annual checks
- Data capture
  - 95 percent valid data capture

Recent Activities

- Reopened comment period
  - March 2001
- Established Stakeholders Workgroup
  - Monthly conference calls
  - Re-write and re-propose Method 203

Revised Method 203

- Requirements
  - Eliminate optical surface dust accumulation, stack exit correlation error, zero and upscale response
  - Optical alignment
    - Checked when stack temperature is +/- 20 percent of typical operating temperature
  - Zero alignment
    - Required to be done off stack every 3 years

Revised Method 203, cont'd

- Monitor acceptance criteria
  - Out-of-control periods (Calibration Drift)
    - The beginning of the period corresponds to the completion of the daily calibration drift check
  - Out-of-control periods (Quarterly Performance Audits and Annual Checks)
    - No change

Revised Method 203, cont'd

- Data Capture
  - 95 percent of the source's operating hours per quarter
  - Allow the use of substitute monitors
    - Previously certified to meet PS-1
    - Perform calibration error check
    - Check calibration drift on a daily basis

Revised Method 203, cont'd

- Corrective action procedures
  - Describes corrective action required to return an opacity monitor to normal operation
  - Specifies four classes of maintenance and repair procedures
    - Routine/preventative maintenance
    - Measurement non-critical repairs
    - Measurement critical repairs
    - Rebuilt or refurbished analyzers

Current Schedule

- Re-proposal package published in the Federal Register – December 2002
- Promulgation package published in the Federal Register – December 2003