

AQS Ambient Monitoring Topics

AQS Conference

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Data Certification

- Requirement started with monitoring regulations promulgated in 1979
 - a. Only required certification of SLAMS/NAMS monitors
 - b. Certification was made with no review of air quality data or QA results

Data Certification (continued)

- AQS came on line in 2002
- EPA urged through guidance the verification of additional parameters other than SLAMS, NAMS, PAMS
- Started linking QA data with air monitoring data

Data Certification (continued)

- Part 58 Regulations modified in 2006 that made changes to certification process

Additional monitoring data for certification required

- a. PAMS data – O₃, VOC, NO/NO_x/NO_y/NO₂
- b. NH₃, NH₄, NMOC (if collected)
- c. SPM if FRM or FEM is used and meets QA requirements

Data Certification (continued)

- d. Cannot call any required monitor an SPM, even if not an FRM-FEM
- e. Continuous PM-2.5 monitors
- f. Filter based PM-2.5 speciation monitors
- g. NCore precursor gas monitors for CO, SO₂, NO/NO_x/NO_y

History of Data Certification 1979

- 1. Part CFR 58.26 Regulations of May 1979 required certification of all monitors designated SLAMS
 - a. Data submitted July 1 for previous year
 - b. Covered all sites designated as SLAMS
 - c. Summary report as specified in Appendix F
 - d. Note air pollution episode occurrences
 - e. Senior air pollution control officer certifies the annual summary report is correct
- 2. Resulted in certification with essentially no review of air quality data or QA results
- 3. Report stored but seldom used

History of Data Certification 2002

- AQS came on line February 2002
- EPA/OAQPS urged (but not required) through guidance certification of data other than SLAMS
- Started linking P & A data with air quality data
- Generally successful in achieving certification for additional monitoring types

History of Data Certification 2006

- New amendments to 40 CFR 58 regulations were promulgated that made changes to certification process

Requirements for 2007

- 1. Before
 - a. All FRM/FEM NAAQS data (including O₃, NO₂, and CO data at PAMS sites)
- 2. After -additional monitoring data for certification
 - a. PAMS data – O₃, VOC, NO/NO_x/NO_y/NO₂
 - b. NH₃, HNO₃, and NMOC (if collected)
 - c. Special Purpose Monitors - must be certified if FRM or FEM is used, and meets QA requirements
 - d. Cannot call any required monitor an SPM, even if not an FRM-FEM

Requirements for 2007 (continued)

- e. Continuous PM-2.5 monitors
- f. Filter based PM-2.5 speciation samplers
- g. NCore precursor gas monitors for CO, SO₂, NO/NO_x/NO_y
- h. Any other parameters not SPM

Requirements for 2007 (continued)

- 3. Different language for certification statement
 - a. Must say that air quality and QA data are completely submitted to AQS
 - b. Must say that air quality data are accurate to the best of knowledge, with consideration of QA findings

Requirements for 2007 (continued)

- 4. Summary of data required to be certified
 - a. Use AMP450 for CO, SO₂, O₃, NO₂, PM-10, PM-2.5, Pb, TSP (select “Criteria”)
 - b. Submit selection criteria
 - c. Use AMP450NC for other pollutants (i.e., PM-2.5 continuous & speciation, met, VOC, etc) (select “All”)
 - d. Run retrievals within 1 week of certification letter

Requirements for 2007 (continued)

- 5. Summary report for P & A data
 - a. Submit AMP255 report (or reports) which are now required
- 6. Certification not required for:
 - a. Air toxics (other than VOC air toxics from PAMS, and toxics from PM-2.5 speciation samplers)
 - b. IMPROVE monitors

Who Must Certify Data

- 1. State and local agencies
- 2. Tribes
 - a. If approval for Treatment of State and responsibility for meeting 40 CFR 58
 - b. If right to make recommendations to EPA regarding designations based on Tribe collected data
 - c. If required under grant conditions from EPA
- 3. Other agencies (i.e., NPS, TVA, industry,) are optional.
 - a. EPA encourages certification of data to aid in interpreting quality of data.

Current Certification Flags

- 1. AMP450 currently displays “Y”, “N”, “S”
■ “Q”, or “M”
- 2. AMP450NC does not currently display flag, but hopefully will be added soon

Flags in 2007 for Certification

- 1. Blank or no flag
 - a. Certification not required
 - b. Deadline for certification not yet passed
 - c. OAQPS not had time to assign flag
 - d. Data has been modified since certification request was made

Flags in 2007 for Certification

- 2. “S” flag

- a. Certification info has been submitted to OAQPS and “Q” or “Y” flag has not been assigned

- 3. “Q” flag

- a. Questions not resolved about quality of data or quantity of QA data. Regional Office will be notified about resolution of problem.

Flags in 2007 for Certification

- 4. “N” flag
 - a. State/local agency has not submitted certification request and summary reports

- 5. “Y” flag
 - a. No issues with certification request, quality of data, or amount of P & A data

- 6. “M” flag
 - a. Data modified since request was submitted

Certification and Data Usage

- 1. EPA may use certified and uncertified data for designation purposes.
- 2. In special cases, EPA may request early certification for designation purposes.
- 3. Reports of some data users not using data on AQS that are not certified.

Flow of Certification Request

- 1. State/local agency sends certification request to EPA Regional Administrator
 - a. Regional Office reviews for completeness of package for letter and attachments, air quality concentrations, QA completeness.
 - b. Regional Office will contact submitting agency regarding any problems.
 - c. After completion of review, Regional Office forwards certification to OAQPS

Flow of Certification Request

- 2. OAQPS responsibilities
 - a. Review package for completeness.
 - b. Compare current data to air quality and QA data submitted.
 - c. Apply appropriate flag to data on AQS.