

AQS Guidelines for Reporting Collocated PM_{2.5} and Lead Data
November 23, 2012

Dear AQS User:

When submitting data to AQS from collocated PM_{2.5} and lead monitors, report the data from each monitor “as is” and do not substitute data from a collocated monitor for a primary monitor. For example, if the primary monitor (e.g., POC 1) is down for maintenance, do not report data from the QA collocated monitor (e.g., POC 2) as if it were from the primary monitor. Keep the data reporting for each monitor separate, and AQS will automatically perform any required substitution.

For data analysis purposes, the data should not be “blended” between the two monitor types. If the QA collocated monitor were to fail a quality assurance check (e.g., a flow check) when the measurement from the collocated monitor was reported as the primary monitor, then it would not be clear to users of the data that this measurement is invalid. To this end, the AQS quality assurance data qualifier flag “SS/Value substituted from Secondary Monitor” is not available for PM_{2.5} and lead.

Per 40 CFR 58.16 (c), “Air quality data submitted for each reporting period must be edited, validated, and entered into the AQS (within the time limits specified in paragraph (b) of this section) pursuant to appropriate AQS procedures. The procedures for editing and validating data are described in the AQS Data Coding Manual and in each monitoring agency's quality assurance project plan.”

For design value calculations, AQS will substitute data from a QA collocated monitor when the primary monitor does not provide valid data.

Per 40 CFR 50 Appendices N and R: “Data for the primary monitor for each parameter shall be augmented as much as possible with data from collocated (same parameter) FRM/FEM monitors. If a valid 24-hour measurement is not produced from the primary monitor for a particular day (scheduled or otherwise), but a valid sample is generated by a collocated (same parameter) FRM/FEM instrument, then that collocated value shall be considered part of the site-parameter data record (i.e., that site-parameter's monthly set of daily values). If more than one valid collocated FRM/FEM value is available, the mean of those valid collocated values shall be used as the daily value.”