

Questions and Answers on Ambient Air Monitoring Data Certification for CY2017 Data

1. What does it mean for a monitoring agency to certify its data?

Certification signals that the monitoring agency has loaded all of its data for the year and has completed the monitoring agency's normal validation process. The responsible official certifies that (i) the ambient concentration data and the quality assurance data are completely submitted to AQS, and that (ii) the ambient data are accurate to the best of his or her knowledge taking into consideration the quality assurance findings. The first part means that all of the ambient data and all of the quality assurance data that were collected, and that have completed and passed the monitoring agency's data validation process have been submitted to AQS. The second part means that the official has considered the results of periodic quality control checks and has determined that any other relevant performance assessments meet regulatory requirements and data quality requirements specified in their specific QAPPs.

2. What types of monitoring organizations must certify their data?

Per 40 CFR Part 58.15, State and local government monitoring organizations must certify their data. A state official should certify all data submitted for affected monitors in that state, except where responsibility for compliance with 40 CFR Part 58 requirements has been delegated to a local monitoring agency. Note that even if multiple monitoring organizations are considered to be with a single Primary Quality Assurance Organization, the certification may come from the state level, or from each local agency which has delegated responsibilities for compliance with 40 CFR Part 58. Specific data certification responsibilities on a monitor by monitor basis are documented through the AQS Certifying Agency Code.¹

A Tribe must certify its data if the Tribe is monitoring for regulatory purposes. A Tribe may also be specifically required to certify its data under terms of a grant from EPA. Tribes should consult with the appropriate Regional office on questions regarding regulatory monitoring and the certification process.

3. What monitoring data must agencies certify by May 1, 2018?²

Only data collected by FRM, FEM, and ARM monitors at SLAMS and SPM monitoring stations that meet Appendix A must be certified.³ In practice, this refers to monitoring data for CO, NO₂, SO₂ (hourly and 5-minute average data), ozone, lead, PM₁₀, PM_{10-2.5}⁴, and PM_{2.5}.

¹ https://aqs.epa.gov/aqsweb/documents/codetables/certifying_agencies.html

² The [final ambient monitoring rule](#) was signed on March 10, 2016 and became on effective on April 27, 2016, revising these requirements.

³ Data certification requirements may also be included in auxiliary agreements such as MOA's between states and operators of industrial networks, for example, SO₂ monitors being installed to comply with the Data Requirements Rule.

⁴ The AMP600 report is not yet configured to handle PM coarse data or 5-minute SO₂ data that is reported under a separate POC. See <https://www.epa.gov/aqs/aqs-guidelines-reporting-5-minute-so2-data-january-3-2011>. Certifying agencies should submit an AMP450NC report to reference these data until the AMP600 modifications are complete (completion – TBD).

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Data no longer needing to be certified include:

- Non FRM/FEM/ARM continuous PM monitors
- PM_{2.5} speciation data - (total mass and speciated components)
- NCore/PAMS data including NO_y, VOC, carbonyl, NH₃, and HNO₃ if collected
- Meteorological data
- Air Toxics data

Monitoring agencies are not required or expected to certify data from CASTNET program samplers located within their boundaries. In most other cases, CASTNET data will be certified by the responsible Federal agency (e.g., National Park Service or EPA Office of Atmospheric Programs) and subsequently reviewed by the Regions or OAQPS.

4. What documents need to be provided by May 1, 2018?

- A data certification letter signed by the senior air pollution monitoring person from the monitoring agency or his or her designee, sent to the applicable EPA Regional Administrator or the delegated official, addressed to the attention of the primary AQS contact noted at the end of this document.⁵ The letter must include the specific statements given in the response to Question 1 above. The letter must be clear regarding what combinations of site, monitor, pollutant, and POC are the subject of the certification statement.
- AMP600 data certification report (see footnote 4 with regard to PM_{10-2.5} data).

Certifying agencies must use the AMP600 driven process for CY2017 data. Follow these steps:

- Run the AMP600 report to review and make changes as needed.
- Add monitoring agency certification flags using the AQS Data Certification form.
- Run the AMP600 report a second time to generate a copy, sign the summary page, and send it in with the 2017 data certification letter.

5. Who will be responsible for reviewing submitted certification packages?

Regional staff will be reviewing all submitted materials, including the signed letter, AMP600 report with AQS recommended and monitoring agency requested certification flags⁶, and any pertinent monitoring agency comments. The only exception, as noted above, is for CASTNET or NPS monitors that are certified by the responsible Federal

⁵ Certifying agencies should check with their Regional contact to determine the appropriate official recipient for the transmittal.

⁶ The evaluation criteria utilized in the AMP 600 report are updated annually and available at: <https://www3.epa.gov/ttn/amtic/qacert.html>

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Agency.

6. When will the AQS evaluation flags start appearing?

EPA regional staff will commence the review process after the May 1 deadline (or earlier in the case of state-requested early certification packages), following the review of certification package submittals to assure completeness and adherence to CFR requirements. There is no explicit deadline for the insertion of evaluation flags. As with previous years, the flag is displayed on both the AMP450 Quick Look summary report and AMP450NC reports. The AQS Team will apply a U-Flag for any data uncertified after July 1, 2018. This will happen if the certifying agency did not submit the required certification letter and summary reports, did not run a AMP600 report and flag the data with the state associated flags, or the state's certification letter specifically did not apply the certification to monitors within their purview.⁷

7. How does data certification affect how ambient air monitoring data are used by EPA and others?

EPA presumes that before the May 1 deadline, monitoring agencies may still be reviewing and validating their data, making the data subject to change. After the deadline has passed, EPA may move ahead and use both certified and uncertified data to propose and make designations or findings of attainment. OAQPS usually advises outside data users to be cautious about using data before the certification deadline has passed. EPA typically does not use AQS data in broadly distributed publications until the deadline for certification has passed.

8. Why is a monitor's certification flag reset if a monitoring agency modifies the data for that monitor after EPA first sets the flag? How can a monitoring agency get a "Y" value restored?

AQS will automatically reset the certification flag to "M" if any deletion, revision, or addition of concentration data causes a change in the value of a summary statistic. AQS is programmed to reset the data certification flag because the data within AQS are no longer what was originally submitted and certified. The monitoring agency should repeat the normal procedure of submitting a signed certification letter, including submission of a new AMP600. This will allow the Regional Office to repeat their review and reset the certification flag to an appropriate value, thus informing all data users that the monitoring organization considers the new data set to be accurate and complete.

9. How can I learn more about the AMP600 report and the data certification process?

A wealth of information is available on the AQS training page:
<https://www.epa.gov/aqs/aqs-training>

⁷ The concurrence flag field will remain blank until the region takes action.

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Data certification specific training: https://www.epa.gov/sites/production/files/2015-09/documents/data_certification.pdf

Detailed explanation of the meaning of each certification flag (also see table below): https://aqs.epa.gov/aqsweb/documents/codetables/certification_flags.html

Other questions or requests for assistance should be directed to Mike Papp (papp.michael@epa.gov) and Robert Coats (coats.robert@epa.gov).

10. Who are the designated EPA Regional Office points of contact for the revised data certification process?

Region	Primary POC	Secondary POC
1	Mary Jane Cuzzupe	Robert Judge
2	Gavin Lau	Mazeeda Khan
3	Pauline Devose	Clinton McCrowey
4	Darren Palmer	Daniel Garver
5	Bilal Qazzaz	Michael Compher
6	Trisha Curran	Fran Verhalen
7	James Regehr	Leland Grooms
8	Joshua Rickard	Richard Payton
9	Fletcher Clover	Michael Flagg
10	Chris Hall	

11. What are the meanings of the data certification indicator flags?

Flag Value	Application	Comments
X	Certification is not required by 40 CFR 58.15 and no conditions apply to be the basis for assigning another flag value	Originally this was a blank (no flag). However, the use of "X" makes it definitive and therefore a flag will be associated with all criteria pollutant data.
U	Uncertified. The certifying agency did not submit a required certification letter and summary reports for this monitor even though the due date has passed, or the state's certification letter specifically did not apply the certification to this monitor.	EPA will need to determine the fields or parameters necessary to identify this data for flagging.
S	The certifying agency has submitted the certification letter and required summary reports. A value of "S" conveys no Regional assessment regarding data quality per se. This flag will remain until the Region provides an "N" or "Y" flag.	For the reporting process, the monitoring organization officially submits the data flagged with an "S" in all cases, even when there appears to be data that need to be flagged as "N". This signifies that processing for a set of data can start and it also helps to identify what data is in the evaluation process.
N	The certifying agency has submitted the certification letter and required summary reports, but the certifying agency and/or EPA	

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	has determined that issues regarding the quality of the ambient concentration data cannot be resolved due to data completeness, the lack of performed quality assurance checks or the results of uncertainty statistics shown in the AMP256 report or the certification and quality assurance report.	
Y	The certifying agency has submitted a certification letter, and EPA has no unresolved reservations about data quality (after reviewing the letter, the attached summary reports, the amount of quality assurance data submitted to AQS, the quality statistics, and the highest reported concentrations).	
M	The monitoring organization has revised data from this monitor since the most recent certification letter received from the state.	Use to recertify