

DATA CERTIFICATIONS

2025 Annual Data Certification Training

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WHAT IS DATA CERTIFICATION?

 Required May 1st submittal to the Regional Administrator by 40 CFR §58.15: a PQAO attests the completeness and accuracy of the previous year's data collected by approved monitors at SLAMS and SPM sites that meet CFR QA/QC criteria.

Data certification requirements may also be in other agreements.

• EPA does not "validate" or "certify" data submitted by an agency but does review the data and enters EPA evaluation flags.

WHAT IS DATA CERTIFICATION? CONTINUED



Data should be verified and validated prior to the data certification process.

- The data certification package:
 - A data certification cover letter
 - AMP600 Report (for criteria pollutants) signed with certifying agency
 - AMP450 NC Report for any PMcoarse (PM10-2.5) and/or 5-min SO₂ data

DATA CERTIFICATION FLAGS AND THEIR MEANINGS

Flag	Application					
Value						
Х	Certification is not required by 40 CFR 58.15 and no conditions apply to be the basis for					
	assigning another flag value					
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.					
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" concurrence flag.					
N	The certifying agency has submitted the certification letter and required summary					
	reports, but the certifying agency and/or EPA 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.					
Υ	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).					
м	The monitoring organization has revised data from this monitor since the most recent					
	certification letter received from the state.					

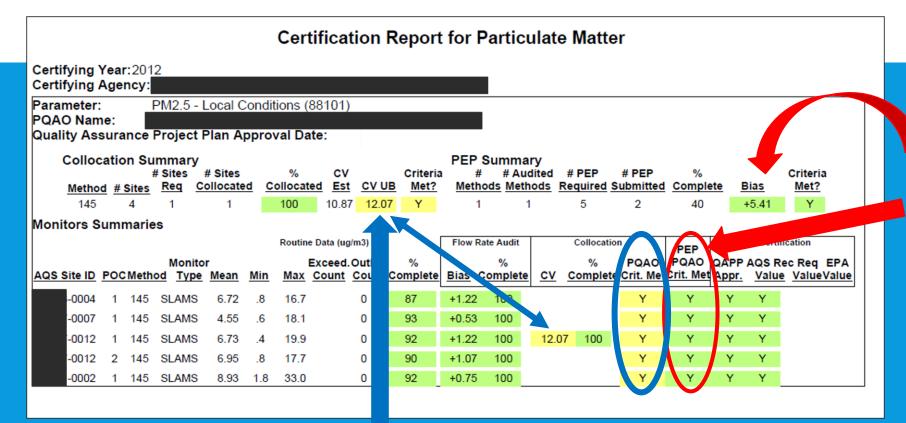
Can be found in the data certification guidance documents, AMTIC webpage, and AQS webpage.

AMP600 COLOR CODING

- In the data certification guidance documents on AMTIC webpage.
- Check the guidance documents annually for any changes to the process or AMP600.
- NOTE: Three Yellow Flags trigger an red AQS "N" flag.

Assessment	Current CFR Requirement or Guidance	Green (Acceptable)	Yellow (Warning)	Red (Recommend N Flag)	Comments		
Technical Systems Audit	PQAO every 3 years	TSA within 3 years	TSA within 4 years	TSA > 5 years	Not a monitoring Org responsibility. Will be reported on summary page not by pollutant		
Gaseous Criteria Pollutants							
Routine Data Completeness	75%	> 80%	80-70%	< 70%	Based on CFR criteria for data use 100* Number of hourly obs/number of hours in monitor sample period ¹		
QAPP Approval	Approval date within 5 years of current date	Approval date within 5 years of current date	N/A	Not approved and/or approval date greater than 5 years	Could be sole reason for "N" flag if QAPP not approved.		
1-Point QC Completeness	75%	> 75%	65-75%	< 65%	Based on 26, 1-point QC for a year. Calculated based on the number of days the monitor operated.		
1-Point QC Precision	< ±7.1% O3, < ±10.1% CO, SO2 < ±15.1% NO2	< ±7.1% O3, < ±10.1% CO, SO2 < ±15.1% NO2	±8-20% O3 ±11-25% CO, SO2 ±16-25% NO2	> ±20% O3 > ±25% others	Based on all valid 1- point QC checks in AQS for the year.		
1-Point QC Bias	< ±7.1% O3, < ±10.1% CO, SO2 < ±15.1% NO2	< ±7.1% O3, < ±10.1% CO, SO2 < ±15.1% NO2	±8-20% O3 ±11-25% CO, SO2 ±16-25% NO2	> ±20% O3 > ±25% others	Based on all valid 1- point QC checks in AQS.		

HOW THE AMP600 CRITERIA WORKS



PEP PQAO Criteria is based on Bias estimate, not completeness.

Some flags are generated at a PQAO level and affect every monitor's AQS recommended flag.

THE DATA CERTIFICATION PROCESS



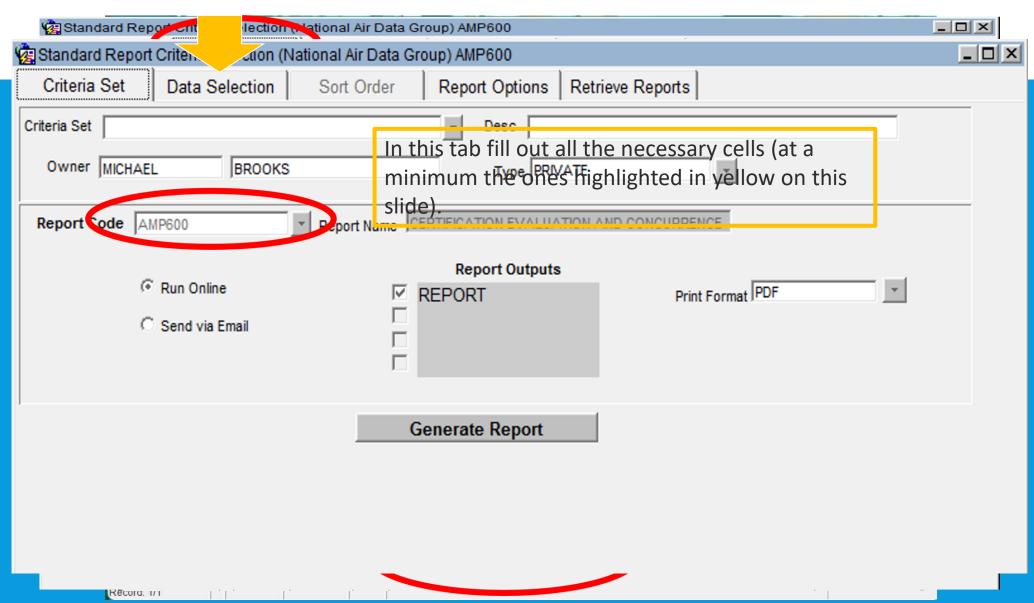


STEP 1: RUN REPORTS

- 1. Run the AQS Monitor Description Report (AMP390) If a certifying agency role is not designated, then the monitor will not appear in the AMP600.
- 2. Run the Certification Evaluation and Concurrence Report (AMP600) AQS will recommend a certification flag for each monitor based on 40 CFR Part 58 criteria.
- 3. Run the QA Data Quality Indicator Report (AMP256) to get a more detailed look at the QA data.



RUNNING AN AMP600 IN AQS



THE AMP600 REPORT SUMMARY PAGE

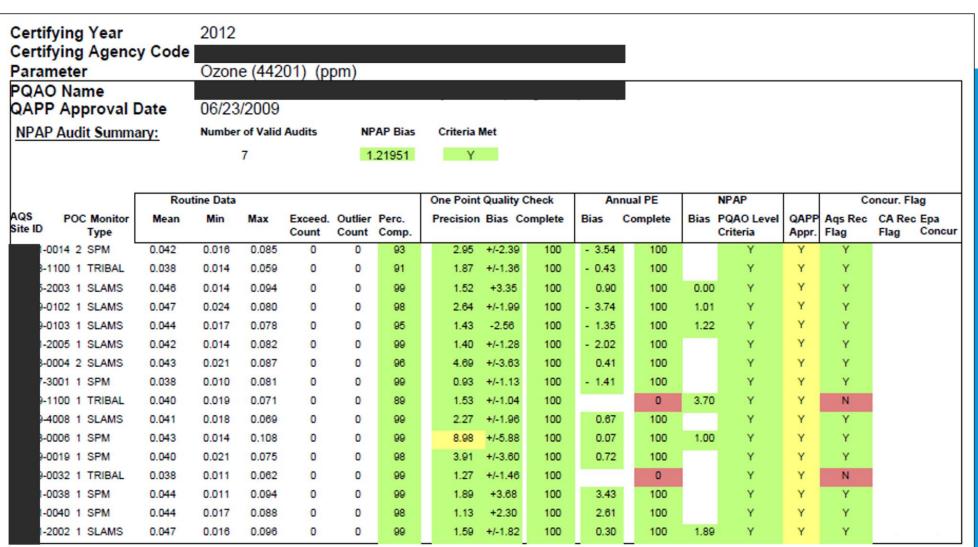
Signature of Monitoring Organization Representative: _

Jul. 22, 2014 Data Evaluation and Concurrence Report Summary Certification Year: 2012 Certifying Agency (CA): Monitors Recommended for Monitors NOT Recommended Pollutants in Report: Monitors Concurrence by AQS for Concurrence by AQS **Evaluated Parameter Name** Code Carbon monoxide 42101 3 Nitrogen dioxide (NO2) 42602 44201 16 Ozone PM10 Total 0-10um STP 81102 PM2.5 - Local Conditions 88101 12 Sulfur dioxide 42401 PQAOs in Report: **PQAO Code** TSA Date **PQAO Name** 09/27/12 AQS Cert. Agency Summary of 'N' flags for all pollutants: Recommended Recommended Parameter Flag Code Flag PQAO AQS Site-ID POC Reason for AQS Recommendation 44201 -1100 N Annual Performance Evaluation Audit Missing or 1 Level. -0032 44201 Annual Performance Evaluation Audit Missing or 1 Level. -0016 88101 Annual Summary completeness < 70%. -0014 88101 Annual Summary completeness < 70%. -0103 88101 PQAO-Level Collocation criteria not met. -0014 81102 Flow Rate Audit completeness < 65%.

Make sure the report is signed here before submittal.

THE AMP600 POLLUTANT PAGE

Before Certification



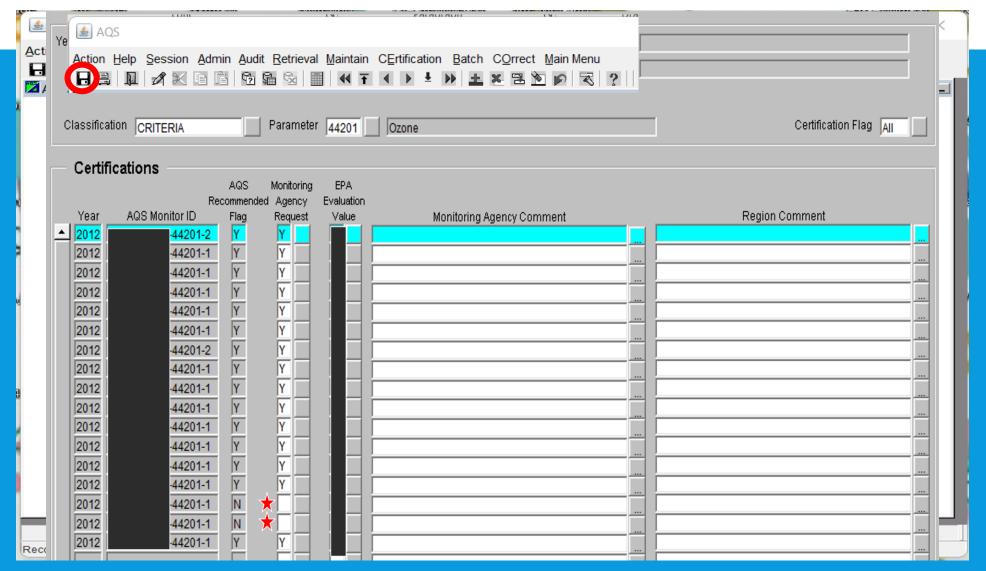
STEP 2: DATA REVIEW AND CORRECTION

- If you see "N" flags in the AMP 600:
 - Should this be a N Flag? Check the following:
 - 1. Has any data not been submitted?
 - 2. Should data be invalidated and removed from AQS?
 - 3. Run an AMP256 and/or AMP390 to get more details.

 The AQS recommended flags cannot be altered - it is based on the AMP600 criteria.

Use the AQS <u>Certification Form</u> to enter your certifying agency flags.

THE AQS CERTIFICATION FORM



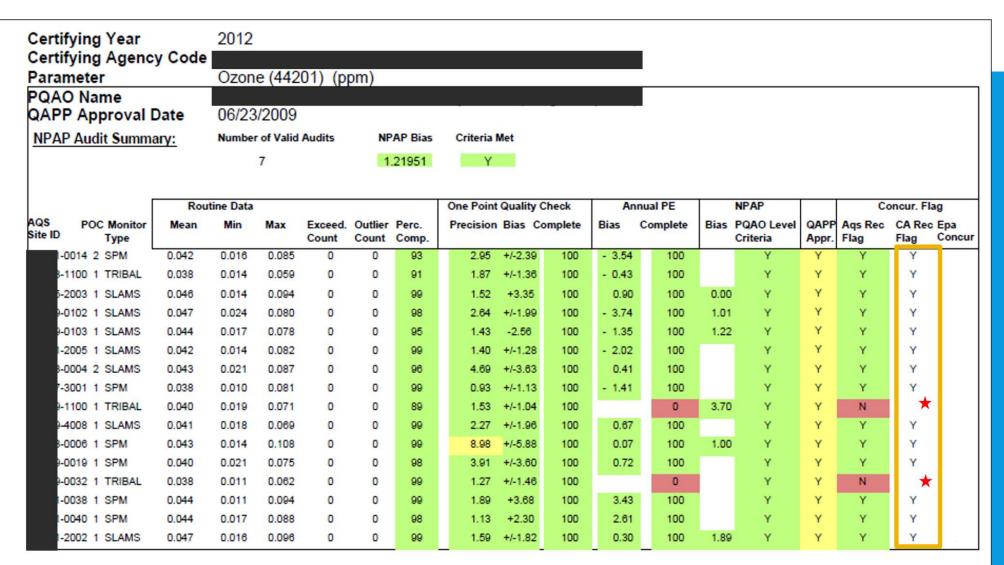
An agency can choose to put in a different flag than the AQS flag and provide a comment. "M" flags indicate data was changed after certification and needs recertification.

SAVE your changes before leaving the certification form!

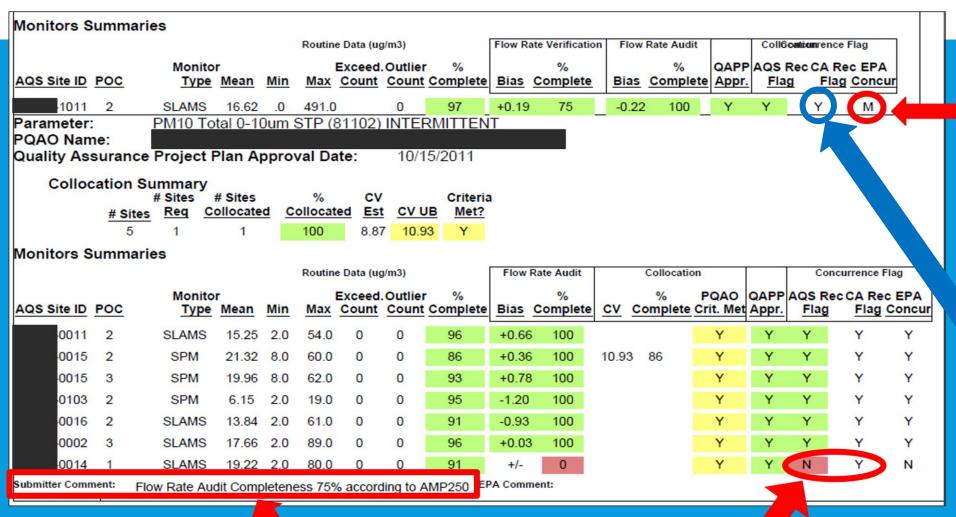
For the \bigstar monitors, until the agency enters their flags, EPA Evaluation Flags will not be added.

THE AMP600 POLLUTANT PAGE

After CA Flags are Entered



"M" FLAGS + CA & AQS FLAGS THAT DIFFER



"M" flags indicate a change to the data was made after certification. In this case, the CA has already changed their "M" flag to another flag. This indicates the data needs recertification.

STEP 3: DATA CERTIFICATION

1. Rerun the AMP600 - Verify flags and comments have been entered.

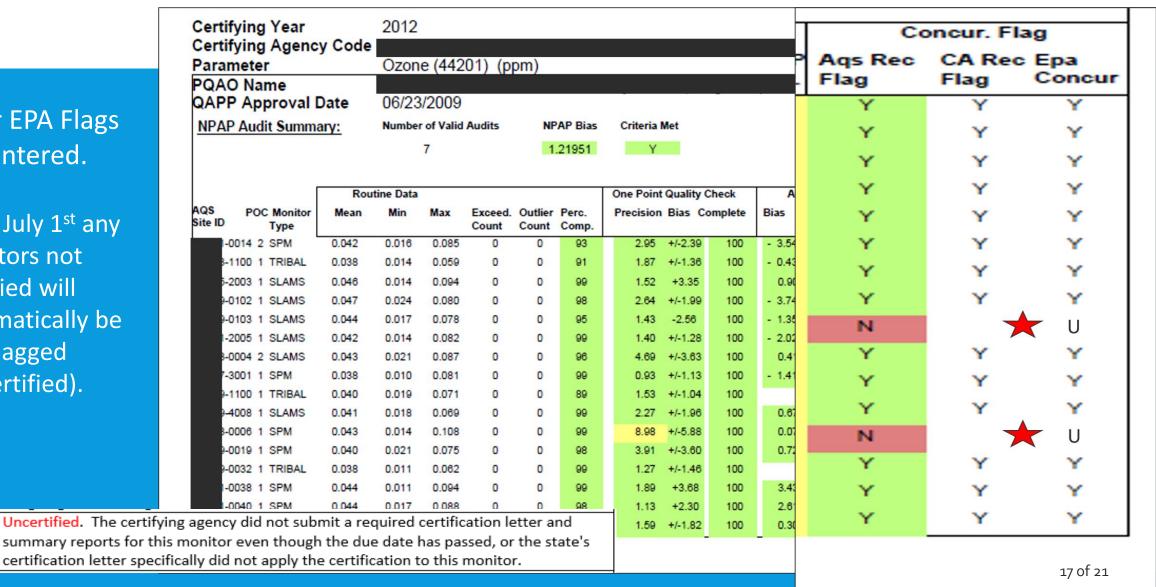
2. Sign the cover letter and AMP600 report and submit with AMP reports or other documentation.

NOTE: EPA Evaluation Flags are not Concurrence Flags!

THE AMP600 POLLUTANT PAGE

After EPA Flags are Entered.

After July 1st any monitors not certified will automatically be "U" flagged (uncertified).



CERTIFICATION PROCESS: THOUGHTS AND STEPS FORWARD



 Use the certification process often - don't wait until May to run the reports!

If you wait until the last minute everything is guaranteed to go wrong!



For more Q&A please see the guidance and webinars posted on the AMTIC Certification webpage.

Questions:

1. What to do if data values are changed (removed or corrected) retroactively? What happens to the data if it isn't recertified?

Answers:

1. Recertification is needed. Please work with your Regional Office contact on recertification packages. Uncertified data is identified as questionable and may or may not be used for determinations.

- 2. How to handle issues at the PQAO level and not at the local level such as collocation not being met at PQAO level?
- 2. Work with your regional office contact. They can help determine what requirements are needed and which flags/comments would be appropriate.



For more Q&A please see the guidance and webinars posted on the AMTIC Certification webpage.

Questions:

3. How are monitor or data issues corrected?

4. Are there rules for the comments in AQS, especially for any issues identified?

Answers:

3. This depends on the issue and how much data may be affected. If data is changed, please see the answer to Question #1. If issues are identified, work with your Regional Office contact to identify a resolution.

4. There is no limit to the number of characters/words that can be entered into the comment section of the AQS Certification Form/AMP600 Comment area.

RESOURCES

40 CFR Part 58

AMTIC QA

Data Certification Webpage

AQS Webpage

- Questions or Problems with AQS or Data Certifications Contact:
 - Your EPA Regional Office AQS Contact current contacts identified in the data certification guidance document
 - The Exchange Network Services Center (ENSC)
 - 8:00 AM 6:00 PM (EST)
 - 1-888-890-1995 choose option 2 for Node Helpdesk Support
 - nodehelpdesk@epacdx.net