2024 Data Certification Webinar Q&As
February 15, 2024

(These questions and answers are not in the same order they were addressed in the webinar – some may have been combined or grouped near others regarding a similar topic)

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

Answer 1:
Recertification would be needed if data values are altered. Certifying agency flags would need to be entered and a certification package would need to be submitted to the regional office for all monitors and years affected. Please work with your regional office contact to determine when a recertification package would need to be submitted. If data isn't recertified it may or may not be used in modeling, in research, or for determinations such as attainment, non-attainment, and exceptional events. However, data that isn't certified (or recertified) is identified as questionable, possibly not verified or validated, and caution should be exercised when using this data.

Question 2:
How to handle issues at the PQAO level and not at the local level - such as collocation not being met at PQAO level?

Answer 2:
Work with your regional office contact who can help you determine if a requirement, like collocation, is needed at the PQAO or local level. They can also help determine which flags and comments would be appropriate to include in the AMP600 and AQS Certification Form.

Question 3:
How are issues corrected?

Answer 3:
This would greatly depend on the issue and how much data is affected. For example, was a monitor having issues throughout an entire year or over a specific time frame? Throughout the year could call into question all the data in that year. If data is changed, recertification may be needed. It is highly suggested that if issues with the data or AMP600 are identified that you work with your Regional Office contact to determine next steps and identify a resolution.

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

Answer 4:
The comment field of the AQS certification form (AMP600 comment area) is limited to 2048 characters. However, the more information provided the better. As mentioned earlier, you can also provide extra AMP reports and any other documentation you believe is necessary with your data certification submittal. Please coordinate with your regional office contact to determine what should be provided. They may want you to summarize the issues and then submit certain extra documents, extra justification, as part of your certification package. If an agency feels the need to enter THAT many characters in the comment field Region 4 recommends to just include everything with the certification cover letter or in extra documentation.

Question 5:
Please review the certifying of non-criteria data, like NCore gas - PAMS?

Answer 5:
This is when an agency would use the AMP 450NC report. The AMP 450NC will allow you to include any monitors or data that do not appear in the AMP 600, including non-criteria. You can certify this data by submitting the AMP 450NC as part of your certification package.

Question 6:
Will PM2.5 data from the T640 monitors, where a data alignment/correction factor is applied, prior to the new method change or firmware updates need to be certified or recertified? Can this be incorporated into our data certification package submitted on May 1st, or will this require a separate certification package? It has been said that a new pollutant code would be created for the updated data so as to not impact the original data submitted to AQS. How will the corrected T640X particulate data be incorporated into the certification reports (if not using existing criteria pollutant parameter codes)?

Answer 6:
The T640 correction is currently out for public review. Currently, we anticipate that there will be 1 parameter code where there is one method code for unchanged data and a new method code will be created for the corrected data. So, there will be two different methods that will show up in your AMP 600. However, that is not anticipated to be added or how up in the AMP 600 until after May 1 of this year. Once the correction code is added I believe you will be required to start reporting all data to only the new method code.

Once it is added in, we will be asking everyone to go back a for the years where the correction was added and certify that data. At this time, I'm not 100% sure if that will be a separate

certification where we ask it to be submitted sometime later this year or if we will ask for it to be submitted with the next required certification due May 1, 2025. As soon as we have more information, we will be sure to share with everyone and provide guidance. This could possibly be in the form of a webinar, or a Q&A Session, a memo/guidance document, or a combination of these options. We do understand this is a new process and we will not be asking for an immediate turnaround of data certifications.

Question 7:
If Exceptional Event demos are concurred on, does that affect certification status?

Answer 7:
No, it does not. Exceptional event flags do not change the actual raw data value. It simply adds on a qualifier flag. So, since the date is not changed, certification flags are not changed either. So exceptional event flags shouldn't impact your certification. If you believe that it has altered the certification flags, please reach out to your regional office data certification contact.

Question 8:
Why is it that some qualifiers are not allowed to be entered into all raw data transactions? It seems like some of the qualifiers would fit in some scenarios.

Answer 8:
Some qualifiers are pollutant specific. This is the way they have been coded in AQS. Partly because some were being used incorrectly. For example, filter not collected was being used for gaseous pollutants when it was meant for PM or Pb.

Question 9:
Are 1C and 1F strictly for gaseous 1-point QC checks? Can they be used for PM QC checks?

Answer 9:
1C and 1F flags are strictly for gaseous 1-point QC checks, and they cannot be used for PM. Right now, I am not aware of any similar flags for PM. Again, some qualifiers are designated as pollutant specific in AQS. Some are specific to PM and can't be used for gaseous, and others are specifically for toxics (where it specifies canisters).

If you have a question about which qualifiers you can use for certain pollutants and scenarios, please work with your regional office to determine which qualifiers would be best suited for your data and what makes the most sense. Your regional office can contact us at any time to

make requests for changes to the qualifiers. We will work with them to either identify other alternatives or make necessary changes to AQS.

Question 10:
Is there a way to enter comments on raw data transactions when it goes below the 75% VDR (Valid Data Return)? Is there any way to add comments just to one particular raw data point, for instance to better explain a qualifier or null code?

Answer 10:
No, there is not a way to enter comments on that. In the AMP390 (Monitor Description Report) there is a place where you can add comments if you need to

Umm, so I know in the amp 390 you're monitor Description report has a place where you can do comments if you need to, for example if a monitor temporarily suspended monitoring and end and begin dates were added. You can always add comments to the AMP600 using the data certification form in AQS.

We always encourage our monitoring agencies to share any information regarding missing data with your regional offices. The regional offices can work with you to determine the best flags to use, how to address these issues in the AMP600, and then what documentation they would like you to provide.

Question 11:
Has AQS been adjusted to accommodate the 1.5 ppb threshold with Precision point (SO_2 trace specifically)- so it doesn't show yellow?

Answer 11:
There have been no adjustments to the AMP600. We are looking into making sure AQS has the appropriate thresholds applied and will keep everyone informed of any changes before the next certification process.

Question 12:
In a situation where a monitor is replaced sometime in the year with a different method, how is certification handled? There is good data completeness and good QA/QC for both methods.

Answer 12:
This actually is quite common. We understand that our monitoring agencies very rarely are able to start one method at the end of a year and begin a new method on the 1st of the next year.

Although that would be ideal, it isn't realistic. So, in cases like this please go back in AQS (shown in the AMP390 – Monitor Description Report) and make sure that you have correct end dates for the prior method and begin dates for the new method. You don't have to create all new sites or POCs – you simply can end a method and begin the new one. Once this information is correctly reflected in AQS it should be correctly evaluated by the AMP600. Regardless of the method, if a POC was running for the entire year (whether under one or more methods) it will look for the required QA and QC for the entire operational period.

In the AMP600 if you end a monitor (not changing the method – but closing the monitor) it will only look at the portion of the year that the monitor was operational. All calculations and evaluations will be made on the operational portion of the year. If an end date is not entered AQS assumes the monitor was operational all year and will base its calculations or evaluations on the entire year. So, end dates and begin dates are very important. For instance, AQS is only looking for 1-point QCs for the operational period, not for the entire year. Same for your audits. We usually look for an annual performance evaluation to be performed if the monitor ran for six months out of the year or more.

Ultimately, you should work closely with your regional office on start dates, end dates, and monitor method changes. If when you run the AMP600 and see anything odd or that you disagree with, please talk to your regional office contact. They will help you through the process and will work with us at OAQPS to find a solution.

Question 13:
Will the AQS system be updated any time soon? Any more info on the new build of AQS? This was mentioned at the previous conference in Pittsburgh but haven't heard since.

Answer 13:
The update of the AQS system is looking like the same as the system we currently have now. We are still in the middle of contracts and so once are able to finalize that then we will start moving and building the new system.
Right now, we don't have a timeline on when that will be complete. We know that is not very specific and not a whole lot of information, but we are still planning on updating AQS. We're being held up at the moment, but as soon as we have more information we will share with the AQS users.

Question 14:
Any more info on when the cylinder must be connected to QA/QC transactions?

Answer 14:

Assigning the cylinder ID and the PGVP ID to the 1-point QC checks and the transactions for the annual performance audits is currently on hold. Most of the features are operational and working right now. The cylinder maintain form works, so we're encouraging everybody to add some of their cylinders into that AQS form and start the process of routinely getting the information together for all of your cylinders at all of your sites. For this certification, we're not requiring that any of the QC checks have the cylinder ID and PGVP ID in AQS.

Currently we are not able to assign an NO cylinder to the NO_2 QC checks or audits. We do not have a timeline on when this will be resolved but have been told by the AQS team that a solution is close and we hope to have this bug addressed soon. After this issue is resolved, we are planning for at least nine months of optional use of these features before making the cylinder id reporting on the QA transaction files required for 1-Pt QC and Annual Performance Evaluations. We will keep everyone updated on the progress.

Question 15:
So the PGVP is for PE only, not 1-point checks?

Answer 15:
It is for both 1-point QC checks and for your annual performance evaluations. The capability currently exists in AQS to assign those cylinder IDs to both the annual performance evaluation audits and your 1-point QC checks, except for NO_2 right now. We hope to have the NO2 issue resolved shortly. We are really encouraging folks to start at least practicing with the logistics of what's involved to include the Cylinder IDs and PGVP IDs with your 1-point QC checks and annual performance evaluation audit results that are reported to AQS.

Question 16:
As there is no requirement for ozone for the cylinder ID, how can there be a requirement for NO2 as the source of error can be the addition of ozone in the GPT process and not the cylinder? Are you also worried about the ozone part in addition to the NO part of the GPT? When you have 30+ sites it's an extreme burden. Meaning in the sense that the ozone is the only part of the system I trust, the NO is riddled with problems.

Answer 16:
The Cylinder tracking is not just for tracking the source of error. It would have been nice if we could have included the ozone calibrator in this process. We did contemplate whether we should also track the ozone calibrators as well for the same reasons you are describing here. We decided in the end that just the tracking of the cylinders was going to be a big enough of a lift without tracking the ozone calibrators, so we scaled back to only tracking the cylinders.

The main goal here is to be able to capture which EPA Protocol Gas cylinder standards are being used for CO, O_3 and NO_2 calibrations. If we know the cylinders that you are using and which speciality gas producers you're using then EPA's protocol gas verification program will have a better hold on what the national market share each speciality gas producer has. This will allow the Protocol Gas Verification to perform better representative sampling of the producers of these standards for our cylinder assessments. For example, what market share does Airgas have versus Linde versus Red Ball? If we know this then we'll be able to target our verification program better than what we have right now. So, the main goal is to just make sure that we have a good comprehension of what cylinders are being used. Then the second goal is the cylinder metadata which will allow us to add an extra level of validation on the 1-point QC checks that are coming into the system.

Sometimes even though we check and we double check before we load to AQS and certify a 1-point QC check, we may still have a QC check slip through the system where the QC check was performed with an expired standard. The new cylinder tracking features in AQS provide some additional validation to help everyone do that final check to catch where the assessment was done outside of the certification periods of that cylinder. It'll help catch that for you and hopefully should reduce findings on TSAs.

Stay tuned for a future request. We would like to track the calibrators/photometers as well. Once we get the cylinders fully implemented, this may be the next step. We want a good logistical system for getting the data into AQS for cylinders. Once that is operating well and it's not causing too much heartburn for folks, then we'll inquire with the community and see if maybe tracking calibrators would be a thing to do as well. But let's makes sure we have the cylinder tracking working well before we add additional standards to be tracked.

Question 17:
Is there a manual or memo or anything on how to enter the cylinder information into AQS?

Answer 17:
Please refer to page 94 of the AQS User Guide – Maintain Cylinder. There is also entry information located on the AQS Transaction Formats page under 1-pt QC, Annual PE, and QA-Ambient Air Protocol Gas Verification Program

Question 18:
There is no documentation at this point for insertion of the cylinder ID etcetera into the PC records, like with AirVision or other data management companies. Will they have add-ons to their products because this can become an extreme burden on us? For example, when you submit in the neighborhood of 7000 PC records every quarter. At this point, we're manually entering them into the PC record because there is no automated way to do that. So, cylinders

that could be changed out in the middle of the quarter, so everything has to be evaluated on a case-by-case basis. It's really an extreme burden.

Answer 18:
Doug Jager has been working with ORD and data management systems. We have been informed that Agilaire has the capability to generate QA-Transaction records that include the Cylinder ID and PGVP ID of the standard used for the QC check if those cylinders are entered into the Air Vision DAS. We know that the DR DAS is working on this capability for their Envidas system, but we are not aware of their production status for this work.