EPA OFFICE OF AIR QUALITY PLANNING AND STANDARDS

The QA EYE

ISSUE 7

DECEMBER, 2008

SPECIAL POINTS OF INTEREST:

- **EPA Revises Lead Standard**
- **Pb Quality System requirements**
- **QA National Meeting May 12-13, San Antonio**
- **QA Handbook Vol II Finished**

INSIDE THIS ISSUE:

EPA Revises Lead National Ambient Air Quality Standards

On October 15, 2008, EPA substantially strengthened the national ambient air quality standards (NAAQS) for lead. The revised standards are 10 times tighter than the previous standards and will improve health protection for at-risk groups, especially children.

EPA has revised the level of the primary (health-based) standard from 1.5 micrograms per cubic meter ($\mu g/m^3$), to 0.15 $\mu g/m^3$, measured as total suspended particles (TSP). EPA has revised the secondary (welfare-based) standard to be identical in all respects to the primary standard.

Scientific evidence about lead and health has expanded dramatically since EPA issued the initial standard of 1.5 $\mu g/m^3$ in 1978. More than 6,000 new studies on lead health effects, environmental effects and lead in the air have been published since 1990. Evidence from health studies shows that adverse effects occur at much lower levels of lead in blood than previously thought.

Children are particularly vulnerable to the effects of lead. Exposures to low levels of lead early in life have been linked to effects on IQ, learning, memory, and behavior.

In conjunction with strengthening the lead NAAQS, EPA is improving the existing lead monitoring network by requiring monitors to be placed in areas with sources such as industrial facilities that emit one ton or more per year (tpy) of lead and in urban areas with more than 500,000 people.

Also as part of this notice, EPA describes the approach for implementing the revised standards and provides an implementation timeline.

To download a copy of the final rule, go to EPA's Web site at: http://epa.gov/air/lead/actions.html

DQO Process Helps to Identify Acceptable Precision and Bias for Pb

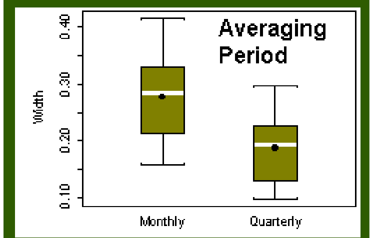
Using the DQO Process, EPA explored how changes in design value averaging times, sampling frequency, data completeness, precision and bias affect ones ability to compare Pb estimates to a NAAQS value. Research Triangle Institute in coordination with Neptune and Company worked with EPA to create a Pb data set which could then be modeled to run various data quality scenarios based on:

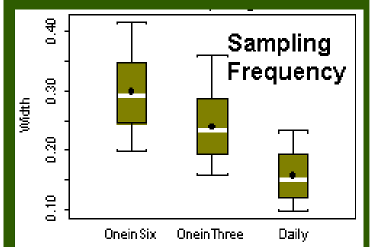
- two design value averaging times (monthly and quarterly).
- Two completeness scenarios (75% and 90%)
- Three sampling frequencies (every day, every three days, every six days)
- Three precision scenarios (10%, 20% and 30%), and
- Three bias scenarios ($\pm$ 5%, $\pm$ 10%, $\pm$ 15%)

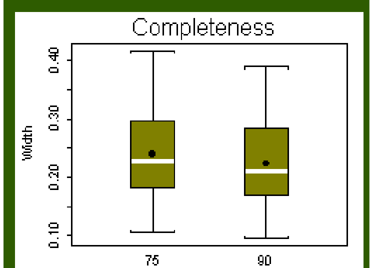
The data and sites used to generate the model were routine monitoring sites that had more temporal variability then the mean of the data set population. This conservative approach is consistent with the approach used to generate ozone and PM2.5 DQO's.

(continued on page 2)

Pb Data Uncertainty Related to the Following Scenarios







Measurement uncertainty is influenced, in order of largest to smallest effect, by averaging time, sampling frequency, bias, completeness and precision

Pb DQO— *Continued from page 1*

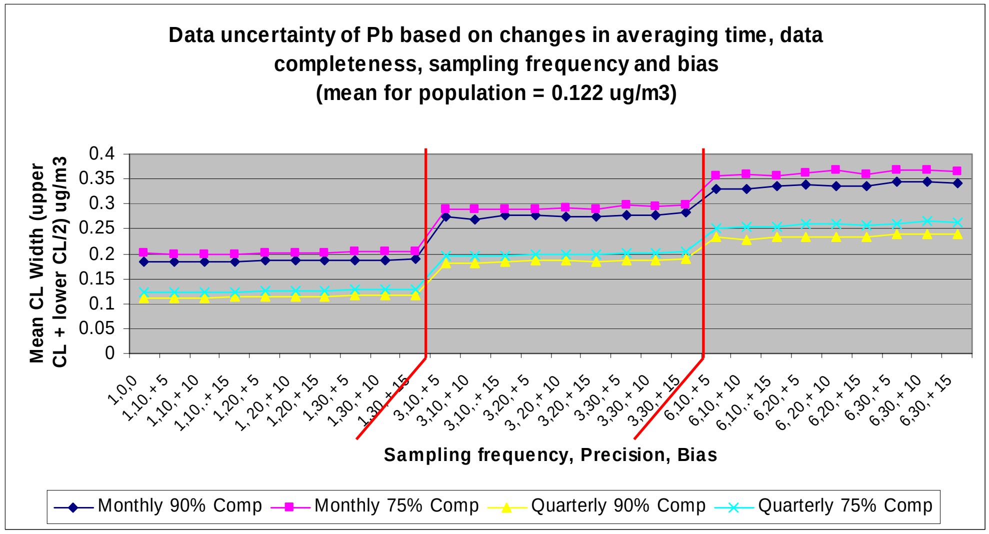


Figure 1.

Figure 1 provides a summary of the findings. The data in Figure 1 represent the difference between the upper and lower 95% confidence limit of each scenario mentioned above and was based on a population mean of the data set of 0.122 ug/m^3.

However, one could use this information at any design value since these graphs show magnitude of change based on the scenarios, so selecting a design value of 0.200 ug/m^3 would basically shift all the graph lines up 0.078 ug/m^3.

Observations

- Confidence limits about a mean value are influenced most by design value averaging times and sampling frequency but they are about equal; meaning there is about the same amount of uncertainty with a monthly data aggregation with everyday sampling frequency as there is with a quarterly data aggregation with an every third day sampling frequency.
- Data completeness and bias do not influence confidence limits as much as design value averaging times and seem to have about equal affect.
- Precision has the least influence on confidence limits.

As is normally the case with environmental data, natural spatial and temporal variability represent the largest amount of uncertainty. Measurement uncertainty is then influenced, in order of largest to smallest effect, by averaging time, sampling frequency, bias, completeness and precision. Based on a review of precision and bias data from various sources, EPA established a measurement quality objectives (MQO) for precision of 20% and bias at $\pm$15%. For completeness, 75% is considered acceptable. Most data reviews show routine data completeness higher than 75% and EPA could provide guidance (extra samplers available for key sites or collocated precision at key sites for data substitution) to ensure higher data completeness.

Pb Measurement Quality Objectives

Data quality indicators are quantitative statistics and qualitative descriptors that are used to interpret the degree of acceptability or utility of data to the user. The principle data quality indicators are precision, bias, completeness, comparability, representativeness and detectability. A measurement quality objective is a goal set by EPA guidance that represents a reasonable expectation of what one should be able to achieve for a specific data quality indicator in order to maintain acceptable levels of uncertainty.

As part of the DQO process described in the page 1 article, EPA reviewed precision data from various sources including routine Pb data from the SLAMS, National Air Toxics Trends Sites and Chemical Speciation Network Sites; this Pb data was collected by various sampling and analytical methods. Table 1 below provides a comparison of this data. The data represent eight precision assessments separated based on either a different sampling method or a different analysis method. As with our other particulate-based criteria pollutants, EPA identifies a "cutoff" concentration value and precision and bias estimates are made only data with values that are equal to or above this cutoff value. At low concentrations, agreement between measurements of collocated values, expressed as relative percent difference, is understandably poor but at such low concentrations precision is not an important objective for air quality purposes. Prior to the new Pb NAAQS standard, the collocated precision cutoff value was 0.15 µg/m^3 . With the lowering of the NAAQS, and improvements in sampling and analytical technologies, EPA feels this cutoff value can and should be lowered. The data in Table 1 was reviewed at a number of potential cutoff values; starting at 0.002 µg/m^3 , which is the proposed method detection limit (MDL) for the XRF-based FRM for Pb-PM_{10}, and up to 0.02 µg/m^3 . Some scenarios in Table 1 do not show the 0.01 or 0.02 µg/m^3 scenarios because there were not enough (or no) routine data concentrations in these ranges. Based on our evaluation, we believe that 0.02 µg/m^3 is an appropriate cutoff value for two reasons: 1) there has been an established concept of a "limit of quantitation" that is usually estimated at ten times the MDL, and 2) it is practically one order of magnitude away from the NAAQS and provides an adequate margin of safety for data review. As an alternative, EPA could consider 0.01 µg/m^3 as a cutoff but we do not recommend going below this concentration. Based on this cutoff value and reviewing the historical data in Table 1 at or above the 0.02 µg/m^3 cutoff value, EPA proposes a precision measurement quality objective of 20% for a 90% confidence limit coefficient of variation, aggregated over a 3-year period at the primary quality assurance organization level. This means that the large majority of paired precision data should show a difference below 20%; monitoring organizations that do not achieve this result would be advised of the problem and encouraged to investigate and resolve the causes of the disagreements.

Table 1. Pb Collocated Precision 90% Coefficient of Variation Summary

Data Values	1	2	3	4	5	6	7	8
Pb > 0.002 ug/m3	19.4	13.0	16.9	9.4	36.6	37.0	23.5	15.5
Pb > 0.006 ug/m3	20.7	11.8	16.8	8.8	29.1	36.1	14.9	15.4
Pb > 0.01 ug/m3	11.2	11.7	16.5	8.1	24.1	18.3		15.4
Pb > 0.02 ug/m3	12.0	6.7	15.0	9.0		14.0		16.4

1. PM10 NATTS Pb High-volume sampling (~113 LPM) Analysis ICP-MS
2. TSP Pb High-volume sampling (~113 LPM) Analysis ICP-MS
3. TSP Pb High-volume sampling (~113 LPM) Analysis Atomic Absorption
4.TSP Pb High volume NY Data Analysis Graphite Furnace AA
5. TSP Pb Low-volume sampling Analysis XRF
6. PM2.5 CSN Very-low-volume sampling (~6 & 7 LPM) Analysis XRF
7. PM2.5 CSN Texas Low-volume sampling (16.7 LPM) Analysis XRF
8. TSP Pb High-volume sampling (~113 LPM) Analysis ICAP

Bias Estimates

Estimates of Pb bias were evaluated by reviewing data collected through the $PM_{2.5}$ Chemical Speciation Network (CSN) and the National Air Toxics Trends Stations (NATTS) QA programs. The XRF bias estimates for the $PM_{2.5}$ CSN were obtained from data provided by the analysis of Performance Evaluation (PE) samples. CSN PE samples consist of "real-world" particle filters collected over multiple days to ensure that an adequate amount of material is present for analysis. For XRF, 46.2-mm Teflon filters were collected and analyzed by an EPA reference lab prior to distribution. The average concentration in µg/filter was 0.331 µg/filter and the equivalent concentration in mg/m^3, based on 24 m^3 (16.7 Lpm sampling), was 0.0138 µg/m^3. The overall absolute bias upper bound for the 95% percentile is 23.42%.

Bias estimates for the NATTS were obtained from data provided by the analysis of Performance Evaluation (PE) samples by ICP-MS. Several laboratories provide ICP-MS analyses in support of the NATTS. NATTS PE samples consisted mostly of 46.2-mm quartz fiber filters that are produced by the aerosolization and deposition of a Pb-salt solution onto each filter. The size distribution of the liquid aerosol was not controlled or characterized. Initially Teflon filters were used and then switched to quartz filters to match the filter material used by the NATTS. The filters were prepared and analyzed by ICP-MS at a reference lab prior to distribution. The average concentration in µg/filter was 2.965 µg/filter and the equivalent concentration in µg/m^3, based on 24 m^3 (16.7 Lpm sampling) was 0.1236 µg/m^3. The overall absolute bias upper bound for the 95% percentile is 16.81%. *(continued on page 4)*

Pb Measurement Quality Objectives *(continued from page 3)*

It is important to note the differences in the PE samples generated for each program as these differences have the potential to affect the bias estimates. The XRF bias estimate is based on $PM_{2.5}$ particles collected in the field and include any associated particle or sample "matrix" effects. For NATTS, the ICP-MS PEs samples are lab-generated liquid aerosols. In addition, the XRF PE samples were at a concentration level that is one order of magnitude lower than the ICP-MS PE samples (0.331 versus 2.965 µg/filter) and at an equivalent concentration (0.0138 µg/m3). It should be observed that this equivalent concentration is below the proposed cut off value. Therefore, one might expect for XRF bias results to comparable to the NATTS bias results if values above the proposed cutoff are used.

Based on this cutoff value and reviewing the CSN and NATTS data, EPA identified an overall absolute bias upper bound goal of 15%. The XRF bias estimate of 23.4% is expected to improve at concentrations 10 times higher than those evaluated. The ICP-MS bias estimate of 16.81% is in line with the proposed goal. This means that the large majority of bias data should show difference below 15%; monitoring organizations that do not achieve this result would be advised of the problem and encouraged to investigate and resolve the causes of the disagreements.

For Pb ... What's in CFR Appendix A?

Base on the DQO process and the data quality assessments EPA reviewed the QA requirements in 40 CFR Part 58 Appendix A. The following are the highlights of the changes that occurred in in Appendix A:

DQO Goals

As mentioned in earlier articles in the Newsletter the measurement quality objective for precision will be 20% for a 90% confidence limit coefficient of variation and an overall absolute bias upper bound goal of 15%.

Flow Rates

No changes occurred to flow rate. Flow rate verification will be implemented quarterly and flow rate performance evaluations will be implemented every six months.

Collocated Monitoring

No changes occurred to the collocation requirements. Collocation will continue to be required at 15% of each method designation within a primary quality assurance organization at a 1-in-12 day sampling frequency. EPA added language encouraging monitoring organizations to site the first collocated sampler in each network at the highest concentration site. This will allow the site to operate over the longest time period and since it may be the site that affects the NAAQS and it is allowable to substitute collocated data for missing data from the primary monitor, this siting would be advantageous for improving data completeness at a very important site.

Pb Strip Audits

The requirement for the analysis of 6 Pb audit strips per quarter (3 strips at 2 concentration ranges) has not changed. However, the audit concentrations ranges have changed. The lower concentration range is 30-100% of the NAAQS and the higher concentration range is 200-300% of the NAAQS. EPA is contemplating the possibility of developing audit strips for monitoring organization laboratories based on interest.

PEP-Like Audits

The implementation of a PEP-like audit is a new requirement and it provides some assessment of overall bias but will be a mix of one or two PEP like audits with additional collocated sampling. The program will require the same number of audit samples as required for $PM_{2.5}$ meaning:

- PQAOs with ≤ 5 sites require 5 audits (1 PEP, 4 collocated)
- PQAOs with > 5 sites require 8 audits (2 PEP, 6 collocated)

Similar to the PEP, monitoring organizations are responsible for these audits but must meet adequacy and independence requirements. EPA is anticipating using the current PEP auditors to provide federal implementation of the program if monitoring organizations would like to have the program implemented through that implementation mechanism.

Additional QA guidance detailing the QA requirements will be developed in January, 2009.

QA Handbook Volume II Complete

The QA Handbook Vol II was completed in December, 2008 and is available on AMTIC at http://www.epa.gov/ttn/amtic/qabook.html . A few items in the new version include:

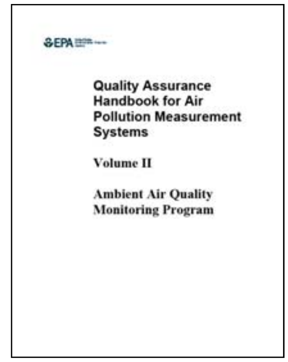
- Heavy use of web links and footnotes in order to provide the reader sources with more detailed information.
- Removed high volume PVC laminar inlets. We have made the Handbook consistent with CFR on the use of Teflon and borosilicate glass only for all inlets and the sampling train and are discouraging the use of high flow inlets which are difficult to audit.
- Removed zero/span calibrations 1 and 2 from section 12 and included the discussion of zero, span and precision checks in the QC section.
- New Attachments

  –Monitoring Program Fact Sheets

  –QA Info attachment

  –Color validation templates

Revisions to this document started in earnest in 2004 with Anna Kelley in the lead during her one-year IPA with EPA from the Hamilton County Department of Environmental Services. The QA Strategy Workgroup is also commended for their dedication to the endeavor as they met with EPA every few months to review and revise each section. A separate Workgroup, led by Gordon Jones from Region 5, met to revise the technical systems audit (TSA) form which is now included as Appendix H. EPA appreciates the assistance of all EPA Regions and monitoring organizations who helped in the completion of this document. Since the revision of this document took longer than expected, EPA hopes that the new version of this document be posted on AMTIC in such a manner that sections can be continuously revised without having to revise the whole document. Therefore, if a rule is changed that effects one or two sections of the Handbook, these sections will be revised and a quality bulletin explaining the change, and what sections are effected by the change, can be posted on AMTIC. Monitoring organizations can ensure their Handbook is current by reviewing the quality bulletin postings and downloading the appropriate sections. For additional information on the Handbook, contact Mike Papp at: papp.michael@epa.gov


EPA

Quality Assurance Handbook for Air Pollution Measurement Systems

Volume II

Ambient Air Quality Monitoring Program

Guidance for Entering TEOM Flow Rate Data into AQS

Over the years, EPA has received numerous questions about the submission of monthly flow rate verification data and the semi-annual flow rate performance evaluation data for TEOMs to AQS. The questions include:

- what flow rate to report, main flow or total flow. and
- where to submit this data.

What Flow Rate to Report

There are two flow rates for the continuous $PM_{2.5}$ TEOM: the main flow rate which is typically set to 3 liters/minute and the total flow rate which set to 16.67 liters/minute. Both flow rates are important and both should be checked during the verification and performance evaluations. Both flow rates can be reported to AQS and this is encouraged, however, the priority flow rate which must be reported to AQS is the main flow rate as this flow rate directly factors into the calculation of the reported concentration.

Where to Report the Flow Rate Data

The monthly flow rate verifications are reported in the precision transaction area. In order to report both the main flow rate and the total flow rate two separate precision transactions must be supplied. These precision audits will be differentiated by the use of the "Precision ID" (number between 1 and 99) field on the RP transaction. There is no significance as to which number is used for the total flow versus the main flow. It will be responsibility of the data analyst to distinguish between audits using total flow and main flow values. The semi-annual flow rate performance evaluations, are reported as an accuracy transaction. EPA suggests reporting the main flow rate data in the Level 1 accuracy field and the total flow rate data in the Level-2 accuracy fields. EPA is not suggesting any resubmission of audit data if the guidance above has not been followed, but recommends this entry scheme in future submittals

As a reminder when reporting the flow rate values, the “Actual” field is for the results of the auditing device’s flow rate, the “Indicated” field is for the result as reported from the monitoring instrument being tested.

PEP Program Testing Audit Samplers for Very Sharp Cut Cyclone (VSCC) Transition

Picture courtesy Greg Noah (Region 4 EPA)

The PM2.5 Performance Evaluation Program (PEP) will deploy very sharp cut cyclones (VSCCs) in the fleet of BGI PQ200A PEP Federal Reference Method audit samplers in 2009. The Region 4 Athens Laboratory set up 20 samplers (picture above) during the week of December 8 for what is called a "Parking Lot" collocation study configuration to compare the performance of the WINS and the VSCC separators. Samplers ran for three days with WINS impactors in all samplers to establish the precision of the parking lot fleet and identify any "rogues." Six to nine more sampling days are planned in early January to randomly rotate the WINS and VSCCs among the satisfactorily performing samplers on the lot. We will have all of the PEP field operators run 2 BGI PQ200A samplers, one with a WINS and the other with a VSCC, in their first four audit events in 2009. We are taking these extra steps to ensure no audit events are lost due to unfamiliarity with operating with the VSCCs and to ensure data comparability between the BGI PQ200As and the R & P 2025 sequential samplers in the national network over the next year or two. In the 2005-2007 (see Figure 1 above) bias data, EPA noticed a positive bias with the R & P 2025 that utilizes a VSCC. The spread between biases for R & P 2025 with WINS and R & P 2025 with VSCCS was greater than the spread for other makes of samplers. EPA will be looking into this issue in 2009 and is testing the BGIs to ensure similar bias does not show up in the PEP data.

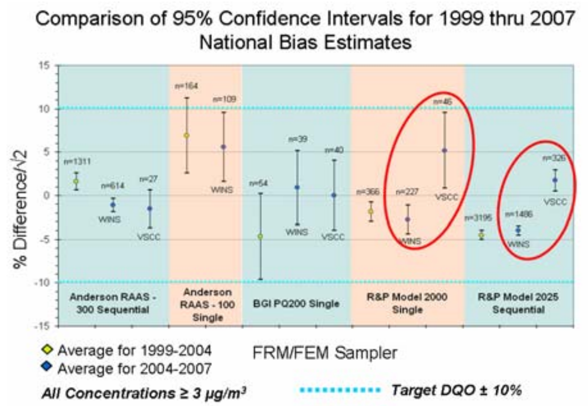


Figure 1

2005-2007 Three Year PM2.5 QA Report Out for Review

Every three years, OAQPS documents the quality assurance activities that were undertaken for the SLAMS $PM_{2.5}$ environmental data operations. The QA Report evaluates the adherence to the quality assurance requirements described in *40 CFR 58 App. A* and evaluates the data quality indicators of precision, accuracy, bias, and completeness. Tables 1, 2, and 3 provide some general information covered in the report. The report assesses the QA information mainly at the level of a primary quality assurance organization but also looks at method designations and at individual sites where appropriate. In general, the majority of the data are meeting the data quality objective goals but the data is showing an increased percentage of primary quality assurance organizations not meeting the precision and bias goals. The report is posted on AMTIC for review http://www.epa.gov/ttn/amtic/anlqa.html.

The report is available for review until January 30, 2009. Please send any comments or corrections you might have to Mike Papp at: papp.michael@epa.gov.

Table 1- Data Completeness- 9 Year Summary

Data Type	Completeness 3-Year Average		
	1999-2001	2002-2004	2005-2007
Routine Data	28%	64%	68%
Average Capture Rate	Not calculated	92%	92%
Collocation Precision	67%	90%	91%
Flow Rate Accuracy	76%	83%	85%
Performance Evaluations	85%	83%	81%

Table 2 Precision, Accuracy and Bias Estimates-9-year Summary

Data Type	Acceptance Criteria	3-Year Estimates		
		1999-2001	2002-2004	2005-2007
Collocation Precision	10%	7.2%	6.9%	7.55%
Flow Rate Accuracy	4%/5%	0.2%	0.15%	0.007%
Performance Evaluations	±10%	-2.%	-2.1%	-2.97%

Table 3 Percentage of PQAOs Meeting Acceptance Criteria- 9-Year Summary.

Data Type	Acceptance Criteria	% of PQAO Meeting Criteria		
		1999-2001	2002-2004	2005-2007
Collocation Precision	10%	86%	89%	81%
Flow Rate Accuracy	4%/5%	99%	100%	100%
Performance Evaluations	±10%	91%	84%	76%

Shippable Gas Dilution Systems Available for Back-of-the-Analyzer or Single Line Auditing of Routine or Precursor Gas Sites

Prior to EPA performing the NPAP audits as through the probe (TTP), the mailed NPAP program included small, shippable cases containing zero air and gas dilution systems with small cylinders of blended CO, SO_2 and NO that were used to generate concentrations at the low, medium, and high on-scale levels for 0-50 PPM CO analyzers and 0-0.50ppm SO_2 and NO/NO_2 analyzers. Three toggle switches turned the flow path through them on or off, allowing the gas from the blended gas cylinder to flow through one of 3 critical orifices that reliably controlled the pollutant gas flow that was then mixed with the zero air input into the gas dilution system.

These systems generate about 4-6 Lpm which is enough to audit an analyzer that was on a single line sampling inlet or through the back of the analyzer (BOA). It can not be used through a sampling manifold with a diameter larger than 1/4" and especially not with a fan or pump causing a high sampling flow rate.

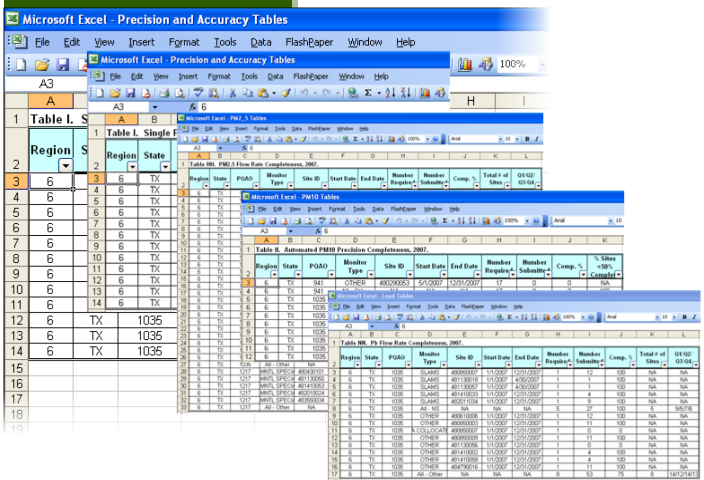
Since EPA has converted the NPAP almost entirely to through-the-probe (TTP), we have an inventory of gas dilution system (and other BOA NPAP audit devices) available for use. Some of these systems have been placed in a number of the Regions for storage and potentially to supplement TTP mobile lab audits. The rest are in RTP are available to the Regions that may have a use for these devices.

Precursor Gas (NCore) Testing with BOA System

Last year an OAQPS contractor assembled and tested an EPA trace level TTP system for EPA and at the same time used the trace level blended gas cylinder with the BOA gas dilution/zero air kit. **The system generated high, medium and low concentrations in the required audit level ranges for trace level analyzers.**

This means that the Regions could make the equipment available to monitoring organizations to perform QA or QC performance evaluations of CO, SO_2, and NO analyzers by a BOA or single line sampling procedure. The only item needed to complete the systems are the acquisition of small blended gas or single gas cylinders (as needed) with concentrations of CO , SO_2, and NO needed to dilute down to the trace level medium and low full scale concentrations. Including shipping, these might cost as little as $200-300 dollars each. For more information on this contact Mark Shanis at: shanis.mark@epa.gov.

Re-design of the AMP255 EPA looking for Reviewers



Several enhancements are currently under development with the Precision and Bias Quality Indicators Report (AMP255) in AQS. In the past, several issues as to the report's ability to accurately display the information required by 40 CFR Part 58 Appendix A have been questioned.

As a part of this effort, several changes to the layout of the report are currently being considered to make the information more usable to the end users. EPA plans on having a new look to the AMP 255 by the end of January, 2009

If you would like to join a workgroup who will contribute ideas to the new layout of the report, please contact Jonathan Miller of the National Air Data Group at miller.jonathan@epa.gov.

National Ambient Air QA Meeting-May 12-13, San Antonio

For the last seven years the OAQPS Ambient Air Monitoring Group has facilitated sessions devoted to ambient air monitoring QA at the Quality Management Conference sponsored by the Quality Staff at the EPA Office of Environmental Information. This year is no different. The meeting will be held May 12-14, 2009 in San Antonio, Texas. Two days of ambient air sessions are planned for May 12 and 13. Registration information can be found at http://www.epa.gov/quality/2009.htm . An agenda specifically for the ambient air session will be completed by mid-February. For those interested in providing a presentation, abstracts are due January 30 to Mike Papp at: papp.michael@epa.gov. Hope to see you at the meeting!

EPA is looking for volunteers to help as session chairs and moderators and to participate in work-groups to develop session goals and topics

National Ambient Air Conference Being Planned for November, 2009

The November 2006 National Air Monitoring Conference (see QA EYE issue #5) held in Las Vegas was considered a success and was EPA's intention to try and schedule a conference of this magnitude every 3 years. Two years have passed and EPA is starting the planning for another National Conference scheduled for the November, 2009 timeframe. Kevin Cavender, OAQPS and Anna Kelly, Hamilton County Department of Environmental Services have been identified as co-leads for planning. EPA is looking for volunteers to help as session chairs and moderators and to participate in workgroups to develop session goals and topics. If you are interested in assisting in any planning activities, contact Kevin Cavender at: cavender.kevin@epa.gov.

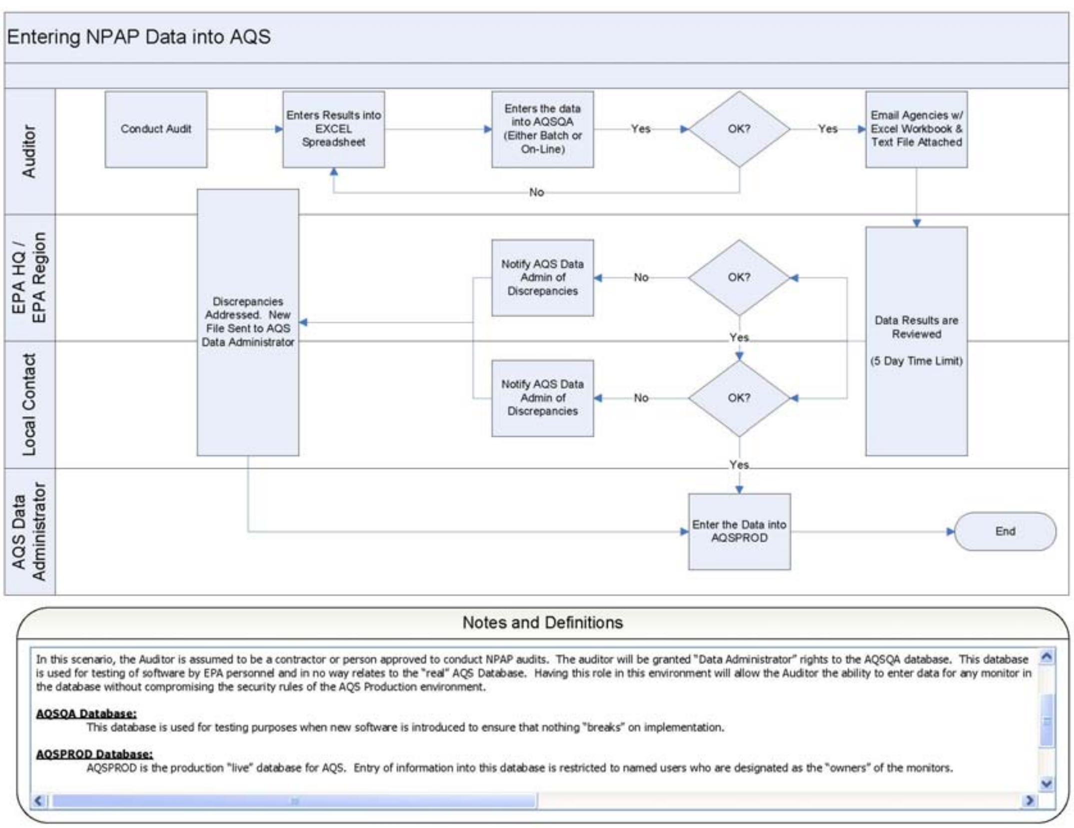
NPAP Data Review and Entry Becoming More Efficient

Currently, NPAP through the probe audit data is collected during the audit process, reviewed by the auditor and site operator, additionally reviewed by the EPA Regions and the monitoring organization, sent to EPA-OAQPS for collection and then finally submitted in batches to AQS for upload. This process can take four to 6 months before audit reports get into AQS. Since it is very rare that data from audits change, and the information posted to AQS is virtually a subset of the data collected during the audit, it was felt that a system could be put in place that would make the final reporting to AQS much easier and with less chance of data loss or entry error. The process described in the flow chart below has been discussed among the EPA Regions and some monitoring organizations and it appears to be worthy on implementation in 2009 for the federally implemented NPAP TTP program.

The Process

As illustrated in the flowchart below, the NPAP Auditor would conduct the audit. As is currently implemented, the data is collected in the NPAP Database Excel spreadsheet. Upon completion of the audit and preliminary acceptance by the monitoring organizations site operator, the auditor would upload the audit data within 2 days of the audit to AQSQA. AQSQA is a testing area in AQS that is a mirror image of AQS Production but is a holding area that is not officially the AQS data base. Therefore, no entity could retrieve data from AQSQA. Entry into AQSQA allows the NPAP auditor the ability to check for entry errors or other types of errors that would hinder the submission of data to the AQS Production database. Upon successful entry to AQSQA, the NPAP auditor would email the NPAP Excel workbook with the audit results to the EPA Regions/Headquarters and the monitoring organization point of contact. These entities would have five working days to accept the results as reported or address any discrepancies. In most cases EPA expects that results would be accepted and the entities would reply to the email affirming their acceptance. In the rare cases of discrepancies, edits would be sent to the EPA Data Administrator who would make any changes required. After the five-day review period, data would be uploaded by the EPA Data Administrator.

It is expected that EPA will test the implementation of this procedure in 2009 and are looking forward to feedback from the monitoring organizations. Details of the procedure will be forthcoming in the form of NPAP standard operating procedures.



EPA Office of Air Quality Planning and Standards

EPA-OAQPS
C304-02
RTP, NC 27711

E-mail: papp.michael@epa.gov

The Office of Air Quality Planning and Standards is dedicated to developing a quality system to ensure that the Nation's ambient air data is of appropriate quality for informed decision making. We realize that it is only through the efforts of our EPA partners and the monitoring organizations that this data quality goal will be met. This newsletter is intended to provide up-to -date communications on changes or improvements to our quality system. Please pass a copy of this along to your peers. And please e–mail us with any issues you'd like discussed.

Mike Papp

Important People and Websites

Since 1998, the OAQPS QA Team is working with the Office of Radiation and Indoor Air in Montgomery and Las Vegas in order to accomplish it's QA mission. The following personnel are listed by the major programs they implement. Since all are EPA employees, their e-mail address is: last name.first name@ epa.gov.

The **EPA Regions** are the primary contacts for the monitoring organizations and should always be informed of QA issues.

Program	Person		Affiliation
STN/IMPROVE Lab Performance Evluations	Eric	Bozwell	ORIA- Montgomery
Tribal Air Monitoring	Emilio	Braganza	ORIA-LV
Statistics, DQOs, DQA, precision and bias	Louise	Camalier	OAQPS
Statistics, DQOs, DQA, precision and bias	Rhonda	Thompson	OAQPS
Speciation Trends Network QA Lead	Dennis	Crumpler	OAQPS
OAQPS QA Manager	Joe	Elkins	OAQPS
PAMS & NATTS Cylinder Recertifications	Rich	Flotard	ORIA LV
Standard Reference Photometer Lead	Scott	Moore	ORD-NERL
Speciation Trends Network/IMPROVE Field Audits	Jeff	Lantz	ORIA -LV
National Air Toxics Trend Sites QA Lead	Dennis	Mikel	OAQPS
PAMS & NATTS Cylinder Recertifications	David	Musick	ORIA-LV
Criteria Pollutant QA Lead	Mike	Papp	OAQPS
NPAP Lead	Mark	Shanis	OAQPS
STN/IMPROVE Lab PE/TSA/Special Studies	Jewell	Smiley	ORIA-Montgomery
NATTS PT Studies and Technical Systems Audits	Candace	Sorrell	OAQPS
STN/IMPROVE Lab PE/TSA/Special Studies	Steve	Taylor	ORIA-Montgomery

Websites

The following websites will get you to the important QA Information.

Website	URL	Description
EPA Quality Staff	http://www.epa.gov/quality1/	Overall EPA QA policy and guidance
AMTIC	http://www.epa.gov/ttn/amtic/	Ambient air monitoring and QA
AMTIC QA Page	http://www.epa.gov/ttn/amtic/quality.html	Direct access to QA programs
Ambient Air QA Team	http://www.epa.gov/airprogm/oar/oaqps/qa/	Information on Ambient Air QA Team
Contacts	http://www.epa.gov/ttn/amtic/contacts.html	Headquarters and Regional contacts