

SPECIAL
POINTS OF
INTEREST:

- Pb Quality System requirements
- Data Reporting to AQS May 1, 2010
- 2009 Box-and-Whisker Plots on AMTIC
- Gordon Jones Remembered

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The QA EYE

ISSUE 8



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Lead Monitoring and QA Moving Forward

The December 2008 Publication of the QA EYE devoted quite a bit a space on the QA requirements for Pb. Monitoring organizations are now in the process of implementing Pb monitoring activities.

EPA received a number of questions about various implementation aspects of the program. In order to address as many of these questions as possible, the OAQPS technical leads developed technical notes for subjects such as network design, samplers, analytical methods and QA. These technical notes are posted on AMTIC at <http://www.epa.gov/ttn/amtic/pb-monitoring.html>.

New to Pb monitoring is the implementation of the Pb Performance Evaluation Program. The Pb-PEP Program is similar in its implementation to the PM_{2.5}-PEP. However, it is different from the PM_{2.5}-PEP in that it will be a mix of samples:

1. A PEP sample will be implemented at the Federal level where an independent field auditor sets up a second audit sampler, collects a 24-hour sample and sends the sample to an independent lab for analysis.

2. A collocated sample will be implemented by the moni-

toring organizations where each quarter the monitoring organization's field operator will take one additional collocated sample (or maybe two depending on number of Pb sites within a PQAO) and send this sample to the independent Pb-PEP laboratory in Region 9 (same lab as PEP sample) for analysis.

Since the collocated sampling frequency is 1-in-12 days, and the routine sampling frequency is 1-in-6 days, an extra collocated sample can be acquired without an affect on routine sampling operations.

(Continued on page 9)

Second National Ambient Air Meeting Well Attended

The second Ambient Air Monitoring Conference the week of November 2, 2009 proved to be quite successful with a turnout of over 500 people. Information and presentations can be found on AMTIC at: <http://www.epa.gov/ttn/amtic/2009present.html>. The conference was a collaborative effort between the EPA and the National Association of Clean Air Agencies. Many thanks to Kevin Cavender, OAQPS and Yousaf Hameed from Clark County, Dept of Air Quality, NV for coordinating the event and

keeping the programs on track. The conference was a full four days jam packed with training, plenary sessions and breakout sessions. Quality Assurance was very well supported at the meeting with a half-day training session and a 3/4 day QA presentation session.

QA Training

Dennis Crumpler, OAQPS and Donovan Rafferty, WA Dept. of Ecology, coordinated the QA Training session. Back in July 2009 the OAQPS QA Team solicited comments from the QA

Strategy Workgroup on three possible training activities.

1. Appendix A in 1/2 a day
2. Speciation Audit Training, and
3. Pb Monitoring QA

Appendix A in 1/2 a day was the hands down favorite. This training event was intended for personnel needing an initial understanding of the ambient air quality system and those wanting an update on the changes that have taken place over the years.

(Continued on page 6)

Development of One QA Transaction Being Reviewed

"What is a minimum set of parameters that need to be reported in order to be able to quantitatively assess and report data quality?"

QA /QC data reported to AQS provide data users with information about the quality of data with respect to precision, bias, detectability, completeness, comparability and representativeness. As new monitoring activities are implemented and/or monitoring programs change, new data quality information is needed. For years AQS has utilized the Precision and Accuracy (P&A) Transaction Process to report data quality information. In August 2009, the Ambient Air

Monitoring Group (AAMG) and the National Air Data Group (NADG) started reviewing the P&A Transactions to determine where improvements could be made. To help kick off this review, a question posed was:

What is a minimum set of parameters that need to be reported in order to be able to quantitatively assess and report data quality?

EPA believes the P & A Transactions can be simplified to

one transaction; include more intuitive naming conventions to reduce confusion and provide fields for reporting new or different types of QA information. EPA is in the process of reviewing the details of this proposal internally and developing a requirements document. Next steps would include a review and discussion with the monitoring and reporting communities, including a review at the National AQS Meeting in June.

Lead Audit Strip Guidance on AMTIC



Pb Audit Strips

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. A number of questions have been asked about the implementation of the Pb strip audits that have been addressed in the QA technical notes posted at: <http://www.epa.gov/ttn/amtic/>

[pb-monitoring.html](#).

EPA has also received a number of questions about the procedures necessary to prepare the audit strips. We have posted two procedures to AMTIC at the site listed above. One SOP is the NPAP procedure that was based on the older (pre-2009) concentrations. The second procedure is a draft developed by Missouri Department of Natural Resources (thanks to Don Gourley, Rayna Broadway and David Malorin) and is more

current than the NPAP method. MO DNR is looking for any comments you might have to improve the method. If so, contact either Dave Malorin at: david.malorin@dnr.mo.gov or Rayna Broadway at: rayna.broadway@dnr.mo.gov

EPA has contracted RTI to develop audit strips for the Pb-PEP laboratory. Part of the work assignment includes the development of an SOP that we will post on AMTIC once completed.

AMTIC Website Getting a Facelift

Hopefully you have not found searching the Ambient Air Monitoring Page on AMTIC confusing of late. We are in the process of trying to make the page more user friendly and intuitive. Geri Doroz, from the Ambient Air Monitoring Group, has been work-

ing with the Ambient Air Team to walk through each QA page to determine what's no longer useful, what's a keeper and the best place to post the material. Through this process we feel we have made substantial improvements on each page but we

still have a way to go. We anticipate completing QA changes by the summer. At times Geri has had to pull some information off line while making changes, but it will eventually be re-posted. If you have a problem finding something feel free to contact us.

ORD Provides Verification Assistance to Ecuador



The EPA had the pleasure of inviting Diego López Mena, Corporacion para el Mejoramiento del Air de Quito (CORPAIRE) from Quito Ecuador to visit RTP the week of March 23, 2009. This visit was a continuation of the cooperative efforts between EPA and CORPAIRE that began in 2008 with a visit from Mathew Plate, EPA Region 9, who performed a technical systems audit of the CORPAIRE Ambient Air Monitoring program and implemented performance evaluations at some of the monitoring sites.

The RTP visit had two objectives. The primary objective was to verify CORPAIRE's ozone transfer standard and primary flow standard to the EPA standards housed in ORD's Metrology Laboratory. The lab is part of EPA's National Risk Management Research Laboratory situated in the Air Pollution Prevention Control Division (APPCD). The second objective was to spend some time with

**Diego Lopez
(left) and
Scott Moore
(right) at the
ORD Metrol-
ogy Lab**

the OAQPS Ambient Air Monitoring Group to answer some technical questions to help improve Ecuador's monitoring program. The trip from Ecuador did not start all that well. The transport container for the CORPAIRE ozone transfer standard (API 700E) was significantly damaged in transport. After spending a few hours in the Raleigh Airport writing up claims, we were able to get Diego's



equipment to the Met. Lab. Scott Moore (APPCD) waited for us at the Met. Lab and worked with the instrument till 7:30 on a Friday night to get it set up for a Monday morning verification. The weekend was spent with a trip to Hanging Rock State Park to provide Diego with a small flavor of NC.

Monday started rough with some technical issues related to the ozone transfer standard and the manner in which it's used in Ecuador as opposed to how the Met. Lab performs the verifications. However, Scott was able to challenge the SRP against the transfer

standard (normal procedure) as well as verify CORPAIRE's ozone generator against the SRP with satisfactory results. In the mean time, Mike Tufts (ARCADIS) performed a satisfactory verification of the primary flow standards. Both tests went very well and Diego was happy with the results.

Scott handled the language barrier and the technical process very well and went out of his way to call API on behalf of Diego to troubleshoot the various issues that surfaced during the verification. While in the lab, we had some great conversations about the SRP program. South America does not have a program comparable to the SRP program we have here in the states. We talked about what it might take to set up a similar verification program for monitoring networks in the S. American countries, and Diego seemed interested in what it would take to purchase an SRP from NIST.

The Ambient Air Monitoring Group met with Diego for an afternoon to discuss Quito's monitoring network and answer some of his technical questions. We also supplied him with a sturdier case for transporting the ozone transfer standard back home. Diego and his equipment made it safely back to Quito.

Speaking about Standard Reference Photometers

Scott Moore from ORD's Air Pollution Prevention Control Division (APPCD) has been the Standard Reference Photometer (SRP) Lead for the last 3 years. He has been assisting OAQPS by verifying SRP #1 and #7 (traveling SRP) against the NIST SRP (#2) and sending out #7 for verifying the SRPs in the EPA Regions.

Scott is also in the process of refurbishing all the SRPs with new cells, new heater blocks for the source generator and new heat controllers. Scott has completed four SRPs, is currently working on two and has the equipment to complete the remaining five regional SRPs. The SRPs will need to be sent to RTP for the refur-

bishment, and Scott hopes to have time to complete the work this year.

In addition, OAQPS plans to finish the SRP standard operating procedures this year and post these to AMTIC.



**SRP # 1 and #7 at ORD's Me-
trology Lab**

Meeting Page



San Antonio River Walk



Colorado Springs

2009 QA National Meeting on AMTIC

Since our last distribution of the QA EYE was over a year ago, we have not had an opportunity to provide a recap of the Ambient Air QA Sessions at the National Quality Management Meeting in San Antonio, TX May 12-13, 2009. This meeting was a little different than past years. The ambient air sessions were not formally recognized as part of the Quality Management Meeting and were not advertized in their program. OAQPS managed to secure a room for two days at the same time as the

National meeting, allowing the ambient air monitoring participants to register, sign up and attend any of the Quality Management Conference session they found of interest.

OAQPS was able to schedule two full days of back to back ambient air sessions. Each day included 4-5 formal presentations which lasted till mid-morning. The remainder of each day was spent on topics that were submitted by the monitoring organization participants. Many of these topic sessions were led by the moni-

toring organization personnel which was very helpful and provided different perspectives. Overheads of all presentations and topics can be found on AMTIC at: <http://www.epa.gov/ttn/amtic/qameetingmay2009.html>

The last file on this page provides a summary of the topic sessions and outcomes.

We had about 50 in attendance which has been the norm. We also had a group social experience/dinner at Dick's Last Resort that was indeed memorable!

2010 Quality Management Conference will not Include an Ambient Air QA Session

The 2010 EPA Quality Management Conference, is scheduled for May 11-13, 2010, at the Philadelphia Marriott Downtown Hotel in Philadelphia, PA. Information regarding the conference can be found at the Quality Staff's Website: <http://www.epa.gov/quality/2010.htm>. Since 2002, the Ambient Air QA community has scheduled presentations and Workgroup sessions at this meeting. Due to a

change in both format and content of the National Quality Management Conference, reductions in travel resources and the fact that EPA sponsored a National Air Monitoring Conference in Nashville in Nov, 2009 (see page 1) which included QA training and presentations, an ambient air QA session will not be planned for this year's Quality Management Conference.

The OAQPS QA Team will be working with the QA Strategy Workgroup to discuss alternatives for future QA related conferences. There have been discussions in OAQPS about changing the frequency of the National Air Monitoring Conference to a 2-year schedule which may be conducive to a QA meeting at the same frequency and venue.

AQS National Meeting June 7-11

The AQS Meeting is scheduled for June 7-11 in Colorado Springs CO. Multiple training courses will be provided on Monday and Tuesday, including hands-on AQS training. Starting on Wednesday, the conference will include discussions of current ambient monitoring issues from a data management perspective. Presenta-

tions will be made by EPA monitoring program representatives along with the AQS Team.

The conference will also include caucus sessions between EPA and State/Local/Tribal Agencies to discuss issues common to all. We will give you an opportunity to ask the

monitoring program representatives and the AQS team questions, and you will also be able to network with your peers, for information sharing, and problem solving.

Information on the meeting can be found at the AQS Website at: <http://www.epa.gov/ttn/airs/airsaqs/>

New Training Software Will Help QA Team Develop Online Courses

During the past few years, the QA Team has developed QA training courses that were provided at the QA National Meeting in Seattle in 2008 and more recently at the November 2009 National Ambient Air Meeting in Nashville. Although there are advantages to face-to-face training, due to tightening of federal as well as monitoring organization travel budgets, it's becoming more time and cost effective to provide training through web-based platforms. OAQPS has been able

to reduce the travel budget for our annual PM2.5-PEP, Pb-PEP and NPAP training by providing a portion of the training through "Webinars".

In order to further our ability to provide timely training, the Ambient Air Monitoring Group invested in Adobe ELearning Suite software. We plan on developing online courses for:

- Developing AMP255 QA Reports

- Appendix A QA Requirements (4-5 modules)
- PM2.5-PEP, Pb-PEP and NPAP
- Turbo-QAPP

We'll have these courses posted on AMTIC for initial review and critique and work to improve them each year. If you have any suggestions for a course let us know!

Ambient Air Protocol Gas Verification Program —Getting Ready

In the QA Eye Issue 4 (2006) we reported on the efforts of the Office of Atmospheric Programs (QAP), the Office of Research and Development (ORD) and OAQPS to resurrect the Protocol Gas Verification Program (PGVP). From 1985 to 1997, ORD implemented a type of PGVP, but this effort was discontinued in 1998. Although we have had a few tests since that time, it was felt that an annual verification program was needed. We worked together along with the specialty gas producer community and thought we had a specialty gas producer funded program in place in 2008, but due to some producer issues, the program fell through.

In 2009, the Office of the Inspector General (OIG) published the report *EPA Needs an Oversight Program for Protocol Gases* (see <http://www.epa.gov/oig/reports/2009/20090916-09-P-0235.pdf>). This document found that EPA "does not have reasonable assurance that the gases that are used to calibrate emissions monitors for the Acid Rain Program and continuous ambient monitors for the nation's air monitoring network are accurate". OIG recommended that OAR implement oversight programs to assure the quality of the EPA Protocol Gases that are used to calibrate these monitors. It also recommended that EPA's ORD update and maintain the document *Traceability Protocol for Assay and Certification of Gaseous Calibration Standards* to ensure that the monitoring programs' objectives are met.

In order to address the OIG findings from an ambient air standpoint, OAQPS, in cooperation with EPA Region 2 (Avi Teitz and Mustafa Mustafa) and 7 (Thien Bui), have developed an Ambient Air PGVP (AA-PGVP). The program establishes gas metrology laboratories in Regions 2 and 7 to verify the certified concentrations of EPA Protocol Gases used to calibrate ambient air quality monitors. An Implementation Plan explaining this program can be found at the AMTIC Website: <http://www.epa.gov/ttn/amtic/aapgvp.html>

The goal of the program is to analyze new, unused gas cylinders from each producer that provides gaseous standards to the ambient air monitoring community. The monitoring community has been providing EPA information on the specialty gas producers they use and whether they would be willing to participate in the AA-PGVP by sending new unused gas standards to EPA Region 2 or 7 for comparison against the standards certified value. The two regional labs plan to verify 10 cylinders per quarter for a total of 80 cylinders per year.

As explained in the Implementation Plan, the only cost to the monitoring organizations is the cost of shipping the gas standards to the Region 7 or 2 Lab. EPA would cover the cost of analysis and shipping the cylinders back to the monitoring organizations.

We are currently working on SOPs and have completed a QAPP that is under review. On Feb. 12, Region 2 ran a verification test with a new protocol gas cylinder from Region 1 (thanks Chris St. Germain) and a NIST Traceable Reference Material cylinder from NY DEC (thanks George Froehlich). Both cylinders passed verification. An example of one of the certificates of verification is shown on the left. The certificate is part of a detailed excel workbook that provides for entry of all raw data and final calculations.

We anticipate that all documentation, IT systems and equipment will be ready to go by the middle of March. We plan to contact our first set of participants around the end of February 2010 and expect to perform verifications in the May/June 2010 time frame.

Challenge Cylinder #1 Certificate	
EPA Ambient Air Protocol Gas Verification Program	
Date of Assay:	11-Feb-10
Cylinder under Test:	Scott ALM046211
Pollutant Gas:	Sulfur Dioxide
Balance Gas:	Nitrogen
Cylinder Pressure After Assay:	1000 psig
Assayed SO ₂ Concentration =	50.48
Vendor Certified SO ₂ Concentration =	50.79
% bias =	-0.61%
Reference Gas:	SRM 1694a CAL016709
Expiration Date:	11-Dec-15
Analyst:	Avi Teitz/Mustafa Mustafa
Analytical Facility:	EPA Region 2 Ambient Air Standards Laboratory, Edison, NJ

National Ambient Air Monitoring Meeting (*Continued from Page 1*)



The training session received good reviews and we have plans to capture this information as an on-line training course



Verifying mobile monitor results

The session provided ambient air monitoring quality assurance requirements contained in 40 CFR Part 58 Appendix A for SLAMS/SPM/PSD monitoring. The session tried to follow the sections as written in Appendix A . Training was also provided on the various quality control samples for each criteria pollutant including their frequency of collection and how they should be reported, the statistics for assessing data quality, and the tools available including the Data Assessment Statistical Calculator and the AMP 255 report. The training session received good reviews and we have plans to capture this information as an on-line training course (see *training software article* on page 5).

QA General Session

Dennis Crumpler, OAQPS and Tammy Eagan, FL DEP, coordinated the General QA Session.

Jonathan Miller, OAQPS, gave the training segment for Appendix A Section 4. He provided a short primer of basic data analysis tools available for characterizing QA data which included the DASC tool, the box/whisker plot tools (see page 9) on AMTIC; and the Amp 255 (see page 9)

Mark Shanis, OAQPS, covered a few key issues associated with the new audit program for Trace Gas monitors which center around changes to audit ranges promulgated in Appendix A in 2006 and what to do with results in very low concentration ranges. Mark discussed a proposed new metric using difference bounded by confidence limits.

Ed Rickman, RTI, presented a new mechanism for the Chemical Speciation Network auditors and operators to report TSAs and monitor checks to a centralized data base. RTI can then prepare transaction files to report flow audit and verifications to AQS.

Tammy Eagan, FL DEP, presented a training program FL DEP has developed for new QA staff. With turnover and retirements, it's very important to

capture and transfer QA expertise to new employees. It breaks down the functions on a daily, weekly, monthly and yearly basis ---and points to the places where resources and information can be found to empower the QA staff person.

Avi Teitz, EPA Region 2 presented some of the key findings and lessons they have learned from audits of gaseous sampling and monitoring set ups focusing on the various manifolds in use, and providing pros and cons of each with some recommendations for best design. Avi emphasized that cleanliness is going to be critical for the trace gas systems

Donovan Rafferty, WA Dept. of Ecology, shared results of a new method he has developed to sample ozone using a van mounted 2B Technologies Model 202 Ozone monitor. He explained how he verifies/validates its performance by comparing to a permanent sites' results. In general the monitor has produced good results and compared well results from permanent ozone monitoring sites. Predictive models used in the region have been verified and also compare well with the mobile results.

Jason Low, South Coast AQMD, Peter Babich, CT and Robert Judge, EPA Region 1, presented a basic approach to developing a QA Program for PAMs including the submission of various QC data to AQS to provide estimates of precision and bias. There was a discussion of utilizing features of the existing programs for gaseous monitoring and NATTS PTs. Some challenging issues associated with PAMs analysis were discussed . Contaminated canisters was a case in point.

Dennis Mikel described an emerging project designed to document and collect information including SOPs for technological methods and instrumentation that can be used for monitoring networks and/or fence-line applications. The project will also identify QA elements that will be needed to characterize the uncertainty of the

data. SLTs who are likely users of the technologies were invited to participate in the collection, assessment and reporting of the information.

Mark Shanis concluded the session by presenting a new project to develop a NIST traceability paradigm for Flow Standards. The objective of this project is to create consistency and confidence levels for flow measurements in all aspects of monitoring from calibration to gaseous instrument audits to verifications and finally flow audits.

Several Posters related to QA were presented at the Poster Session :

EPA's Network of NIST Standard Reference Photometers (SRPs) by Scott A. Moore, EPA ORD, and Mark Shanis, EPA, OAQPS.

Recent PM_{2.5} National FRM Network BIAS Trends Based on 2008 Performance Evaluation Program Findings, by Dennis Crumpler and Jonathan Miller from EPA, OAQPS, and Jennifer Lloyd-Blough and Ed Rickman of RTI International, RTP, NC.

Automated Data Validation Techniques Utilized for the PM_{2.5} Performance Evaluation Program, by Jennifer Lloyd-Blough, Ed Rickman RTI International

Experimental Inter-comparisons of the Chemical Speciation Laboratories, by Jewell Smiley, Steve Taylor, RL Hines, & Eric Boswell US EPA ORIA-Montgomery.

Speciation/IMPROVE Field Audit Summary, by Dennis Crumpler and Solomon Ricks, EPA, OAQPS, Jeff Lantz, EPA, ORIA, Las Vegas; Ed Rickman, RTI International.,

All posters and presentations can be found on AMTIC <http://www.epa.gov/ttn/amtic/2009present.html>.

Remote Sensing Techniques

As remote sensing monitoring techniques (e.g., tunable diode laser or non-dispersive infrared) continue to be used more often to characterize air pollution, stakeholders will want to use the data from these measurements to develop emissions factors, develop atmospheric models and support air quality standards. Use of remote sensing presents some challenging issues. EPA staff, in conjunction with their contractor and other stakeholders, have begun work on a QA Protocol Handbook for Remote Sensing instruments and techniques.

The product will be a draft QA protocol that users of remote sensing monitoring methods can employ when considering or



OPSIS UV DOAS Instrument

operating these instruments. This QA protocol will also discuss potential issues with using remote sensing data for emissions factors development, models and other atmospheric process needs. The protocol will list potential remote sensing methods and the advantages (and disadvantages) of their use. A first draft of the Handbook is anticipated in December 2010.

Contact information: Dennis Mikel
EPA-OAQPS-AQAD
mikel.dennisk@epa.gov

Reminder-AQS Data Certification for 2009 Data is May 1, 2010

It seems like forever that the certification for ambient air data was July 1 for the data collected the previous calendar year. Starting in 2010, the certification date has moved up 2 months to May 1, 2010. The data certification must be accompanied by the certification letter and two reports.

The first is a summary report of the ambient concentration data

from the monitors required to have their data certified. We request this requirement be satisfied with a copy of the AQS AMP450 report for CO, NO₂, SO₂, ozone, lead, TSP, PM10, and PM2.5 and the AMP450NC report for other pollutants. Multiple reports may be needed for complex situations, to capture all the monitors being certified. (Authority – 40 CFR 58.15(b))

The second is a summary report of the precision and accuracy data for each monitor whose data are being certified. The output will be a “pdf” file, which will make it easier to run and transmit electronically compared with the previous version of the report. It will simplify the certification process as the report will readily identify any monitor which did not conform to the Appendix A calculations.

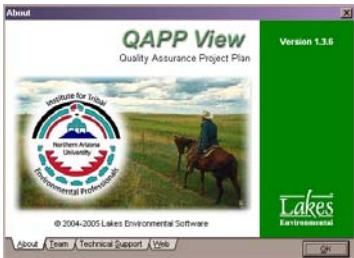
NCore Training Videos Nearing Completion

Over the last two years OAQPS has completed the development of training videos for Operation, Maintenance and Calibration of the Trace Level NO_y, SO₂ and CO instruments. These videos starring OAQPS's Dennis Mikel can be

found on the NCore Guidance Documents page on AMTIC at: <http://www.epa.gov/ttn/amtic/ncore/guidance.html>. One more video on the Operation and Maintenance of the

Mass Flow Calibration System has been developed and is presently going through review and editing. It is anticipated that this will be posted on AMTIC in late Spring 2010.

Turbo-QAPP Improvements and Updates



Turbo-QAPP continues to get updated to include the ongoing changes related to ambient air monitoring and QA requirements. However, this year will see a Turbo-QAPP expansion to in-

clude information to help Tribes complete QAPPs for emissions inventory and indoor air quality assessments.

In October, Stephanie Cheaney (EPA Region 5), while on a detail to the Tribal Air Monitoring Support (TAMS) Center at the EPA Las Vegas Laboratory, developed a generic QAPP for emission inventories. This QAPP will be used to help develop the necessary information to feed the Turbo-QAPP software. However

help is needed. Melinda Ronca-Battista from the Institute of Tribal Environmental Professionals (ITEP) and the Project Lead for the Turbo-QAPP software informed OAQPS that “good examples of emissions inventory and indoor air assessment QAPPs are needed”. These examples will help Melinda develop the generic material necessary to complete Turbo-QAPP. Please email Melinda at: melinda.ronca-battista@nau.edu if you have any QAPPs that can be used in her Turbo-QAPP efforts.

“Good examples of emissions inventory and indoor assessments are needed”

Using the “Non-Regulatory” Monitor Type to Get a Better Handle on Sites Required to Follow the 40 CFR Part 58 Appendix A QA Requirements

In order for air concentration data to be compared to the National Ambient Air Quality Standards (NAAQS), ambient air monitors must meet three sets of requirements:

- Use federal reference methods (FRM), federal equivalent methods (FEM), and approved regional methods (ARM) (40 CFR Part 58 Appendix C);
- Meet siting criteria (40 CFR Part 58 Appendix E); and
- Meet quality assurance (QA) requirements (40 CFR Part 58 Appendix A).

Data can and are reported to AQS for many multiple purposes and objectives. Many of these objectives are not NAAQS related and, therefore, are not required to meet the requirements listed above. At present, there is no functioning, reliable mechanism in AQS to identify sites/monitors for which the data should be meeting all applicable requirements for NAAQS comparisons.

On March 19, 2009 OAQPS posted a memo on AMTIC at <http://www.epa.gov/ttn/amtic/cpreldoc.html> to provide guidance on a mechanism in AQS to objectively identify monitors that are measuring criteria pollutants that do not or are not intending to provide data for regulatory purposes by identifying them with a “NON-REGULATORY” Monitor Type. By default, any monitor that does not include a “NON-REGULATORY” code as a Monitor Type will be assumed by EPA to be available for comparison to the NAAQS and meeting all applicable requirements for NAAQS comparisons. This guidance is for the criteria pollutants only.

Beginning in 2009, EPA asked that organizations responsible for reporting monitoring data to AQS add the “NON-REGULATORY” code to all applicable monitors before the 2008 data certification (July 1, 2009). For those monitors that will be identified as “NON-REGULATORY,” the “Monitor Type Begin Date” when this code applies should also be included. Therefore, if the monitor has always been “NON-REGULATORY,” the start date of the monitor should be used as the applicable Monitor Type Begin Date

for the “NON-REGULATORY” Monitor Type code.

Use of the “NON-REGULATORY” code is not meant to replace the current Monitor Type but supplement it. For example, there may be tribal monitors that are designated using the “TRIBAL MONITOR” Monitor Type code. We would expect the monitors to keep the “TRIBAL MONITOR” Monitor Type code and add a second “NON-REGULATORY” code to the monitors where the “NON-REGULATORY” code was applicable.

The only monitors where it is not acceptable to include a second “NON-REGULATORY” code are those monitors designated with the “SLAMS” Monitor Type.

Additional background, rationale, and details for this procedure are included in the Technical Guidance. If you have any specific questions on the implementation of this process, please contact Mike Papp (papp.michael@epa.gov), or Jonathan Miller of the National Air Data Group (miller.jonathan@epa.gov).

Pb Monitoring QA (from Page 1)

In summary, 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)

Program Status

Equipment and Consumables- EPA has purchased and received the samplers for use in this program and is currently purchasing the necessary supplies and consumables.

Field Standard Operating Procedures (SOPs)-SOPs are now completed and were used in the February 8, 2010 training session.

Laboratory SOPs- The lab has completed SOPs and is moving forward on the submission of a federal equivalent method (FEM) package. It is anticipated that the FEM will be approved around February/March. The R9 method is a nitric acid hot block extraction method with ICP-MS analysis.

QA Project Plan- A draft of the QAPP was completed in December. A final version is anticipated by the end of February.

Training- Pb-PEP training occurred on February 8-10 at the Tribal Air Monitoring Training Center in Las Vegas.

Field/Lab Implementation- Field implementation is expected to start in late March. The lab is expected to start analyzing (assuming FEM approval) in March.

Collocated Sample Shipment to the Region 9 Pb-PEP Laboratory

EPA is expecting monitoring organizations will follow their standard operating procedure for the collection and packaging of the collocated filter that will be sent to the Region 9 Pb-PEP laboratory. It is generally expected that the additional collocated filter will be sampled during a normal 1-in-

6 day sample so that the only extra sample would be the collocated filter. The routine sample from the primary monitor would be transported to the monitoring organizations routine sample analysis laboratory.

The whole collocated filter will be sent to Region 9 who will then subsample and analyze the filter under its SOP. The only extra requirement is that during field processing, the monitoring organization include the field filter/chain of custody form with the sample.

It is anticipated that the monitoring organizations will be provided with pre-printed UPS labels with the Region 9 mailing address, the type of shipment and the EPA billing number. The billing number must only be used for the shipment of the collocated filters to Region 9 and will be tracked by OAQPS.

The collocated data would be reported to AQS by EPA through a similar mechanism to the PM_{2.5}-PEP. Each quarter EPA will attempt to upload all Pb-PEP data including the collocated values. The Pb-PEP data will be accepted into AQS once it can be paired with the routine value.

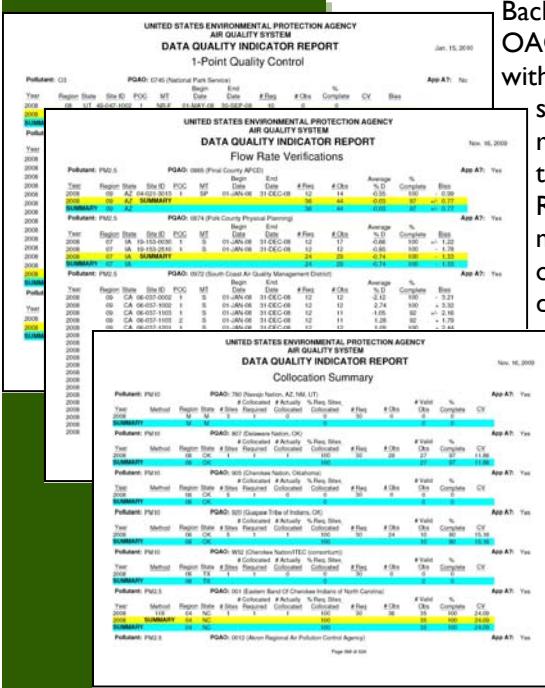
Next Steps

As mentioned above, the Region 9 Pb-PEP Lab method has not received FEM approval. We expect to receive approval around February/March and will then be in a position to accept collocated filters. In order to get ready for this activity the EPA Regions have been contacting the Pb monitoring organizations to get the following information:

- email point of contact for Pb monitoring so that EPA can provide updates on this activity and provide additional guidance as needed
- primary quality assurance organization code and mailing address in order to provide pre-printed UPS shipping labels for the collocated samples.

Please do not send any collocated samples related to the Pb-PEP to the Region 9 Pb-PEP Lab until further notification. Since there is no holding time on the collocated TSP samples, it is suggested that monitoring organizations sample in mid February through the end of March in order to fulfill its first quarter collocation obligation.

Re-design of the AMP255 Receives Positive Feedback...and Complaints



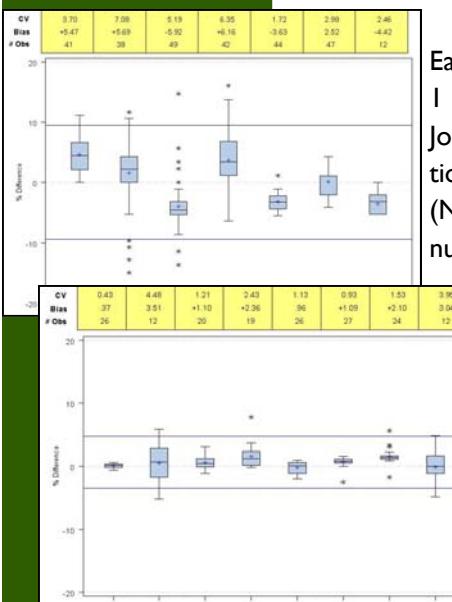
Back in 2005 OAQPS came out with a new precision and bias report called the AMP255 Report. Some monitoring organizations did not like the look and feel of the report. They felt that it had too many individual files and they wanted something easier to work with. Thanks to

the efforts of Jonathan Miller and some volunteers from the monitoring organizations, the AMP255 report has been improved to produce excel worksheets in one file instead of 7, and to produce a PDF report (examples on the left) that some find much more user friendly. We have received some positive feedback on this new direction, but as the monitoring organizations were reviewing the reports a number of questions have come up about how some calculations are made and how the data is handled. In order to answer the

more frequently asked questions, we have posted a document on AMTIC called: "Frequently Asked Questions About the AMP255 Report" This document can be found at <http://www.epa.gov/ttn/amtic/parslist.html>.

If you have a question about the report, most likely you'll find an answer in this document. If you don't, please email Mike Papp (papp.michael@epa.gov) or Jon Miller (miller.jonathan@epa.gov) with your question. We'll answer it and include it in the next posting of the FAQs

2008 Data Quality Indicator Summary Report On AMTIC



Each year, after the July 1 SLAMS reporting date, Jon Miller of the National Air Data Group (NADG) will run an annual summary report on all the quality control data submitted to AQS for the calendar year of data certification. This report (zip file) includes the following files.

Appendix A- The Box Plot Companion Document that describes

the structure of the Box Plots that are contained in Appendices C – L.

Appendix B- The Data Quality Indicator Report which is exactly what is produced by the AMP255 report and is aggregated by QC Type, Pollutant, PQAO and sites that are required to meet the Appendix A criteria.

Appendices C – L- The box a whisker plots derived from the one-point QC check data segregated by EPA Region. The explanation of these graphs can

be found in Appendix A.

amp255.xls- An Excel spreadsheet of the data derived from the AMP255.

Final 2008 QI Report- This document describes the content of the 2008 summary files and provides a detailed explanation of each report in Appendix B.

The 2008 Data Quality Indicator Report can be found on AMTIC at: <http://www.epa.gov/ttn/amtic/parslist.html>



Gordon Jones Remembered

For those in the QA community who have been a part of the QA Strategy Work Group, attended the National QA Meeting Ambient Air Sessions or are from an ambient air monitoring organization in Region 5, you have probably met or heard of Gordon Jones. Gordon passed on December 4, 2009. The following tribute was written by the American Federation of Government Employees local 704 (AFL-CIO)

Gordon spent almost 25 years of his life protecting human health and the environment. He was a skilled Environmental Scientist whose expertise was utilized by the Office of the Regional Administrator, the Air and Radiation Division, the former Environmental Science Division (ESD), and all six states in the Region.

He was one of the founding members of the African American Cultural Exchange Committee in the former ESD. Additionally, he was a former black employment manager, academic relations volunteer, and Environmental Justice (EJ) coordinator. Gordon was especially concerned about the impact of environmental hazards on communities. He took special interest in EJ and was instrumental in creating an EJ Center at Chicago State University.

Gordon was a recognized expert in air monitoring and quality assurance. He received numerous awards including in 2007 a Gold Medal, the highest award in the Agency, as part of the Bridgeport Team "for installing monitors in response to a community's concerns and negotiated a unique settlement reducing hydrogen sulfide emissions by approximately 50 tons per year."

Gordon was a proud graduate of Benedict College, a historically black college (HBCU) that prides itself in preparing students to be "powers for good" in society. Gordon believed that Benedict truly provided the nurturing support that helped him be such a good example to us all. Gordon not only shared his HBCU experiences with fellow staff, but he also served as a liaison between EPA and HBCU officials. In this capacity, Gordon collaborated with officials to bring to the Region a faculty fellow who has expertise in EJ and who also was one of his former professors.

Gordon generously shared his time and talents throughout the Agency and the greater community. He was the Region's "saxophonist in residence" who provided entertainment at holiday parties and special emphasis programs. Gordon also played his saxophone at local churches.

Gordon loved people, was a good friend to many, and always a gentleman. Brother Gordon truly will be missed by everyone whom he touched at EPA. He is survived by his two children and extended family.

Gordon was a contributing member of the Ambient Air QA Community. It's one thing to attend meetings and engage in discussions, but Gordon was one to go a little farther and commit his time and efforts to projects. He led a Workgroup to revise the Technical Systems Audit (TSA) forms for the QA Handbook and was always active in QA Strategy Workgroup Meetings. He attended most if not all the National Ambient Air QA meetings and would often assist in training or presentations.

However Gordon's biggest contribution to the QA community was his spirit. You always knew when Gordon was in a room. His booming voice, laugh and smile were infectious. I think many have fond memories of Gordon at the National Meetings especially after hours!

There is a line in a Bruce Cockburn song:

"To be held in the heart of a friend is to be a King"

Gordon was a King...





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 e-mail us with any issues you'd like discussed.

Mike Papp

Important People and Websites

Since 1998, the OAQPS QA Team has been working with the Office of Radiation and Indoor Air in Montgomery and Las Vegas and ORD in order to accomplish its 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

Program	Person	Affiliation
STN/IMPROVE Lab Performance Evaluations	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-APPCD
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
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 Contacts	http://www.epa.gov/airprogm/oar/oaqps/qa/	Information on Ambient Air QA Team Headquarters and Regional contacts
	http://www.epa.gov/ttn/amtic/contacts.html	