



SPECIAL POINTS OF INTEREST:

- Comments period on changes to CFR Part 58 Appendix A come to a close
- Good turnout at the National QA Meeting in Austin, Texas
- National Monitoring Meeting Set for November

INSIDE THIS ISSUE:

- QA & Monitoring Help to South Africa 2
- Speciation Program Cyclone Issue 3
- National Monitoring Meeting 3
- QA Handbook Ready for Revision 4
- QA Spotlight— Anna Kelley 5

Comment Period on Monitoring & QA Regulation Closed

The EPA proposed revisions to the monitoring and QA regulations (Federal Register/ Vol. 71, No 10., January 17, 2006) closed for comments on April 17 and not a day too soon! Anyone interested in reviewing the comments can go to the federal government's docket management system at www.regulations.gov. The docket number for the monitoring and QA rule is OAR-2004-0018.

From the comments reviewed to date, we have received positive comments on the majority of our QA revisions, but have also received concerns in a few areas. A summary of the major QA revisions were included in the QA EYE Issue No. 1 (on AMTIC website), and can also be found in the preamble to the rule. In summary, a number of the OAQPS ambient air monitoring and QA staff will be buried for the next

few months responding to comments so be patient if it takes us a little longer to get back to you on monitoring and QA issues. The proposed rules are expected to be finalized in September.



National QA Meeting Draws a Larger Ambient Air Crowd

by Mike Papp

The 25th Annual National Conference on Managing Quality Systems was held in Austin on April 24-27, 2006. Over the last 5 years, OAQPS has established two days of presentations and meetings related to ambient air monitoring QA activities. This year we provided some additional activities and were presently surprised to see substantially better attendance from the ambient air monitoring QA community.

Monday is traditionally a training day. Dennis Crumpler (OAQPS) and Jeff Lantz (ORIA) trained about 13 monitoring organization personnel on the auditing of the PM2.5

Speciation Trends Network monitors. Both Dennis and Jeff had been on the road training and recertifying the PM2.5 Performance Evaluation Program (PEP) field personnel the week before. In addition, both provided presentations and chaired presentation sessions so many thanks to them for their long hard work over the two week period.

Also on Monday evening, Melinda Ronca-Battista, from the Tribal Air Monitoring Support (TAMS) Center, presented the beta version of the Turbo-QAPP software to a number of monitoring organization personnel who have been testing it over the last month. Melinda walked

through each of the screens and gathered a lot of great comments for improvements. The meeting was supposed to go about 2-hours with pizza brought in for dinner. The group skipped the pizza, ate a few chocolate covered pretzels and worked for about 3.5 hours. Thanks Melinda and those that helped to improve this software.

Wednesday was the day for presentations and we had eleven focused on ambient air. All the ambient air QA presentation are posted on AMTIC (<http://www.epa.gov/ttn/amtic/qamsmtg.html>).

(continued on Page 4)

EPA Provides Monitoring and QA Support to South Africa



Scott Jackson and David Musick with travel guide

Traveling to four different cities meeting 7 different agencies in 8 days. How do they do it?



David and Scott with some of the City of Cape Town's air quality staff



City of Bloemfontein

Imagine traveling 27 hours on a plane. You have to meet foreign dignitaries and discuss how to develop a training plan. You have to travel to four different cities and meet with 7 different agencies. Oh, you only have 8 days to complete everything.

That is what Scott Jackson and David Musick accomplished November 13-20, 2005. They traveled from different cities – Scott from Washington D.C. and David from Las Vegas – and met in Atlanta. They flew to South Africa to meet with members of their scientific and government communities to assist them. South Africa just passed and promulgated its version of the Clean Air Act. Now its staff had to be trained in how to implement the new air pollution laws.

Scott and David traveled first to Cape Town and met with the staff of the local air pollution control agency. This agency was very advanced with knowledge of air pollution equipment, procedures, calibration guidelines, and the EPA quality system. The agency regularly use the EPA QA Handbook (and even had one in the original Red Notebook). Scott and David were given a tour of its city and visited several of its major pollution sources.

Scott and David then flew to Mangaung to meet with its city officials. This city had virtually no expertise in air pollution or quality system requirements. These staff would require abundant 'hands-on' training. They were also given a tour of its animal park and visited its major sources.

The EPA duo then traveled to Johannesburg (after enduring the most stressful air flight through numerous lightning strikes and thunderstorms). This is a very large populated city with many tourist sites. Scott and David used their time in this city to plan their strategy for the development of a training plan to assist the experienced Cape Town staff as well as the inexperienced Mangaung staff. They devised a modular training approach with differing levels of experience for specific modules. This training course would include operations and calibration of air pollution equipment, the quality system requirements, and lots of 'hands-on' one-on-one training capsules.

David traveled to Pretoria to meet with several additional governmental agencies. He met with the U.S. embassy officials to discuss the EPA's involvement in South Africa. He met with the South African Weather Service to discuss their ownership in the training course. He met with staff from the scientific agency, CSIR, to discuss their expertise in passive air pollution monitoring. Finally, David met with the South African equivalent to the EPA – Department of Environment and Tourism (DEAT) – Administrator to discuss the proposed training course and further collaboration that the EPA could provide.

The entire trip was full of experiences that included social (the tourist sites), governmental (meeting SA officials), and scientific (discussing QA procedures and SOPs) with staff from the other side of the globe.

In a related activity, a second follow up trip occurred in March, 2006 with Dennis Mikel from OAQPS and Cary Eaton from Research Triangle Institute going to Cape Town and meeting with the local air pollution agency to review the training material and make any necessary changes. Dennis and Cary then flew to Bloemfontein and delivered a 3-day session on Ambient Air Monitoring .

ORIA Montgomery Provides Ambient Air QA Support and Super Sleuthing Techniques

The EPA Office of Radiation and Indoor Air (ORIA) laboratories in Las Vegas, Nevada and Montgomery, Alabama have been providing OAQPS with ambient air monitoring QA support since 1998. Eric Boswell, Jewell Smiley and Steve Taylor from the Montgomery Laboratory perform three major QA functions for the PM_{2.5} Speciation Trends Network (STN) and IMPROVE programs:

- develop round robin performance evaluation studies,
- perform technical systems audits, and
- carry out special studies when needed.

The round robin studies involve the collection of pollutants on the filter media used in the programs. Montgomery uses a number of speciation samplers to collect replicate ambient air samples over the same time period (multiple filters in same day) and vary the exposure time in order to develop samples with different pollution con-

centrations. Although the actual concentration of the round robin samples are not known initially, the replicates provide a measure of comparability among the laboratories providing routine sample analysis for both programs and can help highlight areas for data quality improvement. During the most recent development of what Montgomery calls the STN/IMPROVE "Mega-PE", Montgomery scientists worked with Robert Willis and Bob Kellogg from the ORD Laboratory in RTP, North Carolina to run all the PE sample filters through XRF analysis. Upon review of the data, they discovered discrepancies in the repeatability of the filters sampled on the same day; specifically for the element nickel. ORD ran the filters a second and third time and there was very good repeatability in the three runs of the same filter (signaling the analysis was OK) but the discrepancy among filters in a sampling day remained. Upon further sleuthing, Montgomery examined the sharp cut cyclones that are used in the sampling canisters and made a discovery that

they had two types: one that is nickel coated aluminum and a second type that is pure aluminum. The picture shows the nickel plated cyclone where the nickel on the opposite wall of the air inlet appears to have corroded or eroded. **Met One has been made aware of this issue and has agreed to replace any nickel-plated cyclones with pure aluminum units free of charge.** At present we are unaware of the magnitude of the issue but will provide further information as it becomes available.



Speciation sampling canister with corrosion in cyclone.

National Monitoring Meeting Set for November in Las Vegas

Mark your calendars for the week of November 6, 2006 for the National Ambient Air Monitoring Meeting. STAPPA/ALAPCO representatives and OAQPS have been planning this meeting for a number of months and have settled on this date in Las Vegas. The meeting is scheduled for 4 days (Monday through Thursday) with the first day devoted to training which is tentatively planned to include:

- Monitoring technologies: Continuous PM & NCore/precursor gas
- Network assessments techniques
- Data validation and analysis techniques
- Data acquisition

The next two and a half days will include various topics including but not limited to:

- New PM coarse monitoring and network design requirements
- New NCore multi-pollutant monitoring network and related requirements
- Modified QA requirements
- New reference and equivalency requirements for PM
- Future directions in air monitoring
- Tribal monitoring
- Air toxics
- What the data is telling us and how it is being used
- Web access and data reporting

A number of members from the QA Strategy Workgroup, including Anna Kelley (OH),

Donovan Rafferty (WA), Richard Heffern (AK) and Terry Rowles (MO) are helping develop the agenda, including the QA Topics.

Interested in presenting a paper or poster at the National Air Monitoring Conference? Great! We want to hear from you. Send a short abstract for your presentation or poster to Kevin Cavender .

For more information contact [Kevin Cavender \(cavender.kevin@epa.gov\)](mailto:cavender.kevin@epa.gov) or [Pete Babich \(pete.babich@po.state.ct.us\)](mailto:pete.babich@po.state.ct.us) .



QA Strategy Workgroup Session

Some suggestions:

Develop an “Ambient Air QA 101” training session.

Devote more time to the QA Strategy Workgroup issues

“We welcome any and all reviews of this document”

National QA Meeting Draws a Larger Ambient Air Crowd (continued)

My thanks to all those who provided a presentation. Wednesday was the first day I got to evaluate the number of ambient air monitoring personnel in attendance and was pleasantly surprised by the turnout.

Realizing that travel funding is always at a premium and many monitoring organization’s funding comes in July, it is difficult to have travel funds available at this time of the year. We had room for 75 people in our meeting room and at times it was filled to capacity. This was the largest turnout to date. I asked a few ambient air personnel how they became aware of the meeting and was thrilled to hear that the second issue of the QA Newsletter brought the meeting to their attention!

Wednesday evening we had a group of about 30 head out to Rudy’s for some Texas BBQ. It was good, and even though I was born in Texas, I think North Carolina BBQ is better.

Thursday was devoted to the QA Strategy Workgroup. Although this is considered a QA Strategy Workgroup meeting, it is open to any ambient air monitoring organization personnel attending the meeting. We had 35 personnel representing ambient air monitoring organizations, 9 personnel representing the EPA Regions and 7 representing various headquarters offices. I passed around an attendance sheet and asked if any were interested in participating more fully in the QA Strategy Workgroup to sign up. I received quite a few more members. The Thursday session was used to discuss issues that have been identified and prioritized by the Workgroup in advance of the meeting. Although we had 16 issues on the table, we never expect to get through them all. We did manage to get through about six, which is typical. I left time at the end of the meeting to ask the group what improvements we could make to next year’s meeting. Suggestions included:

- Develop an “Ambient Air QA 101” training session. Similar to the AQS 101 training, it would provide new members of the ambient air QA community with a solid foundation on QA; the reason for doing it, the policies and requirements, QAPPs and QMPs; DQOs, MQOs and validation templates; TSAs, SRP, PEP and NPAP and what all the acronyms mean!,
- Utilize the second day of the meeting, which is a plenary session for the National Meeting, with ambient air related activities, and
- Cut presentation time to half a day and spend more of the remaining two days (Wednesday and Thursday) associated with the Workgroup session and issues.

These suggestions, as well as others stemming from the Workgroup meeting, can be accommodated. Please email me with any additional suggestions.

QA Handbook Volume II —Ready, Set, Go!

Once Anna Kelley finished her Intergovernmental Personnel Act (IPA) assignment with OAQPS (see Spotlight article) work ceased the revisions to the *QA Handbook for Air Pollution Measurements Systems Volume II Part I Ambient Air Quality Program Quality System Development*, affectionately known as Redbook Volume II. In April the QA Strategy Workgroup discussed picking up where Anna and her Team left off and start to revise this document in earnest. The goal is to have a

good draft completed in December.

Currently, 5 sections have been revised and 2 sections have had some level of review and revision. During the QA Strategy Workgroup session at the QA National Meeting in Austin session (page 4) the Workgroup discussed focusing on the following sections:

- Quality Control (Section 10)
- Data Review, Verification & Validation (Section 17)
- Instrument Calibrations (Section 12)
- Network Reviews (Section 15)

We welcome any and all reviews of this document. Anyone interested in seeing changes or additions can submit their review comments to Mike Papp. The current version of this document is on AMTIC (<http://www.epa.gov/ttn/amtic/qabook.html>). As draft sections are completed, they will be posted on this site for review. Workgroup meetings will start up in June. For more information contact: [Mike Papp \(email: papp.micheal@epa.gov\)](mailto:papp.micheal@epa.gov) phone: 919-541-2408



QA Spotlight: Anna Kelley Describes Her One-Year Experience Working with the OAQPS Ambient Air QA Team

March 19, 2004, I found myself driving to North Carolina ready to embark on a new “adventure”. I was finally beginning an Intergovernmental Personnel Act (IPA) assignment with the Monitoring and Quality Group (MQAG) at the Office of Air Quality Planning and Standards (OAQPS) at Research Triangle Park, North Carolina. This had been in the works for quite some time. Ah, the wheels of government! As I drove, I must admit it was with mixed emotions: very excited and a little scared all at the same time.

The purpose of an IPA is to allow employees- federal, state, local and tribal personnel- to gain valuable experience working in different levels of government while working on assignments mutually beneficial to all parties. My IPA was under the direction of Rich Scheffe, Group Leader of MQAG at that time; but more specifically I was asked to come on assignment with the group to work with Mike Papp, Ambient Air Monitoring QA Team Lead. My assignment was to revise our beloved “Redbook” or *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II Part I*, a guidance document for monitoring organizations throughout the United States performing the daily operations in ambient air monitoring.

The Research Triangle Park facility is a beautiful facility and very impressive. There is an excellent cafeteria, library, great walking trails and paths, and a nice little “gift shop” complete with a dry cleaning service. During my first day on the job, I received an overview of the EPA/RTP campus, the building, and the various service departments at Employee Orientation. There is also a gym within the building that has free weights and machines and offers several different “classes” (i.e., yoga, etc) during the work day. Because I am not an EPA employee, the gym was not something I could use; however, I could understand what a nice benefit that would be. Working out either before or after work or during the day (yes, it happens with supervisor approval of course!) would eliminate the need to drive to the gym.

A buzz word heard time and again from Mike is EPA wants to give states and locals *flexibility* in their monitoring programs. After being there a year, it is easy to understand the desire to incorporate flexibility – you need to be flexible if you are an EPA employee! While I was there, the QA ambient air monitoring team was moved from the Monitoring and Quality Assurance Group (MQAG) to the source testing group. Both groups were renamed, Ambient Air Monitoring Group and Air Measurements and Quality Assurance Group, respectively, office/cubicle movement of personnel occurred, some rotation of group leaders occurred (I had three group leaders while there: Rich Scheffe, Conniesue Oldham, and Phil Lorang) and we all carried on our assigned responsibilities as if nothing had happened. Recently, OAQPS has gone through an official reorganization and some of the people who moved cubicle/office spaces a little over a year ago are moving back from whence they came. Thus the need to be flexible!

In addition to working on the revisions to the Redbook, I was encouraged and allowed to observe and become involved in a number of other OAQPS responsibilities including: precursor gas monitoring and the development of the data quality objectives; helping prepare for the July, 2004 CASAC Ambient Air Monitoring and Methods Subcommittee; monthly conference calls with ORIA labs and the coordination of the work performed for the ambient monitoring programs; speciation and IMPROVE auditor training; weekly QA team meetings; conference calls with the NPAP through-the-probe (TTP) SOP development group; and weekly group meetings. Throughout all these different events, the staff at OAQPS displayed commitment to their jobs and professionalism, a willingness to do things for the betterment of the programs they serve and the mission of EPA. There was much discussion of the various projects and programs: what could be done better; what does the data tell us; what doesn't the data tell us; how can we make this happen; what burden could this cause for those who must complete what OAQPS wants in a program; etc. Of course all discussed was not work – a little golf and other sports are thrown in here and there!

Of course at any job there are always frustrations; the same frustrations many of us face in our day-to-day work. The staff at OAQPS may face more between funding, politics and priorities. It seems it isn't uncommon to work on a project diligently and solely for months only to have the project go on the back burner for months, changed, or be scrapped completely.

I am honored to have had the opportunity to meet and work with not only the staff at OAQPS but also with ambient air monitoring and QA persons throughout the United States representing local, state and regional offices. I am truly grateful and humbled by the experience to work at OAQPS, to be considered a member of the team, and the trust and confidence placed in me and my work by the staff, a great bunch of people!



**EPA Office of Air Quality
Planning and Standards**

EPA-OAQPS
D205-02
RTP, NC 27711

E-mail: papp.michael@epa.gov
elkins.joe @epa.gov

The Office of Air Quality Planning and Standards is dedicated to developing a quality system to ensure that the quality of the nations ambient air quality data is of appropriate quality for informed decision making. We realize that it is only through the efforts of our 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 & Joe Elkins

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 its QA mission. The following personnel are listed by the major programs they implement. Since all are EPA employees, their e-mail address are: 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. See the contact website listed below for a list of the Regional contacts.

Program

- STN/IMPROVE Lab Performance Evaluations
- Tribal Air Monitoring
- Statistics, DQOs, DQA, precision and bias
- Speciation Trends Network QA Lead
- OAQPS QA Manager
- PAMS & NATTS Cylinder Recertifications
- Standard Reference Photometer Lead
- Speciation Trends Network/IMPROVE Field Audits
- National Air Toxics Trend Sites QA Lead
- PAMS & NATTS Cylinder Recertifications
- Criteria Pollutant QA Lead
- NPAP Lead
- STN/IMPROVE Lab PE/TSA/Special Studies
- NATTS PT studies and Technical Systems Audits
- STN/IMPROVE Lab PE/TSA/Special Studies

Person

- Eric Bozwell
- Emilio Braganza
- Louise Camalier
- Dennis Crumpler
- Joe Elkins
- Rich Flotard
- Mark Shanis
- Jeff Lantz
- Dennis Mikel
- David Musick
- Mike Papp
- Mark Shanis
- Jewell Smiley
- Candace Sorrell
- Steve Taylor

Affiliation

- ORIA- Montgomery
- ORIA-LV
- OAQPS
- OAQPS
- OAQPS
- ORIA LV
- OAQPS
- ORIA -LV
- OAQPS
- ORIA-LV
- OAQPS
- OAQPS
- ORIA-Montgomery
- OAQPS
- ORIA-Montgomery

Websites

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

Website

- EPA Quality Staff
- AMTIC
- AMTIC QA Page
- Ambient Air QA Team
- Contacts

URL

- <http://www.epa.gov/quality/>
- <http://www.epa.gov/ttn/amtic/>
- <http://www.epa.gov/ttn/amtic/quality.html>
- <http://www.epa.gov/airprogm/oar/oaqps/qa/>
- <http://www.epa.gov/ttn/amtic/contacts.html>

Description

- Overall EPA QA policy and guidance
- Ambient air monitoring and QA
- Direct access to QA programs
- Information on Ambient Air QA Team
- Headquarters and Regional contacts