



## SPECIAL POINTS OF INTEREST:

- Final Monitoring and QA Rules expected to be signed in September.
- New QA Policy expected will revise and replace QA Order 5360.1
- Registrations for National Monitoring Meeting in November closing in on 300

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## Final Monitoring & QA Regulations Due Shortly

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. EPA received approximately 125 comments on the revisions to the quality system section (40 CFR Part 58 Appendix A) and has been reviewing and responding to

comments since April. Anyone interested in reviewing the comments can go to the Federal Government's docket management system at [www.regulations.gov](http://www.regulations.gov). The docket number for the monitoring and QA rule is OAR-2004-0018. In September, EPA will be finalizing and submitting the preamble and the rule text

to the Office of General Counsel for review. It will then proceed forward for an internal agency review, as well as an inter-agency review facilitated by the Office of Management and Budget. It is expected to be delivered to the Administrator for signature around the end of September.

## EPA Quality Staff News— An EPA Quality Policy Coming

In the Spring of 2005, the Science Policy Council provided the Agency's Chief Information Officer with findings and recommendations on quality assurance issues, including the need to revise the existing Quality Order (5360.1).

In the Fall of 2005, the EPA Quality and Information Council Steering Committee established a Quality Policy Workgroup to:

- review and make recommendations on the scope of the Agency's quality program,
- develop quality policies and procedures, including the revision of the existing Quality Order, and

- develop an implementation plan for the new policies and procedures.

The Quality Policy Workgroup identified the need for an overarching Quality Policy that ensures that EPA's products and services are covered by a quality management system that will conform to international consensus standards. In addition, the Agency will develop an Environmental Data Quality Policy that updates the existing Quality Order 5360.1. The new Environmental Data Quality Policy will address the Information Quality Act which was promulgated after the last revision to 5360.1 and will also serve to harmo-

nize Agency quality policies and procedures. Drafts of both policies are being developed and reviewed internally. The revised document will be presented to the Quality and Information Council Steering Committee for review in the October-November timeframe with a presentation to the Quality and Information Council in December. The policies will then go through a number of review stages that will include external stakeholder workshops and Science Advisory Board review and consultation. Dates and timeframes for these activities have not been determined.

## EPA Provides Monitoring and QA Support to Baja California

By Catherine Brown and Emmanuelle Rapicavoli, Region 9

The Baja California Monitoring Network was established by USEPA and the California Air Resources Board (ARB) in conjunction with Mexican local and federal partners to monitor air quality in Northern Baja California. For the last ten years, EPA's Border Program has funded ARB to operate the ambient monitoring network in Baja California. In June 2004, USEPA, ARB, la Secretaría de Medio Ambiente y Recursos Naturales (The Secretariat for the Environment and Natural Resources or "SEMARNAT") and el Estado de Baja California (The State of Baja California or "Baja California") entered into an agreement to transfer ownership and operations of these monitoring stations to Baja California. SEMARNAT has the long-term goal of developing a National Monitoring Program, which would include a quality control/quality assurance program, and is using the development of the Baja California Monitoring Network as a pilot for further study. Baja California is also developing their capacity to operate a monitoring network and develop a QA/QC program.

The network currently consists of thirteen monitoring stations located in the cities of Tijuana, Mexicali, Rosarito, and Tecate. Nine stations include monitoring for gaseous and particulate pollutants and the remaining four stations are particulate monitoring stations only. Performance audits of the gaseous monitors of ARB's Baja California monitoring stations had not been performed in several years. Audits were deemed by all parties to be a prerequisite to a responsible transfer of operations to the new monitoring agency. EPA conducted the audits from April 6, 2006 to April 12, 2006. These audits included performance audits of six of the nine gaseous pollutant monitoring stations, a collocated audit of the only PM<sub>2.5</sub> continuous monitor, flow audits of four of the thirteen PM<sub>10</sub> filter-based monitors, a siting evaluation at six of the thirteen sites, and a technical evaluation of operations at the same six sites.

The performance audits were conducted by challenging the monitoring system with an independently generated and known concentration of gaseous pollutants using the Region 9 Through-the-Probe (TTP) audit system. The TTP system provides for superior data quality by testing the entire monitoring system while producing real-time audit results. Based on TTP audit results, monitoring organizations can take immediate corrective action. Additionally, in many cases, the TTP system is available to provide real-time troubleshooting.

The technical evaluation conducted included review and inspection of ARB's Baja California ambient air monitoring program to assess its compliance with established USEPA regulations and guidelines governing the collection, analysis, validation, and reporting of ambient air quality data funded by the USEPA. The auditor interviewed technical staff on various aspects of the air monitoring program including such areas as field operations, data handling, and quality assurance and quality control procedures. The site inspections consisted of an interview with the site operator, a review of station and instrument logbooks, and an evaluation of the station siting with respect to EPA requirements for probe siting.

ARB is currently making changes to the network in response to EPA's audit findings and hopes to complete these by the end of October. At that time, EPA will conduct follow-up audits to ensure that the audit findings have been resolved and the network is ready to be transferred. Both SEMARNAT and Baja California plan to be present at the next audit to increase their knowledge and experience with EPA's quality assurance program. Once the stations are transferred, EPA will continue to support the Baja California network through technical assistance to the Mexican agencies.



City of Tecate, Baja California  
(Looking West from Tecate towards Tijuana)



ITM site in Mexicali



Sunrise over Mexicali

# QA Handbook Volume IV: Meteorological Measurements Update

Revisions to the QA Handbook Volume IV are progressing. EPA Staff have been working with monitoring organizations and private contractors to create the volume. There will be some very interesting and important changes in this version:

- Measurement Quality Objectives for the different programs that require or recommend meteorological measurements (i.e., PAMS, PSD and NCore).
- Updated color photographs and illustrations.

- In-depth discussions about current technologies that have been advanced in the last 10 years.
- A great discussion of tower construction, maintenance and siting.
- A detailed discussion on sonic anemometers vs. cup/vane anemometers.

At this time, the material is being edited and reviewed by Sonoma Technologies Inc. who are tasked to deliver a 2<sup>nd</sup> draft by September 30, 2006. The third draft will be available to the public in late October, 2006. Dennis Mikel, the AQAD QA lead for meteorology, will be making

a presentation about the document at the National Air Quality Conference in Las Vegas, Nevada during the week of November 6-9<sup>th</sup>. The final document is expected to be available in the Spring of 2007.



## Remember...Standard Time Only for Particulate Matter Monitoring



Occasionally, EPA will get a question about operating PM instruments on standard time or switching the monitors/samplers to daylight savings time in the spring. This is just a reminder to run all PM instruments and monitors at local standard time. During the

development of the PM<sub>2.5</sub> program, there was some initial confusion about whether or not the PM<sub>2.5</sub> monitors should be adjusted to daylight savings time. The PM<sub>2.5</sub> guidance document (Method 2.12) and the method regulation (40 CFR part 50, Appendix L) did not make mention of the time adjustment. On June 11, 1999 EPA released a guidance memorandum instructing monitoring organiza-

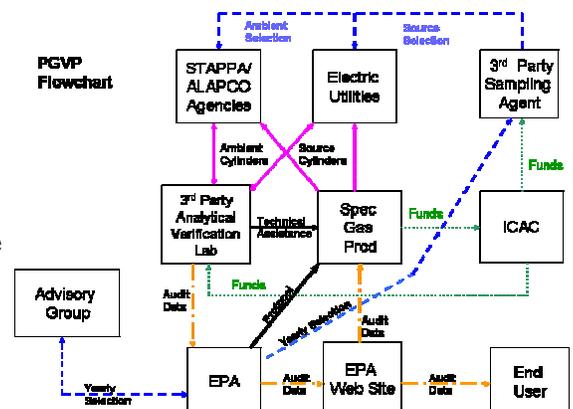
tions to operate the PM instruments on standard time which is also referred to as "local standard time". This guidance memorandum and the rationale for the decision can be found on AMTIC at <http://www.epa.gov/ttn/amtic/pmpolgud.html>. So, if you happen to be operating any of your PM instruments at daylight savings time, switch back to standard time and stay there.

## Status on the resurrection of the Protocol Gas Verification Program (PGVP)

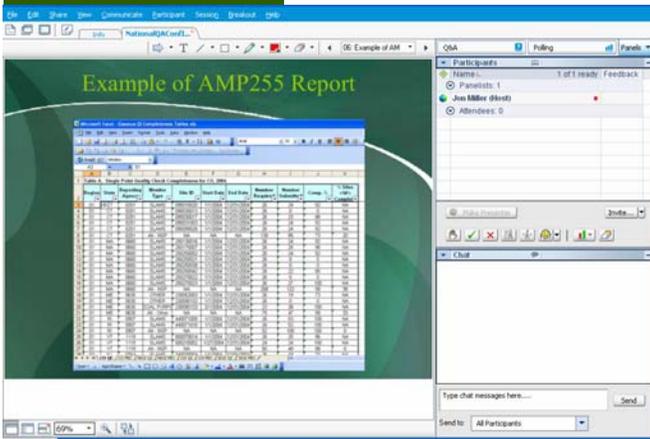
In the 1980s and 1990s, the U.S. Environmental Protection Agency (EPA) conducted a series of performance audits of EPA Protocol Gases sold by specialty gas producers. This program was discontinued in 1998 due to funding shortfalls. In 2002, there was interest by the gas vendors and EPA to reestablish this program. Efforts are underway to resurrect this program by having the specialty gas producers fund the program. These funds will go to the Institute of Clean Air Companies (ICAC) who will be responsible for collecting these funds and allocating a

portion to a 3rd party sampling agent who is under contract with ICAC to implement the process for source testing audit cylinders and to the 3rd party analytical verification laboratory for the analysis of the audit cylinders. Every other year, ambient air monitoring standards will be tested with the assistance of STAPPA/ALAPCO during the selection process. A draft EPA PGVP Implementation Plan is currently under review by ICAC, the National Institute of Standards and Technology (NIST), and the Electric Power Research Institute (EPRI). The following diagram provides a schematic of the selection/audit/

reporting process. The draft is expected to be available by late fall for a wider review.



## WebEx Becoming a Popular Training/Communication Tool



Over the past few years, EPA has been utilizing WebEx software and has had very good experiences using it for conferences and training activities. Basically, WebEx is a web conferencing tool. The software allows 25 sites (a site can be considered an individual computer)

- and the panelists who observe what is on the screen and can participate in various ways.

The host can change presenters throughout the WebEx session. The panelists can participate via conference line or through areas on the right hand side of the WebEx screen that will allow the panelists to type in comments that either all participants can see or just the host.

WebEx has recently been used to provide training on the Turbo-QAPP software, the AMP255 P & B Report, as well as for training on AQS systems like the P&A transaction generator (see *article on page 5*) and DataMart.

The software is generally very easy to set-up locally. Due to the time commitments and costs for travel, WebEx appears to be a great communication and training alternative. Additional information on WebEx can be found at:

<http://www.webex.com/overview>

### Example of a WebEx Screen

to conference. There are three types of participants in a WebEx session:

- a host, who initiates the session and controls the session,
- a presenter, who is the person given rights by the host to run the session and is in control of the screen seen by the panelists,

## Number of Primary Monitor Definitions in AQS on the Rise, but Corrections Still Needed

*“Since July of this year, the number of collocated PM<sub>10</sub> and PM<sub>2.5</sub> monitor definitions within AQS has increased by 35%”*

*“While the increase is encouraging, there is still a considerable number of reporting organizations that have not defined their collocated network within AQS”*

In the January, 2006 issue of the QA EYE, Jonathan Miller reported on a subject which had to do with monitoring organizations identifying primary PM<sub>10</sub> and PM<sub>2.5</sub> monitors in AQS. These definitions are essential in determining the completeness of required audits at collocated sites within a given reporting organization.

Since July of this year, the number of collocated PM<sub>10</sub> and PM<sub>2.5</sub> monitor definitions within AQS has increased by 35%. While the increase in the number of definitions is encouraging, there is still a considerable number of reporting organizations that have not defined their collocated network within AQS. As of August 22<sup>nd</sup>, over 60% of reporting organizations had inadequate monitor collocation definitions for their PM<sub>10</sub> SLAMS network and over 40% of the PM<sub>2.5</sub> SLAMS network had inadequate numbers of collocated monitors defined. The inadequate monitor collocation definitions can be categorized in one of three ways:

1. The reporting organization is collecting collocated audit data at the proper number of sites, but there is not a corresponding monitor collocation definition record in AQS.

This constitutes over 70% of the errors. Fortunately, this is the easiest error to correct. A set of records were generated by EPA staff and distributed to the AQS state and local contacts for review in July. These records reflected a “best guess” as to which monitors should be defined as collocated. To correct this error, these distributed records should be reviewed by the data owners, and then processed accordingly.

2. The reporting organization is not collecting any collocated audit data when they should be AND they do not have any collocated monitors defined in AQS. It is unclear what the circumstances may be for this occurrence, but it is being reviewed by EPA Regional staff.
3. The reporting organization is not collecting collocated data at enough sites. In these instances, it appears that all the collocated sites are properly defined in AQS.

If you are a data owner and have any questions as to how to establish these monitor collocation definitions within AQS, please contact Jonathan Miller (National Air Data Group at EPA – OAQPS) at (919) 541-7738 or [miller.jonathan@epa.gov](mailto:miller.jonathan@epa.gov).

## WebEx Training on the P&A Transaction Generator

A WebEx session on using the Air Quality System Precision and Accuracy (AQSP&A) transaction generator (an Excel spreadsheet tool) has been scheduled for Wednesday, September 20, 2006 from 2:00 - 3:00 pm Eastern.

This 1 hour session will:

- show you how to find and download the AQSP&A files,
- show you how to use the spreadsheet to generate precision transactions and accuracy transactions, and
- describe the functions available in AQSP&A.

This session will be held on the Web,

using WebEx, a web conferencing tool. You will need to download the WebEx software to participate. This only takes a few minutes, but Administrator privileges to your PC are needed to load the software. If you're not sure if you have Administrator privileges, please contact your IT support prior to the session.

The session will be open 15 minutes prior to the start time to allow you time to download and join the session.

The audio portion of the session will be provided by a toll free teleconference line. After dialing this number, you will be asked for a conference code.

**The WebEx session is limited to the first 25 people to register.** To register

for this session, go to:

<https://epa.webex.com/>

The password for this session is: aqspal

Once you have registered, you will receive an email advising you of the address for joining the session and further instructions.

If you have any questions about this session, please email Bill Frietsche at:

[frietsche.bill@epa.gov](mailto:frietsche.bill@epa.gov).

Due to the publication date of the Newsletter, we realize this is short notice for anyone interested in attending this session, so, if you can't make this one, more sessions will be available. E-mail Bill regarding your interest.

## The 2005 Completeness, Precision and Bias Summaries Are Out

Since 2000, EPA has been producing reports that summarize the completeness, precision, and bias of the criteria pollutant data. Since EPA has proposed to revise some of the statistics used to evaluate the QC data, EPA worked with the National Air Data Group (NADQ) to develop a new report on AQS. This report, referred to as the AMP 255, can be run for any time period. As a

service, and a way of evaluating data from a national standpoint, EPA generates an annual report after the July 1 certification deadline which it distributes on AMTIC at <http://www.epa.gov/ttn/amtic/parslist.html> as a zip file. This zip file contains:

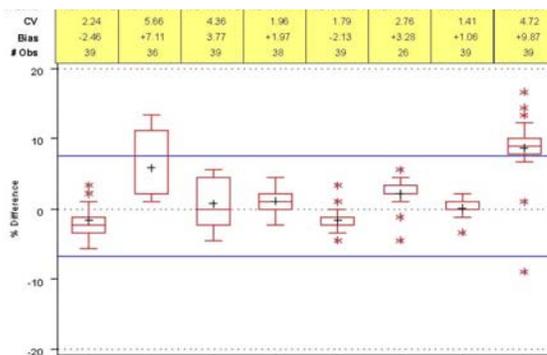
- “2005 Report Explanation” document that ex-

plains the content of the various excel files,

- “Final 2003 Report”- although this report is dated as 2003, it contains details of the statistics behind the generation of the 2005 evaluations. Since the statistics are the same, EPA did not generate a new report,
- AMP255 Excel spreadsheets of the data, and

- Box-and-whisker plots of the one-point QC checks of the gaseous pollutant data aggregated by EPA Region and reporting organization.

The box-and-whisker plots cannot be generated by AQS so thanks to Jonathan Miller of NADQ, we have been able to distribute these each year.



**Example of ozone box-and-whisker plots of each site within a reporting organization**

This year the PM<sub>10</sub> and PM<sub>2.5</sub> data were not distributed since many organizations had not identified the primary monitor (see article on page 4) and therefore the data would not be truly representative of the data completeness. The monitoring organizations have been making progress on this issue and we hope to include the PM<sub>10</sub> and PM<sub>2.5</sub> data by December.



## Upcoming QA Related Meetings and Training

Over the months of October and November there are 3 meetings scheduled that will cover QA related Topics:

**16<sup>th</sup> Annual Region 6 Quality Assurance Conference, October 16-20, 2006 Dallas TX.**

This conference addresses overarching QA topics from a national perspective but also gets specific to issues in Region 6. There is a track from Tuesday Oct 17 through Thursday Oct 19 devoted to ambient air monitoring issues. An agenda and information about hotels is posted at the conference website [www.epa.gov/region6/qa](http://www.epa.gov/region6/qa).

**2006 Annual Quality Systems Training, October 24-26, 2006 Chicago IL .**

This training is put on by the EPA Quality Staff in Washington and is typically devoted to topics such as: quality system development, data quality objectives, quality assurance project plan and quality management plan development, technical systems audits and data quality assessments. For more information check out the Quality Staff's website at <http://www.epa.gov/quality1/train.html>

**National Monitoring Meeting November 6-9, 2006, Las Vegas, NV**

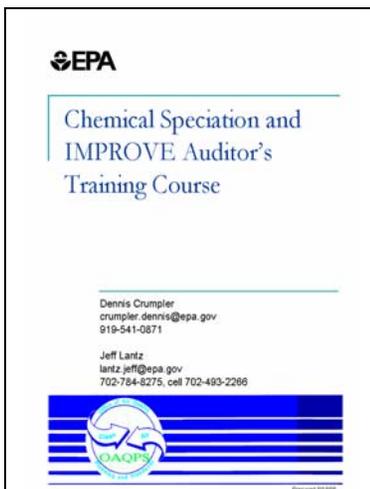
Quite a bit of progress has been made on the National Ambient Air Monitoring Meeting scheduled for November 6-9, 2006 . STAPPA/ALAPCO representatives and OAQPS have been planning this meeting for a number of months and have settled on this date in Las Vegas at the Riviera Hotel. Registration for the conference can be made online at <http://www.epa.gov/ttn/amtic/vegasmgt.html>. The website also includes information on the hotel and the current agenda. So far, around 280 people have registered for the conference and EPA has increased the room reservation by an additional 50 rooms at the Riviera. There is still room in the three training classes on Monday. Abstracts for presentation and poster sessions were due August 15th and it appears most sessions are full.

### National Air Toxics Trends Stations Quality Assurance Review

The NATTS program is now in its third year of operation. The EPA QA Staff are working with their contractor to create the second annual Quality Assurance Annual Report (QAAR) for calendar year 2005. Battelle Inc. has pulled together data and created the first draft, which is currently under review by EPA. The final document will be sent to EPA in mid-September. Dennis Mikel will be presenting a summary of the QAAR at the National Air

Quality Conference in Las Vegas, Nevada during the week of November 6-9<sup>th</sup>. Previously created quarterly Proficiency Testing and the 2004 QAAR reports for the NATTS program are available on the EPA's AMTIC website: <http://www.epa.gov/ttn/amtic/airtoxqa.html>.

## Field Audit Training for PM<sub>2.5</sub> Speciation and IMPROVE Monitoring Sites



Back in January, (see QA EYE Issue 2) Dennis Crumpler and Jeff Lantz reported progress and their goals to develop a field audit training program for the PM<sub>2.5</sub> Speciation Trends (STN) and the IMPROVE Networks. One of the overarching goals of the audit program is to provide feedback to owner/operators regarding the operational status of their samplers and networks and at the same time provide a QA data repository that allows data analysts and modelers the tools to assess the uncertainty within the STN and IMPROVE data sets. We continue to solicit feedback on the needs that the Speciation QA field audit program can address.

Over the spring and summer of 2006, Dennis and Jeff conducted a Metone SASS training module in Austin, TX; and full IMPROVE/ Metone SASS courses in RTP, NC; Frostburg, MD, Sac and Fox Indian Reservation, KS (near Kansas City); Denver, CO; Sacramento, CA; and Seattle, WA. Training Certificates have been issued to 25 State and Local monitoring staff, 9 EPA Regional and one OAQPS staff, one Tribal environmental professional and 5 contractors to States or EPA. Feed-

back from the course has been very positive. Audit reports are beginning to come in at a rate that should enable us to eclipse our goal of at least one qualified federal audit at 25% of the samplers in each network this calendar year. The most significant value added to the training course has been the digital integration of the site TSA forms and the sampler performance audit worksheets, which allow for electronic reporting. Evaluation of siting factors has been added. Reporting and remediation procedures were proposed and discussed in the classes, which will ultimately give the entire community a written record of the audit report and remediation activities that resulted from the audit. Lessons learned and improvements to the audit will end-up in the STN QAPP revision currently underway. A training course manual and CD is issued to every graduate. These materials will be posted on the "SPECIATION/Quality Assurance" page of AMTIC by September 30. [Please be advised that only auditors certified through this course are given the technical information needed to conduct an audit on IMPROVE sites.]



Rocky Mountain National Park

We would like to mention that the technical assistance team from Research Triangle Institute under contract to EPA, helped compile and revise the course material, the digital TSA forms and Audit Worksheets, and provided faculty for the course. The IMPROVE Implementation staff at Crocker Nuclear Laboratory, UC Davis, helped produce the IMPROVE audit worksheet and provided invaluable review and input into all aspects of the IMPROVE material. Steve Ixquiac from UC Davis attended the full course and became certified.



Audit Training in RTP, NC

We may be able to get one more course in this calendar year in Florida; however there will be future offerings of this course in the spring and summer of 2007. We would like to plan venues to reach the largest number of prospective auditors; consequently we are building a contact list of interested State, Local, Tribal, and Federal staff. If you have an interest in attending or hosting an audit training course contact Dennis Crumpler at [crumpler.dennis@epa.gov](mailto:crumpler.dennis@epa.gov).



**EPA Office of Air Quality  
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EPA-OAQPS  
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The Office of Air Quality Planning and Standards is dedicated to developing a quality system to ensure that the quality of the Nation’s 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	ORIA- Montgomery
Emilio	Braganza	ORIA-LV
Louise	Camalier	OAQPS
Dennis	Crumpler	OAQPS
Joe	Elkins	OAQPS
Rich	Flotard	ORIA LV
Mark	Shanis	OAQPS
Jeff	Lantz	ORIA -LV
Dennis	Mikel	OAQPS
David	Musick	ORIA-LV
Mike	Papp	OAQPS
Mark	Shanis	OAQPS
Jewell	Smiley	ORIA-Montgomery
Candace	Sorrell	OAQPS
Steve	Taylor	ORIA-Montgomery

**Affiliation**

## 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