

AQS Quarterly Newsletter

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Information Management Group (919) 541-5586

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Welcome

I want to thank you for your help over the past few weeks as we worked to resolve a system issue that affected AQS performance. We had been making a change to improve AQS but, unfortunately, the change and other events had a negative impact on AQS. The article on page 3 explains what happened and what we did to restore performance.

This year's AQS Conference will be held in

Albuquerque NM, March 31-April 4. We are looking forward to meeting with you. We will demo the new AQS web so please come to learn about it. Please see Jerry's article below for details on the Conference, and Mike Letke's article on the AQS web. Chuck's User Support article discusses problems that users have reported and what is being done about them. Jake's article discusses the recent changes we have made to the AQS software. Virginia has



developed a list of AQS acronyms to help folks understand our AQS-ese. Please let us know if there are any topics you'd like us to address in future AQS Newsletters

Hope to see y'all at the Conference.

Ed Lillis



AQS Conference in Albuquerque, NM, March 31-April 4, 2003

A reminder about the AQS Conference: It's just around the corner! So get those registrations in as soon as you can. Remember, you need to register on the AQS web page:

<http://www.epa.gov/ttn/airs/airsaqs/airsaqs/conference/AQS2003/aqs2003.htm> as well as with the hotel for your sleeping room at the Hyatt Regency Hotel, 330 Tijeras St., Albuquerque, New Mexico 87102.

For reservations call: 505-842-1234 or 800-233-1234, as soon as you can before the reserved room block at government per diem rate ends.

Plans are going great. We were delayed somewhat by our legal team in getting the hotel contract signed which caused some "bumps" at the registration desk for some folks but that has all been resolved now. Of course, if you have trouble registering or getting the \$72/single or \$90/ double plus tax rate don't hesitate to call me for help.

We have the perfect floor plan for meeting and training rooms reserved this year, right there on the 2nd floor of the Hyatt Regency. We've contracted, once again, to provide T1

level internet communication service for our attendees to use the AQS system, surf, check emails, etc and will make this available all week during the conference. Now, all I need is you! I've contracted with the Hyatt for people to come and I'll see that you're treated like homefolk. I've also made arrangements for a backup hotel (same government per diem rates (\$72/\$90 plus taxes) with free shuttle to the Hyatt in case we need overflow space. It is the Plaza Inn, 900 Medical Arts Ave, NE, Albuquerque, NM, 505/243-5693 in case you miss our cutoff dates.

We've put a map of the surrounding area of the Hyatt and a lengthy list of restaurants within walking distance on the web site as well as a 2nd floor Hyatt floorplan of the meeting room space we've rented for the conference (Fiesta Room and Enchantment Ballroom).

Continued on next page...





Downtown Albuquerque

AQS Conference continued:

I suggest you print these and bring them with you since you may not register with us at the conference desk for several days and may find these extremely useful beforehand.

Incidentally, ESC has decided, once again, to come to the AQS Conference and plans another think-tank night (Tuesday night) and would like you to join them. I heard lots of good things from this last year (not just about the food).

Also, I've learned from a Hot-Air Balloon web-site that on April 1-4, 2002,

Albuquerque averaged a max temperature of 72 degrees daily for what it's worth in making your clothes preparations.



One other thing, I've been informed that EPA has a prohibition on providing tote bags to conference participants. What this means and how I help you manage the tons of handouts I'm not sure. You may want to

consider bringing a tote bag from a previous conference just in case I can't fix this problem. I'm truly thankful (and surprised after taking my boss horse-back riding in Louisville last year (no injuries, remember)) to be able to plan another great conference for you to learn more about AQS and its data.

As always, I look forward to seeing you in ALBUQUERQUE!

Jerry Husketh

Update Your Address on AQS

AQS Version 2.4 includes a change to the Address format. The new address includes a line for City and Address2. These changes were made to prepare for the AQS Web and Central Data Exchange (CDX) implementation, which will happen at the AQS Conference in late March.

Why do we need to have this City and Address info?

Well, it has to do with registering for CDX, which is part of the AQS Web. In the client server version of AQS, an FTP product was used to send data to AQS and to

retrieve batch reports. In the AQS Web, FTP will be replaced by CDX.

CDX is the new electronic front door for the U.S. EPA and AQS is one the first users! Now back to why we need the address info – new users of CDX will be mailed a Certification Key which will be used to complete the registration process. In order to mail the Certification Key we need the additional address information (City and Address2).

Without this information, users will not receive a Certification Key and therefore will not

be able to register with CDX and also not be able to send data to AQS or retrieve batch reports.

To update your address information, install version 2.4 of AQS client server, go to the Admin/Security screen of AQS, verify that the address is correct. If the Zip Code is correct the City should be also. If the Address2 is needed, please provide. Click the Save icon in the upper left.

Mike Letke



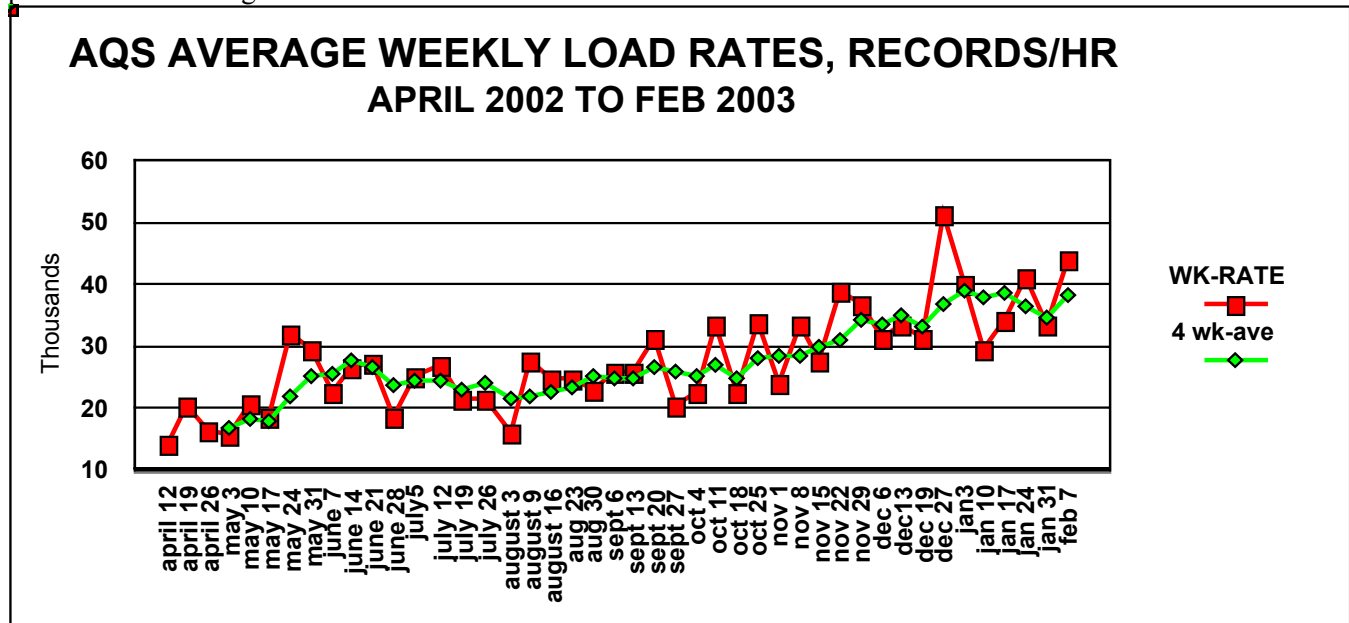
Rio Grande and Bosque



AQS Performance

We have been working to improve performance since AQS went into production. We are trying to reduce the amount of CPU being consumed and increase the speed so that jobs run faster for our users. We had been making some progress as the chart below illustrates.

For example, average upload rates in April 2002 were about 15,000 records loaded per hour (clock time). More recently, weekly upload rates were in the range of 35,000- 45,000 records/hr., more than double since the beginning of the time period. However, in mid-February we made a change that unfortunately affected AQS performance in a negative manner.



The change that was made was scheduled for the President Day weekend (Feb 14-17). AQS had to be taken off-line and users were notified. The first problem that occurred was an ice storm that hit the RTP, NC area over the weekend, keeping National Computer Center staff from completing the change during the scheduled period. As a result, AQS remained off-line until Thursday, Feb. 20.

Initially, AQS performed ok, but as more users began to submit the jobs that had accumulated when AQS was off-line, performance decreased. Also, an unusually large number of very large data retrievals were submitted on Feb 21, 22, 24, 25, each requiring several hours to complete. Jobs from other EPA applications on the server also contributed to the load due to the usual high "end-of-the-month" traffic. The total impact of these jobs caused the server to run at full capacity and bog down.

By Wednesday, Feb. 26, it was clear that action had to be taken to stabilize the server. Our goal was to keep AQS operational for as many users as possible. Some of the large retrievals that were noticeably affecting performance were terminated (after contacting the user). We also limited user access to a few raw data reports (e.g., AMP 501) that can potentially consume a lot of CPU. As performance improved, access to these reports was restored so that by the end of the week, all reports were available. Though performance has improved, we are still asking AQS users for their help in spreading jobs over the entire workday and avoid submitting nationwide reports without our prior review.

Though we believe the large number of jobs that were submitted (due to the backlog that has accumulated while AQS was off-line) and the several, very large retrievals were the principal reason for the event, we now believe that the data base change made over the President's Day weekend had a negative impact on performance. For example, the upload rate since the server stabilized is lower than before the change. At this time, we are assessing options as what to do and when to do it. We will let you know what we plan to do.

I want to thank each of you for your help and understanding during this time period and hope that most of you were able to complete your work in a reasonable time.

Ed Lillis



AQS Security

I want to thank all of the AQS users that sent in their signed AQS User Security Guidelines. The guidelines were developed to help preserve the integrity of the AQS data base and prevent unauthorized access to the

data that State, local and tribal agencies have uploaded into AQS.

So far, we have received over 85% of signed forms from the users. Recently we sent out another request to those who did not respond asking that they either submit the signed form or

tell us why they don't plan to. It is important that everyone read the material and submit the signed form. This is requirement for all EPA major systems, not just AQS. Again, we thank all of those that submitted the form and encourage all

others to submit them.

Michael Hamlin



Inside Story: User-Ids Being Revoked after One Year of "Not" Logging into AQS by the National Computer Center (NCC)

The new AQS has been in production just over a year. Recently, some users have reported their User-Id being revoked, and their Canyon and Volcano accounts permanently locked by the NCC. This has been found to be a result of these users not logging into AQS for a year or not accessing your Volcano (ftp) or Canyon (batch jobs) accounts.

The EPA National Computer Center (NCC) security policy mandates that the User-Id be revoked on the 366th day of not logging into either Canyon or Volcano. When this occurs, the User-Id is revoked for one month. During this time the user cannot access the AQS data base for uploads or retrievals. The NCC mandates the one-month lockout to give account administrators time for disposition of user files. Only after this one-month period can the User-Id be reactivated; or in some cases, a new User-Id assigned.

To avoid one's User-Id being revoked, users must log onto Canyon and Volcano before the 366th day. The simplest way to achieve this is to log

into AQS and synchronize both the Canyon and Volcano passwords (the synchronization software actually logs onto both servers). Please note that the EPA NCC security policy also mandates that user passwords be reset every 90 days. To avoid your passwords being locked (disabled) after 90 days, users should log into AQS and synchronize their passwords before the end of the 90-day period. Our strong recommendation for all AQS users, who want to retain an active status, is to log into AQS and synchronize their passwords every 90 days. This action will keep your User-Id and passwords alive and well. Some users, primarily EPA, only access the AQS database via SAS software. Since SAS accesses the AQS Oracle database directly (not thru the AQS client), their Canyon and Volcano Unix passwords are subject to being revoked if either of these Unix servers has not been accessed for a period of one year. It is recommended

that SAS users, who only use SAS and do not use the AQS client, be removed from their Canyon and Volcano accounts. This will help prevent account administrators having to deal with revoked User-Ids and permanently locked accounts for those users that only use SAS. Again, if SAS users also use the AQS client, then they need to keep their User-Ids and passwords active by logging into AQS and synchronizing their passwords every 90 days.

We are currently working with the NCC and have requested that they notify users (and us) at least one month in advance of any AQS User-Id being revoked and their Canyon and Volcano accounts permanently locked by the NCC. We feel that this early notification will provide users the necessary time to log into AQS and synchronize their passwords prior to their User-Id being revoked and their accounts being permanently locked. Again, once the user ID has been revoked and their

accounts locked, the user must wait a month before a new User-Id can be established and their accounts unlocked.

For those users who do get permanently locked or deleted from their accounts, if they need to remain an AQS user they will need to contact their regional AQS person to re-register for AQS. The regional AQS contact person will have to add the user to the appropriate accounts and contact IMG for the user to be put in AQS again. Should the user no longer need access, your regional AQS contact and IMG needs to be notified. Please forward this email to any users in your agency that are not active AQS users and may not have accessed AQS within the past 11 months. Your cooperation and support in this matter are greatly appreciated. Please contact me if you have questions or concerns.

Chuck Isbell



User Support Issues

Here is the latest status on some challenges that User Support is addressing:

Password Reset Taking Too Long

In the past month or two, have you called the AQS Helpdesk (Call Center) for a password reset and discovered that it took longer than it used to? Are you wondering why sometimes the Helpdesk specialist is able to reset your password while you are on the phone, and yet other times it takes 1, or 2, or 3 days?

There are several explanations for the delays you may have been experiencing.

First of all, the Call Center (Level 1) specialists only have authority to reset SecuRemote passwords and the Unix passwords for Canyon and Volcano. In these situations, the Helpdesk will usually reset your password while you are on the phone. If you need your AQS Oracle password reset, the Call Center has to forward your request to the Data Base Systems Support (Level 3) specialists. If your User-Id/account is locked, the Call Center has to forward your request to Unix Support. Locking occurs frequently, and is the result of the wrong password being entered three times, or not being reset before expiration

(every 90 days).

Second of all, the process that worked fairly well in the past is now hampered by problems associated with the transition to a new DynCorp/PlanetGov contractor and the introduction of the new Remedy web application. For example, the Helpdesk specialists are forced to transfer password problem tickets via the phone. This process does not work as well, and can result in significant delays when voice mail has to be used (specialists are assumed to be available to assist with the problem and are not).

What's being done to correct the problems?

We have met with the EPA Office of Environmental Information (OEI) and the DynCorp/PlanetGov Call Center contractor. Everyone agreed that resetting passwords is a top priority. The Call Center said that their expectation is to either resolve the password problem within two hours, or at least have a specialist return the user's call within two hours.

The DynCorp/PlanetGov team has agreed to modify some of their current procedures to make this 2-hour expectation a reality. For example, they are exploring the options of giving Level 1 the additional ability to reset Oracle passwords, and authorize Level 2 to perform

password resets too. The DynCorp/PlanetGov team will be improving their communication by enhancing the new Remedy web application. This will enable the Level 1 staff to transfer problems (tickets) to more specialists (and notify their supervisors) in a more timely and efficient manner.

Please let me know if you continue to experience delays in getting your passwords reset.

Rudeness Complaint

We received a complaint of rudeness. The user asked to remain anonymous, so we do not have the specifics. But the DynCorp/PlanetGov management assures us that rudeness will not be tolerated.

If you experience rudeness of any kind when you are assisted by the Helpdesk specialists (Levels 1, 2 or 3), please let me know so we can address the specifics and avoid any future problems.

Level 2 Support After 5:00 P.M. ET

Not much progress has been made on this issue. We continue to raise this issue, and so far the OEI/DynCorp folks have not determined what Level 2 services they are willing to provide after 5:00 P.M. ET; and at what cost. As a reminder, there is a Level 1 specialist available until 8:00 P.M. ET Monday thru Friday.

Chuck Isbell



AQS Web

Background

The client server based Air Quality System which was implemented in February 2002, provided a more user friendly environment to access the reengineered AQS Oracle database. Prior to this development, users of AQS would use mainframe-based software, which while having advantages, was very difficult to master. Soon after the implementation of the AQS client server, planning was started for the AQS Web.

In March 2002, the development of the AQS Web was begun. While AQS Web still uses the Oracle based AQS database, access is significantly easier and many database enhancement have been made. The AQS Web will begin to be implemented in April 2003, with more enhancements to be made in the following months.

What is AQS Web?

AQS Web allows the user to access the AQS database using web browser (Internet Explorer) technology. Although the 'Look and Feel' of the AQS software is similar, there is no longer a need for SecuRemote to access the AQS database. If you can access the web using Internet Explorer, you can access AQS Web. AQS Web also uses the EPA Central Data Exchange (CDX) software to send and receive data and reports from AQS database. CDX will be the 'front-door' for applications which want to send data to EPA. AQS is one of the first applications to use CDX on a large scale basis.

Differences between AQS client server and AQS Web.

- Use Internet Explorer to access AQS database.
- AQS Web does not require the use of SecuRemote software.
- Central Data Exchange is integrated into AQS eliminating the need for FTP software.
- Improvements have been made to the AQS to provide a more user friendly interface.
- Enhancements have been made to the AQS application providing faster and more efficient access to data.

How do I access AQS web?

AQS Web is accessed using the Internet Explorer (version 5.0 or later) web browser which is available free of charge from www.microsoft.com. A valid user ID and password, a connection to the internet and Internet Explorer are the only things that are required to access AQS Web.

What is CDX?

CDX or Central Data Exchange is the electronic front door to the Environmental Protection Agency and will be the mechanism that the user community uses to send and receive data from EPA. In the case of AQS, CDX will replace the FTP process of sending and receiving data from AQS. Rather than using an FTP client to send data to AQS, CDX will be used. Users will need to have a CDX user-id and password. CDX will also be used to return *batch* reports to the user. Instead of having to use a FTP client the user's batch report will be delivered to the CDX mailbox where they can be picked up directly from within AQS.

How do I get setup to use AQS Web?

If you are a registered AQS user, you should be able to use AQS Web. Prior to implementation, the CDX system will mail a certification key to active AQS users. The certification key will be used to activate the CDX account. After this is completed, the user only needs to have access to Internet Explorer web browser.

What if I have problems?

In most cases, users who are having problems with the AQS Web will contact the AQS Technical Support Center at 800-334-2405. If the problem relates directly to CDX, such as a CDX mailbox issue or invalid/expired CDX password, the user should contact the CDX help Desk at 888-890-1995 or via email epacdx@csc.com. If you are unsure of the nature of the problem, contact the AQS Technical Support Center.

Mike Letke



User Recommendations from the AQS Conference 2002

At the last AQS Conference in Louisville, users prioritized a number of improvements they wanted to see in AQS. Our goal is to make as many of these changes within budget and other constraints. Since the Conference, we have addressed some (though not all) of these recommendations. The table below identifies what we have done with respect to each of the top 20 recommendations. We plan to provide a more complete listing at the next AQS Conference.

Rank/Recommendation	Action so far	Comments
1. Provide all reports with a useable text report file.	Text files are now available for: -AMP 350H-raw data-1 hr; -AMP350HP-raw data hourly preproduction; -AMP350NW-raw data NAAQS -AMP 350D-raw data-daily; -AMP 350MX-raw data max values -AMP 350DP-raw data-preproduction	Working on or in que: -AMP 430-data completeness; -AMP 450-quicklook criteria parameters -AMP 350-raw data monthly -AMP 350MP-raw data monthly, preproduction
2. Need explanation of cryptic error codes.	A number of error codes have been modified.	Error codes will be modified as they are brought to our attention.
3. Need Quarterly standard report; Quarterly quick look and quarterly completeness reports.	The completeness report can be run by quarter or any other date range selected. The initial system design limits quarterly summary statistics to arithmetic mean, observation count, % observations, and criteria flag. These statistics can be listed with Discoverer.	Will discuss new reports at AQS Conference.
4. Load, query and retrieve are slow Cannot post raw data	Load, query, and retrieval rates continue to improve as a result of several system changes that have been made. Reports are being optimized to improve speed at the time they are being enhanced to provide text files. Post has been modified and works correctly.	AQS Development contractor and Oracle Corp. reviewing AQS for additional performance enhancements.
5. Cancel query button sometimes exits user from system.	Testing of the web application indicates that this will not be a problem after web implementation	



6. Need mechanism to post tips and alert all users not just RO) of system/communication problems.	-Have established a new alert system to notify all users when AQS is or is expected to be off-line. -AQS website has list of frequently asked questions -AQS Newsletter can be used to discuss useful tips and info.	-Help Desk to alert users when AQS is down or other NCC problems. -IMG to alert users of expected downtimes (scheduled maintenance, etc.)
7. Users want to -select/sort by date, site, monitor and POC in Browse, -Retrieve by RO, -Retrieve by POC, -Retrieve by monitor type on all reports.	- No action will be taken until web forms are in place. -- Retrieval by RO now available. -- Retrieval by POC to be implemented when reports are converted to text format (see #1). --Retrieval by monitor type is in place for reports, where valid.	
8. Add null data codes and exceptional events flag back to raw data.	The null data codes/exceptional event flags are being added to the raw data reports as they are being converted to text format (see #1).	
9. Want a batch edit to make global changes in Correct - Want to see all errors listed in Correct dialog box at one time.	The current correct screen has always permitted global changes. As designed, the screen displays all messages for one record at a time.	Will discuss at the AQS Conference. Need more details on what is needed.
10. Issues certifying SLAMS reports, makeup samples not appearing.	Data certification issues have been resolved. Precision and accuracy report modified to provide summary data and raw data. Procedures to handle makeup samples, seasonal sampling frequency and minimum detectable level have been corrected. New software to implement seasonal sampling has been added. PM10 and PM2.5 summaries were recomputed and retrievals have been distributed for validation. Precision/accuracy summaries have been recomputed. Retrievals will be distributed for review with a list of rejected data.	Agencies should be able to complete their data certification process.



11. Reports need to work as intended and produce accurate calculations.	Several corrections have been made as identified in # 10 above. Reports are being tested and corrected as converted to text. Also, corrections have been made based on user reports.	
12. Warning when all passwords are going to expire.	The AQS client gives a warning message warning before the AQS password expires. Synchronization, all should expire at once.	We are working with NCC to provide users an early warning message, informing them their user-id will be revoked if after a year of non-use of AQS.
<p>13.- Ability to e-mail help desk for timely response</p> <p>-Help Desk not returning calls</p> <p>-User support needs to be more familiar with AQS</p> <p>-Help Desk (level 2) support after 5 pm</p>	<p>-E-mails are acceptable and will receive higher priority w/new contractor</p> <p>-Issue has been raised with NTSD who manages AQS User Support contractors. Their expectation is call-backs should occur within 2 hrs (and no more than 1 day). Please notify us of specific problems.</p> <p>-Level 2 and Level 3 folks are familiar with details of AQS application. Level 1 folks have attended AQS training sessions but they are primarily responsible for recording problems for AQS and other EPA applications and resolving password issues.</p> <p>We have raised this with OEI/NTSD several times but they have recommended a delay due to the contractor transition</p>	<p>-New Level 1 staff will be trained on AQS</p> <p>-Level 1 specialist is available until 8 pm ET</p>
<p>14.-Need online GEO common file or data dictionary.</p> <p>-Need data dictionary for reports and input</p> <p>-More on-line context-sensitive help</p>	<p>Plan to provide in FY-03 when AQS Query is enhanced</p> <p>Data Dictionary is available and has/will be enhanced in time.</p> <p>On-line context sensitive help will soon be restored to AQS. It was inadvertently deleted. Will be expanded in time.</p>	



15. -Need PM2.5 speciation and airtox report	Agree these reports are needed but many design questions (format) exist	Plan to discuss at AQS Conference.
16.-Need design value report with explanation of design value calculation	Many data quality and policy issues involved in generating design value report from raw data without judgment.	No current plans to develop this report
17. Can't view P&A data upon submission -Make P&A loading procedure same as raw data; want to see P&A before Post	Agree that p and a data are handled differently but would take major redesign to modify.	Plan to discuss at AQS Conference
18. Need summary info on parameter requirements (dp, rounding, start time).	No action yet.	
19. Need message on bottom of screen to stay longer -Status bar flashes too fast	These items inherent in the underlying Oracle software.	Have asked Oracle Corp to explore if/how these Oracle messages can be modified.
20.-Need advanced printing options (double sided or landscaping) -Add print current page option -Make banner pages optional on all reports	Printing is a function of local PC rather than the AQS application. IMG has this capability and ability to print selected pages, you should too. (Depends on local printer) As reports are being converted to text format (see #1 above) users are given flexibility to customize report format as they wish (e.g., keep or delete banner page).	



A new tool for creating Precision and Accuracy Transactions for AQS

Many of you are familiar with the Precision and Accuracy Reporting System (PARS) PC tool that creates data input transactions for precision and accuracy data. Originally, we had provided this DOS based tool to agencies interested in using a stand-alone PC program to create input transactions for P&A data for AQS. A second "Windows" version was developed a few years ago for Windows 95 and 98. The Windows version will not run on the newer PC operating systems (Windows 2000 and Windows XP), however.

Because of this, we decided to create another application, similar in scope to PARS that will run in the newer PC operating system environments. This application is called AQSP&A, and is an Excel spreadsheet, with visual basic procedures to provide look-ups, do some error checking, and generate batch transaction text files.

The spreadsheet (actually, it is an Excel workbook file) contains one worksheet for the accuracy transaction and one worksheet for the precision transaction. Additional worksheets hold lookup values, and are pre-populated with data from AQS for state agencies. This allows some error checking to be performed in the spreadsheet itself. Look-ups for monitors and code descriptions are also included as part of the application, as well as the ability to add new values to the lookup tables as needed. Users will set up the application with the spreadsheets of look-up values appropriate to their agency.

We hope that you try this tool and find it to be useful. Since AQSP&A is actually an Excel file, the flexibility inherent to Excel is available in AQSP&A. If you are interested in obtaining a copy to try, please give me a call at (919) 541-5451 or email me at Frietsche.Bill@epa.gov.

Also, training is being provided on this new tool at the AQS Conference in Albuquerque. If you are interested, please be sure to register. You can register on-line from our web site (the TTN site).

FYI: The application was created using Excel 2000 on a PC with Windows 2000 Professional operating system. I have tried running the application in Excel97, and Excel2002 (XP) with success, on both Windows 2000 and Windows XP. The application (file) is approximately 10 MB.

Bill Frietsche



AQS Acronyms & Abbreviations

In AQS so many abbreviations appear leaving people wondering and asking the question, 'What does this mean?'

Therefore, upon the request of AQS users, a list of Acronyms and Abbreviations have been compiled to assist in understanding AQS. This list may be found at www.epa.gov/ttn/airs/airsaqs under Manuals and Guides. If you have any additions and/or suggestions, please let me know at: ambrose.virginia@epa.gov.

Virginia Ambrose

AQS Current Stats as of 3/6/03

Region 1 = 53 Users

Region 2 = 23 Users

Region 3 = 34 Users

Region 4 = 75 Users

Region 5 = 48 Users

Region 6 = 39 Users

Region 7 = 32 Users

Region 8 = 35 Users

Region 9 = 112 Users

Region 10 = 19 Users

Other = 96 Users

TOTAL = 566

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