Air Quality System
Precision and Accuracy Data Transaction Generator

(AQSP&A)

Training Session

Air Quality System
Precision and Accuracy Data Transaction Generator

(AQSP&A)

Training Session

Overview of AQSP&A

- Background
- Setting up the application
- Functionality
- Questions

This training course will cover these topics.

Background

- How does AQSP&A fit in with AQS?

- Hardware and Operating Systems

How does AQSP&A fit in with AQS?

•AQSP&A is an Excel workbook that generates the 2 transactions for Precision and Accuracy data (The RA transaction and the RP transaction).

•Visual Basic for Applications (VBA) is used to automate validations, look ups, and generation of transaction files.

•Use of drop down lists, and look-ups of valid monitors helps simplify transaction creation.

•AQSP&A is not a stand-alone database; it is not designed to store data and generate reports.

AQSP&A contains "reference" worksheets of valid monitors, valid protocol combinations (parameter, method, unit, sampling duration) and valid code values for several different fields on the RA and RP transactions. These reference worksheets are loaded from the AQS database and updated each time a new release is posted. The reference worksheets allow the spreadsheet to look up code values and validate fields on the transactions as they are generated.

The purpose of AQSP&A is to make it easier for you to create Precision and Accuracy transactions by providing lookups of valid monitors and codes, and their descriptions. An Excel application is used because we thought it was one of the most universal and understood products available to Agencies.

Hardware and Operating Systems

AQSP&A runs on Windows 98, 2000, or XP operating systems.

Files can be opened with Excel 97, Excel 2000, Excel XP (2002), and Excel 2003.

**What do RA and RP Transactions look like?**

Transactions are text files that are loaded to AQS from the EPA's Central Data Exchange (CDX) website. The above form shows files ready to load as they would look in the AQS Batch load form.

Each text file contains transactions, shown below the form.

Fields are separated by the vertical bar delimiter "|" .

Setting Up AQSP&A

- Load Regional file to your PC
  - One file for each EPA Region
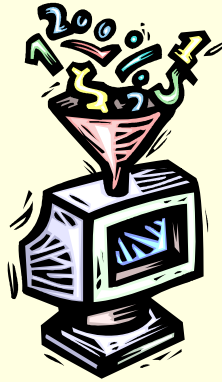
Setting up AQSP&A

Load file to your PC
The USEPA OAQPS Technology Transfer Network (TTN) website contains a site for AQS. The AQS site has a page for AQSP&A downloads. The AQSP&A Excel files are posted there: one for each EPA Region.

The web address is http://www.epa.gov/ttn/airs/airsaqs/padata/padata.htm

Setting Up AQSP&A

- Load Regional file to your PC
  - One file for each EPA Region
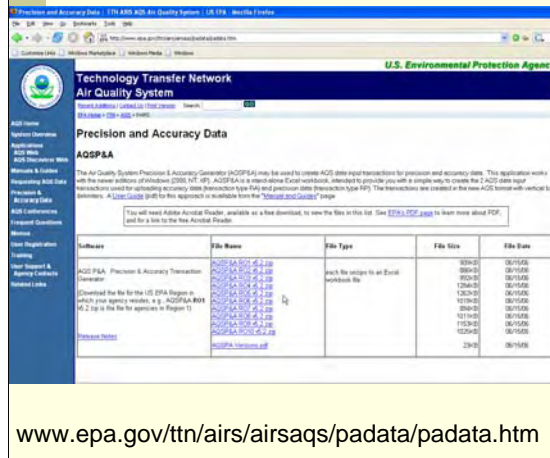
One file for each EPA Region

Here is a map showing the EPA regions.

Setting Up AQSP&A

This is the website where you will find the 10 EPA regional files.

These files are updated on occasion as needed. The version number is included in the file name so that you can tell if you have the most recent file.

An arbitrary file naming convention is used:

•Incremented version numbers mean new AQSP&A program code or new code values added by AQS in addition to refreshing look up tables.

•Incremented alphabetical characters following the version number mean refreshed look up tables

So if you have added new monitors to AQS, they will be included in the next posted version of AQSP&A. And you can tell when AQSP&A has been refreshed by the version number and date.

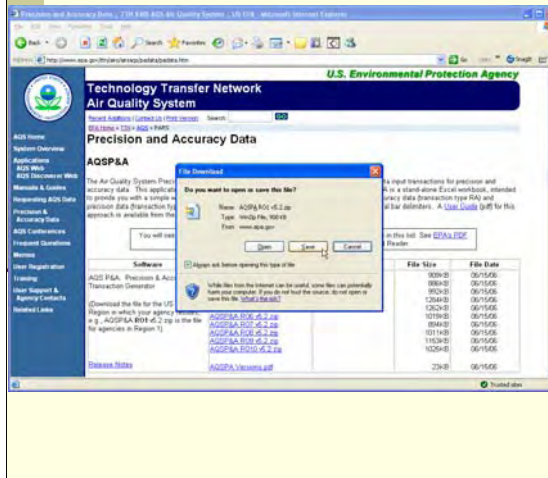**
*

Choose the file for the USEPA Region that your agency resides in.

Each of the 10 files are similar, except that reference worksheets (for lookup data and validation) are loaded with monitor data specific to the screening groups located in the EPA Region.

8

Setting Up AQSP&A

■ Load Regional file to your PC
 ■ One file for each EPA Region

www.epa.gov/ttn/airs/airsaqs/padata/padata.htm

Setting Up AQSP&A

Choose the file for the USEPA Region that your agency resides in.

Each of the 10 files are similar, except that reference worksheets (for lookup data and validation) are loaded with monitor data specific to the screening groups located in the EPA Region.

Note that you can use any of the 10 files; there are no user id or security requirements. However if you create transactions for monitors outside of your screening group, then you will not be able to load them into AQS. They will reject during the AQS batch load.

A User Guide file is also available for downloading under the Manuals and Guides page.

Setting Up AQSP&A

To download the file to your PC, click on the filename of the regional AQSP&A file you wish to download.

You will get a "File Download" confirmation window, or something similar depending on which internet browser you are using. The examples on these slides show the Microsoft Internet Explorer file download confirmation window.
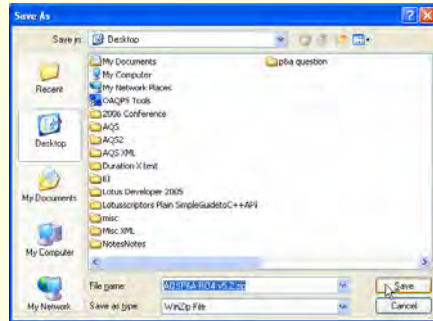
Setting Up AQSP&A

Specify path and filename, and then click on Save.

Note that this is a zipped file. After saving it, you must unzip it. The zipped file will unzip to one Excel file.

You can rename the Excel file, move, copy, or delete it… similar to any other files on your PC.

Setting Up AQSP&A

- Load Regional file to your PC
  - One file for each EPA Region
- Enable macros in Excel
  - Security setting = Medium
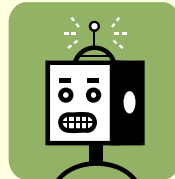
Setting Up AQSP&A

After downloading the regional file to your PC, the next step is to make sure that macros are enabled in your Excel application.

Setting Up AQSP&A

- Load Regional file to your PC
  - One file for each EPA Region
- Enable macros in Excel
  - Security setting = Medium
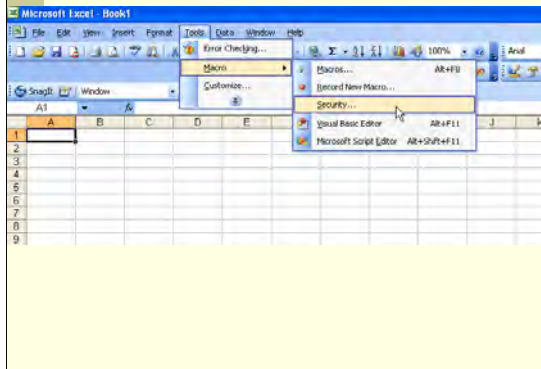
To make sure that macros are enabled, open Excel. (Use the Excel shortcut, rather than clicking on the Excel file).

After you have opened Excel, select Tools / Macro / Security.

Setting Up AQSP&A

- Load Regional file to your PC
  - One file for each EPA Region
- Enable macros in Excel
  - Security setting = Medium

Setting Up AQSP&A

Select a security level setting of "Medium". With this setting, Excel will prompt you each time you open a file that contain Macros.

> *Notes regarding security settings:*
>
> Excel security setting of "Low"   =   no prompt, macros are run.
> Excel security setting of "Medium"   =   prompt to enable macros or not.
> Excel security setting of "High"   =   no prompt, macros are not run.
> ***And for Excel 2003:***
> Excel security setting of "Very High" =   no prompt, macros are not run.

A security setting of "High" or "Very High" prevents AQSP&A macros from running and the AQSP&A application will not work. The macros in AQSP&A include Visual Basic for Application (VBA) procedures that run "behind the scenes" to automate the application, including lookups, button functions, data validation, and report creation.

Set up Screening Group in AQSP&A

Open the AQSP&A file with Excel.
Enable Macros.
The Help worksheet will open, and includes a "Set Up Screening Group" button.

Set Up Screening Group

Click the set up screening group button.

Choose one screening group from dialog window.

All other monitors and associated reference data will be deleted, leaving only your screening group data.

Set Up Screening Group

Click "OK" on the confirmation window to continue to set up data.

Set Up Screening Group

And click "OK" again to message window.

You will return to the "Help" worksheet

Set Up Screening Group

After clicking "OK" to message window, you will return to the "Help" worksheet.

Notes about screening group set up:

Using the screening group set up button helps to ensure that you build transactions only for the monitors belonging to your

screening group.

You only run this utility one time.

The "Set Up Screening Group" button does not have to be used. If you want all of the lookup data available for all agencies in the EPA Region, then ignore the "Set Up Screening Group" button.

If you submit precision and accuracy data to AQS for more than one screening group, then you can create copies of the AQSP&A file with different names for each screening group that you use. The AQSP&A files must have different names, of course, or else reside in different directories. Run the Set Up Screening Group utility for each file you have copied and renamed, and choose a different screening group for each copy.

AQSP&A Functionality

AQSP&A Functionality

Workbook Structure

The Workbook contains 7 worksheets:

Help

TransactionRA

TransactionRP

Coding Manual

Valid Methods

Code Values

Audit Protocols
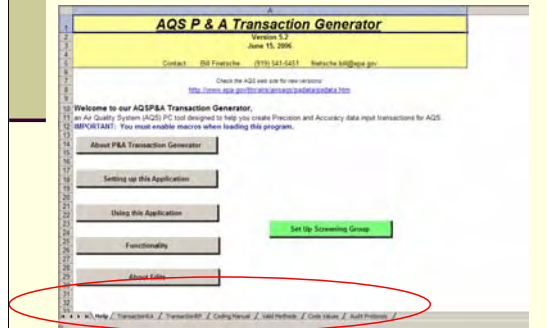
Workbook Structure

The **Help** worksheet provides a starting point, some embedded help, and the
Set Up Screening Group button.

To create accuracy transactions (type RA), use the **TransactionRA** worksheet.

To create precision transactions, (type RP), use the **TransactionRP** worksheet.

The **Coding Manual** worksheet contains entries for fields on transactions RA
and RP.

The **Valid Methods**, **Code Values**, and **Audit Protocols** worksheets contain
monitors, methods, and code values so that the transaction worksheets can
provide automated lookups and validation with Visual Basic for Application
(VBA) procedures.

These last 4 worksheets have been left accessible, however users do not need
to navigate them to use the application.

Additional Toolbar Commands

This application adds 5 new commands to your Excel toolbar.

> **Look up Monitor**
> **Generate Transactions**
> **Add New Monitor / Method**
> **Create Report**
> **Tribal Mode (On/Off)**

We will go over these commands shortly.

Using the 2 Transaction Worksheets

- Column Headings
- Drop down lists
- Look Up Monitor button
- Right-click for code values
- Data validations
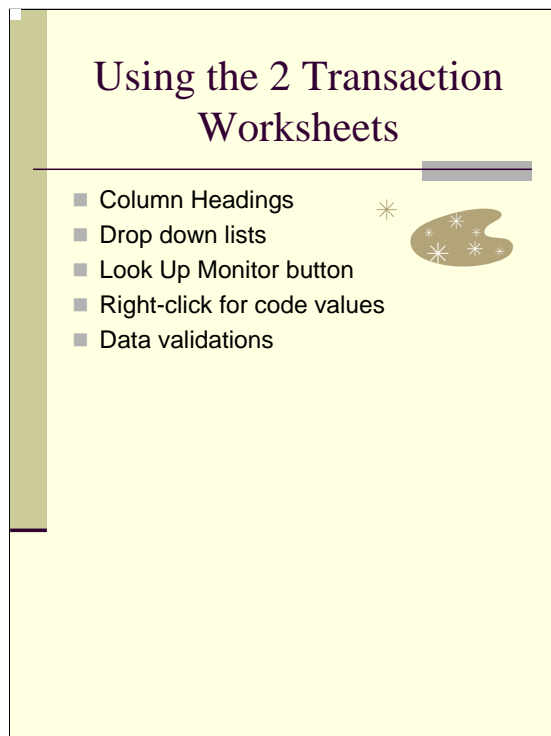
Functionality on the 2 transaction worksheets

Each transaction worksheet has a fixed header area that contains the names of the fields in the order that they appear in the transaction format for the transaction type.

To create a transaction, populate a row with appropriate values in each column.

If you want to create multiple transactions, populate multiple rows with the required data.

Functionality on the 2 transaction worksheets - continued

Here is a graphic of the Column Headings

Mandatory fields have black column headings; optional fields have blue headings.

Columns are in the same order as the fields on the transaction formats.

You can look up field definitions by right-clicking the column heading. (I'll show you that later).
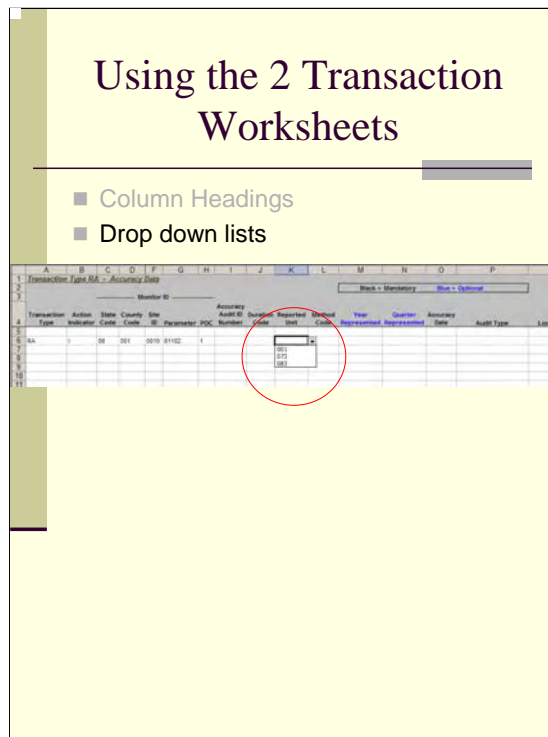
Functionality on the 2 transaction worksheets - continued

Drop down lists

For fields that have a set of allowable codes or values, drop down lists will appear in each cell containing the allowable choices when you select the field. Here is list of values for unit codes for the monitor id shown.

The left mouse button is used to select the appropriate value from the list.

In all cases, warnings are given if values not on the list are typed in; however you can proceed with those values if so desired.

But if you generate a transaction with non-valid values, you will receive an error when attempting to load the transaction into AQS.
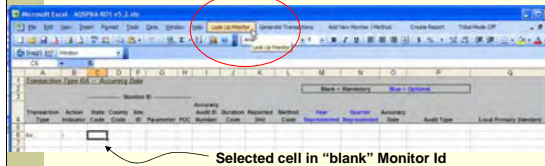
Functionality on the 2 transaction worksheets - continued

Look Up Monitor button

To use the Look Up Monitor button, you must select a monitor id field in a row with a blank monitor id. Any one of the monitor id fields can be selected.

Then click the Look Up Monitor command button.

Functionality on the 2 transaction worksheets - continued

Look Up Monitor button

After clicking the Look Up Monitor command button, a form to select the State, County and Monitor will open.

Make the appropriate selections, and then choose OK on the Add Monitor confirmation window.

*(Note that for this example, **Set Up Screening Group** was not run… the choices include all States in the EPA Region 1)*

Using the 2 Transaction Worksheets

- Column Headings
- Drop down lists
- Look Up Monitor button
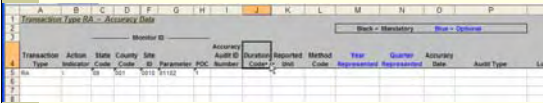
Functionality on the 2 transaction worksheets - continued

Look Up Monitor button

The monitor id is returned to the worksheet.

Functionality on the 2 transaction worksheets - continued

Right-click for code values

The right mouse button has been reprogrammed to look up code values.
A right click on one of the monitor id fields returns a Monitor Description.

Using the 2 Transaction Worksheets

- Column Headings
- Drop down lists
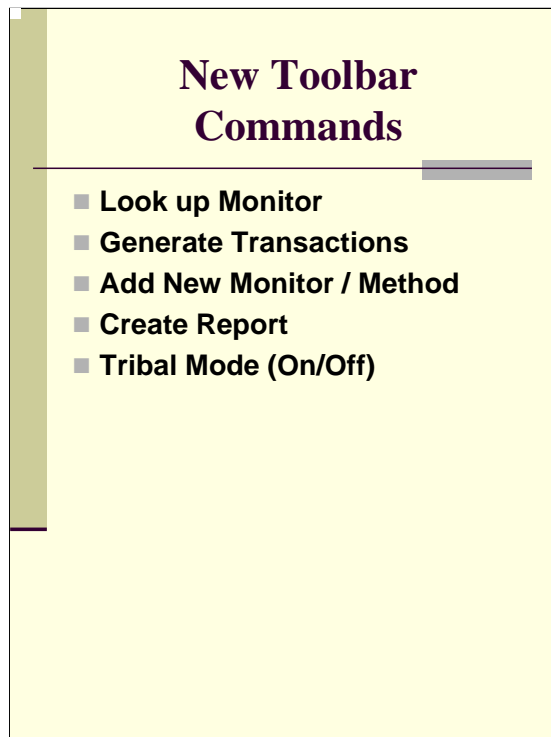- Look Up Monitor button
- Right-click for code values

Functionality on the 2 transaction worksheets - continued

Right-click for code values

A right click on Column Headings returns the coding manual description.

For example, a right click on Duration Code results in…
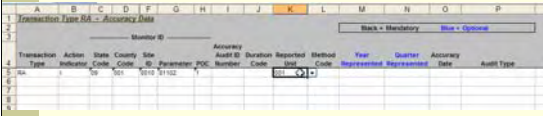
Functionality on the 2 transaction worksheets - continued

Right-click for code values

The coding manual entry for Duration Code. Click the Return button to go back to the transaction worksheet.

Using the 2 Transaction Worksheets

- Column Headings
- Drop down lists
- Look Up Monitor button
- Right-click for code values

Functionality on the 2 transaction worksheets - continued

Right-click for code values

A right click on a code value will return the code description.

For example, a right click on a units code results in…
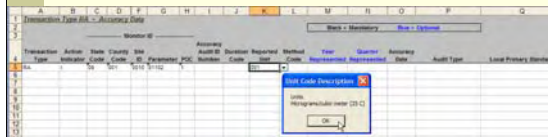
Functionality on the 2 transaction worksheets - continued

Right-click for code values

A message box with the description for unit code 001.

Fields that store code values will have the right-click look up available.

Using the 2 Transaction Worksheets

- Column Headings
- Drop down lists
- Look Up Monitor button
- Right-click for code values
- Data validations
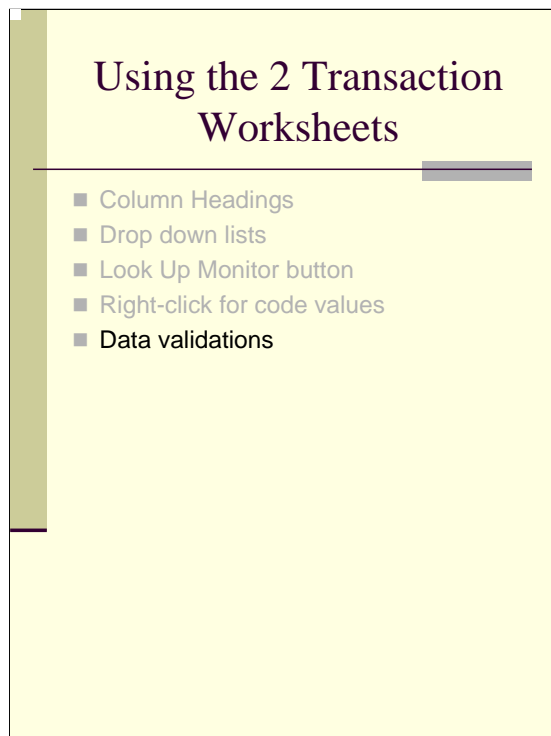
Functionality on the 2 transaction worksheets - continued

Data Validations

Excel data validations have been created for cells that store date fields and code values.

Validations for Numeric fields and mandatory fields are performed by VBA procedures.
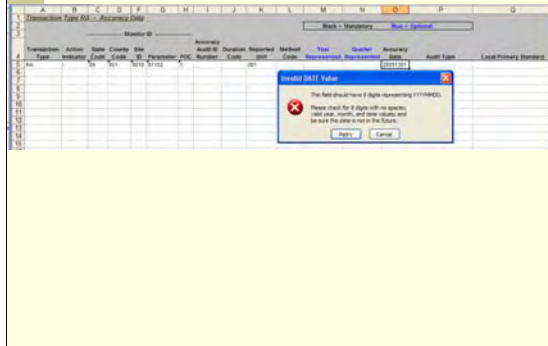
Functionality on the 2 transaction worksheets - continued

Data Validations

Here is an example of a date field validation error message. A month of "13" was inadvertently entered, and the cell's data validation formula caught the error.

Invalid dates are the only fields where data entry is stopped on error, and you must fix the date. All other validations result in warnings, so you can either fix the data or you can continue on with the invalid value.

Transactions are text files that can be edited with any word processor, and can easily be changed to include any values you choose. But AQS will validate the data as part of the load process when you submit the transactions, and invalid data will result in failed transaction(s).

Functionality on the 2 transaction worksheets - continued

Data Validations

Here is an example of a field validation error message for a code value. An invalid code value of "unknown" was typed in for **Audit Type**. This resulted in a warning message, and you are prompted to fix the invalid value. Note that you could continue with the invalid value if you wished.

To fix the entry you could use the drop-down list of values.

New Toolbar Commands

- **Look up Monitor**
- **Generate Transactions**
- **Add New Monitor / Method**
- **Create Report**
- **Tribal Mode (On/Off)**

New Toolbar Commands

AQSAP&A adds 5 new commands to your Excel toolbar.

> **Look up Monitor**
> **Generate Transactions**
> **Add New Monitor / Method**
> **Create Report**
> **Tribal Mode (On/Off)**

New Toolbar Commands

New Toolbar Commands

Look up Monitor

 As we have already discussed, this command allows you to select a monitor from a list of valid monitors in AQS, choosing State-County-Site-Parameter-and POC.

See slide 26.

New Toolbar Commands

- **Generate Transactions**

This is the reason for this spreadsheet… to create transactions!
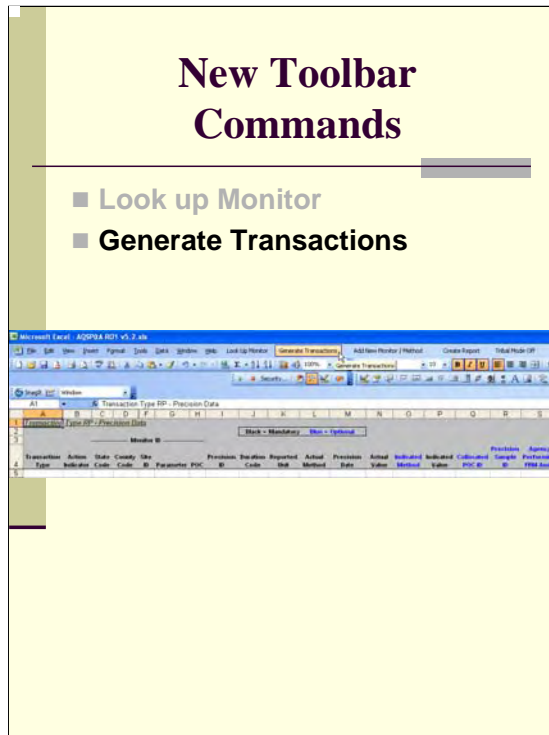
New Toolbar Commands

- **Generate Transactions – cont**

  This is the command button used to create a text file in AQS input transaction format.

New Toolbar Commands

- **Generate Transactions – cont.**

    Enter all of the data you want to update to AQS. Each row is one transaction.

New Toolbar Commands

- **Generate Transactions – cont.**

Highlight at least one cell in each row to generate transactions.

New Toolbar Commands

- **Generate Transactions – cont.**

Click the Generate Transactions command button.

New Toolbar Commands

- **Generate Transactions – cont.**

  The data will be validated. If errors are found, you will receive message prompts asking if you want to continue generating transactions.

  After the validation procedure completes, a "Save As" dialog box will prompt you for a path and filename. The transactions will be saved as a text file.
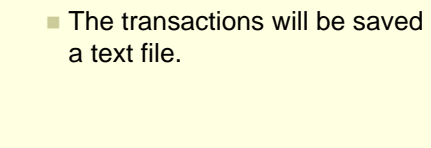
New Toolbar Commands

- **Look up Monitor**
- **Generate Transactions**
  - The transactions will be saved as a text file.

```
RP|I|09|001|0010|81102|1|1|7|001|062|20060101|25||26|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060107|15||13|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060113|17||14|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060119|4||4|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060125|55||55|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060231|35||36|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060206|39||38|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060212|12||13|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060218|18||18|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060224|26||25|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060302|25||25|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060308|6||6|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060314|8||7|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060320|22||22|||
RP|I|09|001|0010|81102|1|1|7|001|062|20060326|27||28|||
```

New Toolbar Commands

- **Generate Transactions – cont.**

Here are the transactions that were generated.

New Toolbar Commands

■ **Look up Monitor**

■ **Generate Transactions**

■ Here is an example error listing.

AQSP&A Error Listing for the following file:
RP transactions from Jul 5 2006 @03-08-27 PM .txt

Error Messages --

Row # 1, Cols 13 & 15: % difference of 190.2% outside range of ±160%.
Row # 6, Col # 12:   Invalid PRECISION DATE
Row # 9, Col # 3 - 7 : Invalid Monitor ID (State-County-Site-Parameter-POC)
Row # 9, Col # 15:   Invalid INDICATED VALUE

New Toolbar Commands

- **Generate Transactions- cont.**

If errors were encountered, you will be asked if you want to generate an error listing.

If you want an error listing, then a "Save As" dialog box will prompt you for a path and filename for the error listing.

Here is an example error report.

New Toolbar Commands

•Add New Monitor / Method

This is the command button used to add new data to the look up
tables so that new monitors, methods, protocols, etc. will be
available in the look up and validation procedures.

New Toolbar Commands

•Add New Monitor / Method

This is the command button used to add new data to the look up tables so that new monitors, methods, protocols, etc. will be available in the look up and validation procedures.

New Toolbar Commands

- Look up Monitor
- Generate Transactions
- **Add New Monitor / Method**

Add New Monitor / Method

This menu item lets you add new monitors and methods to the look up lists of valid monitors and methods included in this application.

Be sure to register new monitors in AQS, so that the transactions you create here will not reject upon loading to AQS. Please contact the AQS Team at USEPA if you are unsure how to add (register) a new monitor in AQS.

EPA Help Desk for AQS: 1-866-411-4372

[OK] [Cancel]
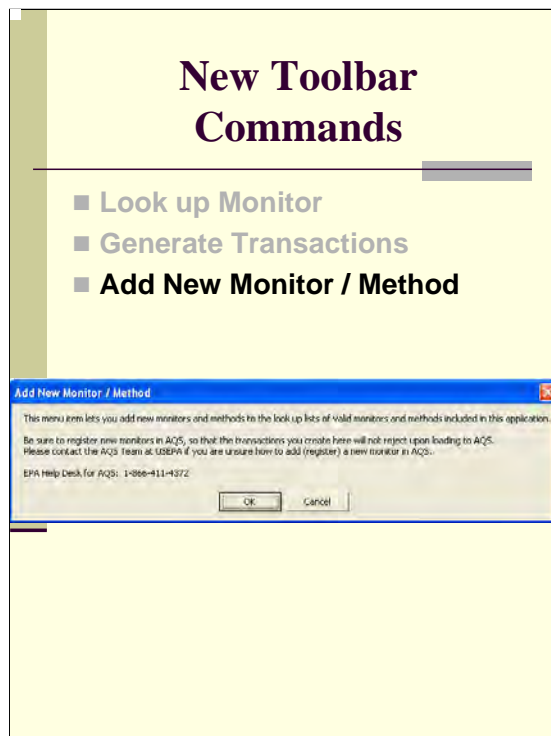
New Toolbar Commands

•**Add New Monitor / Method**

After clicking the command button, the following message appears to remind you that data you add to the spreadsheet must also be added to AQS to prevent failed transactions.

New Toolbar Commands

•**Add New Monitor / Method**

All of the fields on the form must be filled in. The values will be validated to a certain extent, and then added to the look up data.

If you are adding a new method, method descriptions are required. It is best to copy the descriptions exactly from AQS.

This form does not in any way result in or represent a request to add data to AQS. The purpose of this form is to allow you to easily update your spreadsheet with new lookup data that has already been added to AQS.

When a new version of AQSP&A is posted, it will include the data in AQS up to that point in time. But after a while, you may be missing some new methods or monitors that you have added to AQS since the AQSP&A files were posted. This form allows you to add those new values to AQSP&A manually, so that you will have complete lookups for your monitors and methods.

New Toolbar Commands

•Add New Monitor / Method

Here is an example with all of the fields filled in, and a new method code specified.

Click Create this Monitor or Method to proceed.

New Toolbar Commands

•**Add New Monitor / Method**

Click Yes to the confirmation window.

New Toolbar Commands

•**Add New Monitor / Method**

Click Yes to another confirmation window.

New Toolbar Commands

•**Add New Monitor / Method**

In this case, method 222 for this parameter has not been used before, so the descriptions will be required.

For this example, we will make up fictitious "test" descriptions.

New Toolbar Commands

•**Add New Monitor / Method**

After carefully typing in the Sample Analysis Description, click OK.

New Toolbar Commands

•**Add New Monitor / Method**

A Sample Collection Description is also required for a new method code.

After carefully typing in the Sample Collection Description, click OK.

New Toolbar Commands

•**Add New Monitor / Method**

An Equavalent Method Description is also required for a new method code.

After carefully typing in the Equivalent Method Description, click OK.

New Toolbar Commands

•**Add New Monitor / Method**

You will get one more confirmation window for creating the new protocol. Click Yes, and the new method will be added to the lookup tables.

New Toolbar Commands

•**Add New Monitor / Method**

An Audit Class must also be assigned. Since this method is a 24 hour avg concentration in micrograms per liter, audit class is analytical. Click OK.

Note that you are not updating any data in AQS; what you are doing is adding values to the spreadsheet lookup tables, so that these new values will be included in the drop-down lists of values, and any data validation.

New Toolbar Commands

•Add New Monitor / Method

Now when the values for actual method are presented in the list of values, an additional choice of method 222 exists for this monitor.

Choose this method code, and right click the method code to see the description.
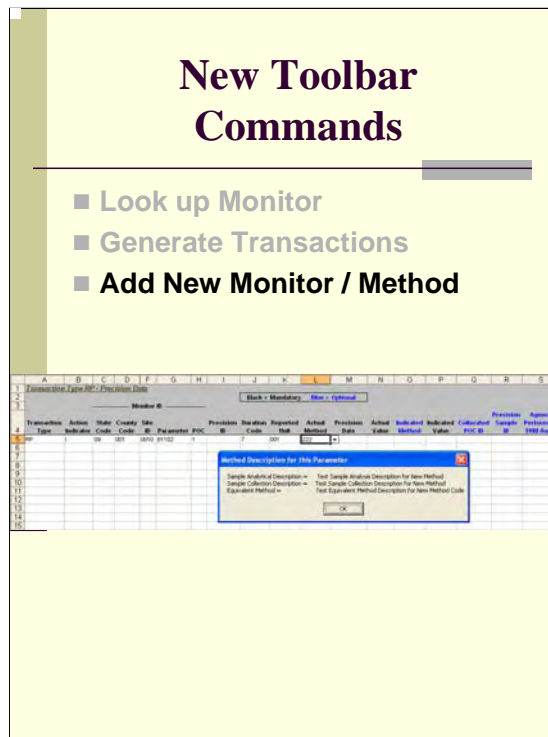
New Toolbar Commands

- **Add New Monitor / Method**

The new descriptions are also included in the lookup data.

Notes:

1. You can add sites, parameters, POCs, durations, methods, and units with this form.

2. The Equivalent method description is only populated for equivalent and reference methods.   If you know the value, you can populate it on this form. Leaving it blank is OK too, as long as the method exists in AQS, and you are using the correct method code.

3. This may be confusing… but just remember that the values you have filled in with this add monitor method function are not affecting AQS in any way. You are just adding info to the lookup tables, so now you have a method 222 (in this example) and it will appear in your list of values, along with the lookup descriptions you gave it.
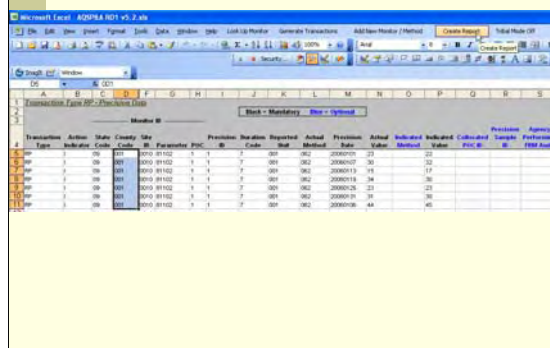
New Toolbar Commands

Create Report

The Create Report command button lets you printout your entries with some of the info from the transaction.

The percent difference is calculated and printed out as well.

Start by highlighting the rows you want to include in the report.

New Toolbar Commands

Create Report

After highlighting the rows you want printed, click on the Create Report command button.

New Toolbar Commands

Create Report

Here is a sample report for an RP transaction, and the Save dialog window. If percent differences are calculated to exceed the AQS edits, then the values will show in red text.

You can save the Word document to a path and filename of your choice.

New Toolbar Commands

Tribal Mode (On/Off)

AQSP&A supports Tribal codes as implemented in AQS.

New Toolbar Commands

        Tribal Mode (On/Off)

        AQSP&A supports Tribal codes as implemented in AQS.

        A monitor can be identified in 2 ways:

        Non-Tribal Mode = State Code-County Code-Site Id-Parameter
Code-POC

    Tribal Mode   =   TT-Tribal Code-Site Id-Parameter Code-POC

        (TT is two Capital T's in place of the state code – this means that
the next value in the transaction is a Tribal code, not a county code.)

New Toolbar Commands
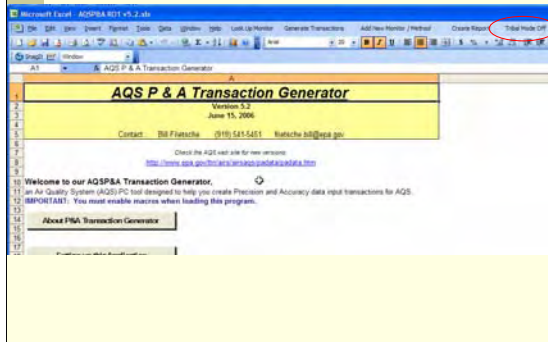
Tribal Mode (On/Off)
You can toggle Tribal mode on and off using the toolbar command.

New Toolbar Commands

Tribal Mode On

-> Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

New Toolbar Commands

               Tribal Mode On

               Transaction spreadsheets show Tribal codes, rather than state-county codes.

->   Right-click looks up Tribal information.

               Look Up Monitor retrieves monitors by tribe, rather than state – county.

               Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

               Generate Transactions outputs transactions in Tribal Code format.

               Add New Monitor / Method includes Tribal code field.

               Create Report creates report with Tribal codes.

New Toolbar Commands

> ### Tribal Mode On
>
> Transaction spreadsheets show Tribal codes, rather than state-
county codes.
>
> > Right-click looks up Tribal information.
>
> -> Look Up Monitor retrieves monitors by tribe, rather than state –
county.
>
> > Ability to add, change or delete Tribal codes to existing monitors
from Look Up Monitor command.
>
> > Generate Transactions outputs transactions in Tribal Code format.
>
> > Add New Monitor / Method includes Tribal code field.
>
> > Create Report creates report with Tribal codes.

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

-> Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

71

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

->   ADD Tribal Code

Click to add this Tribal code to an existing monitor.

Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

ADD Tribal Code

->   Click to add this Tribal code to an existing monitor, and click OK.

Now select the monitor you want to associate with this tribal code.

Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

Notes:

If data has already been submitted to AQS using the Tribal codes, then the codes will be included when the Regional files are refreshed on the

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.
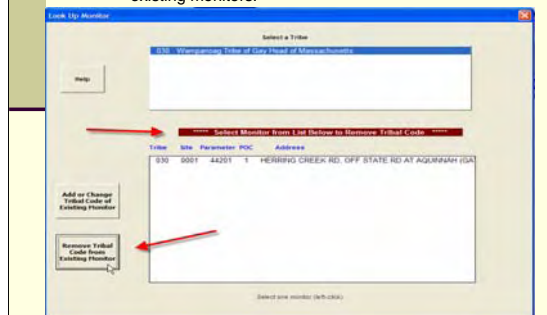
-> DELETE Tribal Code from monitor

Select the monitor which should have the tribal code removed, and then click the button to remove the Tribal code association.
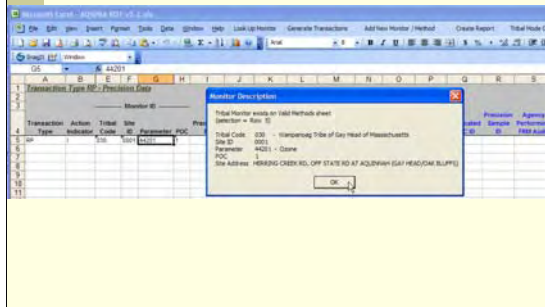
Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

Here, the one existing Tribal code can be deleted. The monitor will remain, but no longer have a tribal code.

Multiple Tribes and monitors would appear if there were more than one in the look up tables.

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

-> DELETE Tribal Code

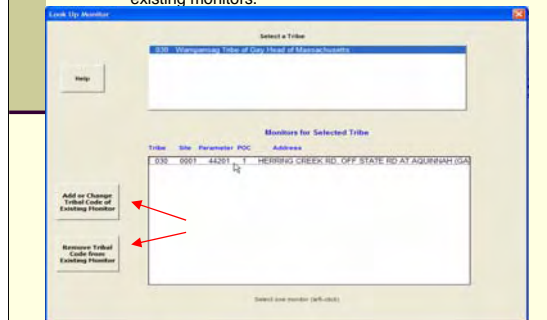Click OK to remove association of Tribal Code with Monitor.

Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

Ability to **change** Tribal codes for existing monitors from Look Up Monitor command. In other words, update the look up tables with Tribal codes so that they

will be available for help and validation routines.

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

CHANGE Tribal Code

Choose the Tribal code you want to change to. Then select an existing monitor.

-> Click OK to change the Tribal Code associated with the chosen monitor.

Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

-> Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.
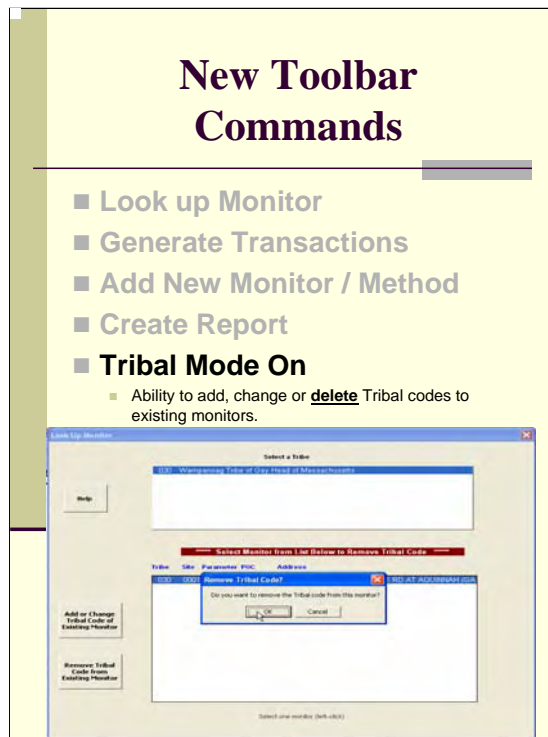
-> Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

-> Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

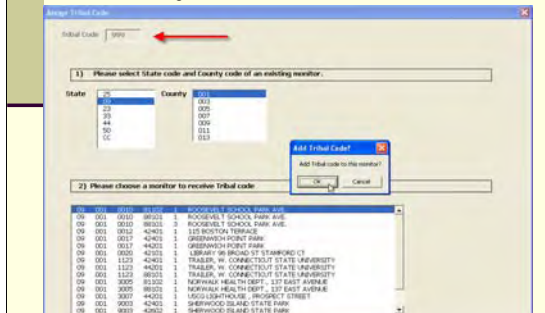Create Report creates report with Tribal codes.

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

Generate Transactions outputs transactions in Tribal Code format.

-> Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.
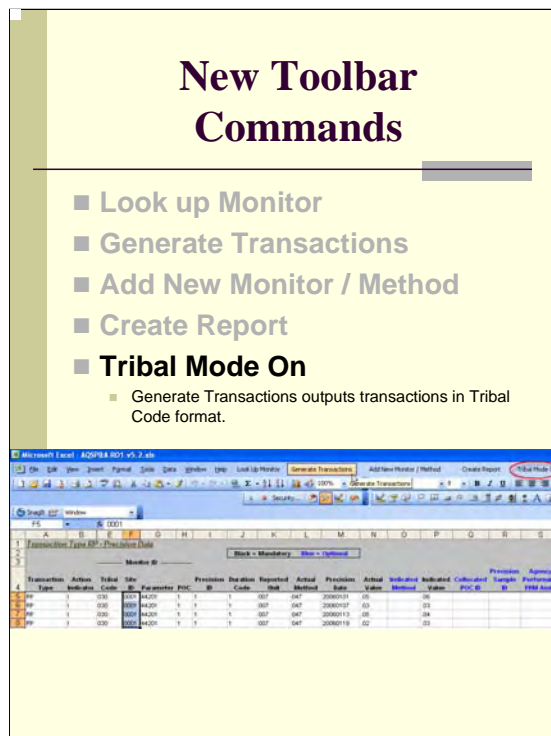
Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

Generate Transactions outputs transactions in Tribal Code format.

-> Add New Monitor / Method includes Tribal code field.

Create Report creates report with Tribal codes.

New Toolbar Commands

        Tribal Mode On

        Transaction spreadsheets show Tribal codes, rather than state-county codes.

        Right-click looks up Tribal information.
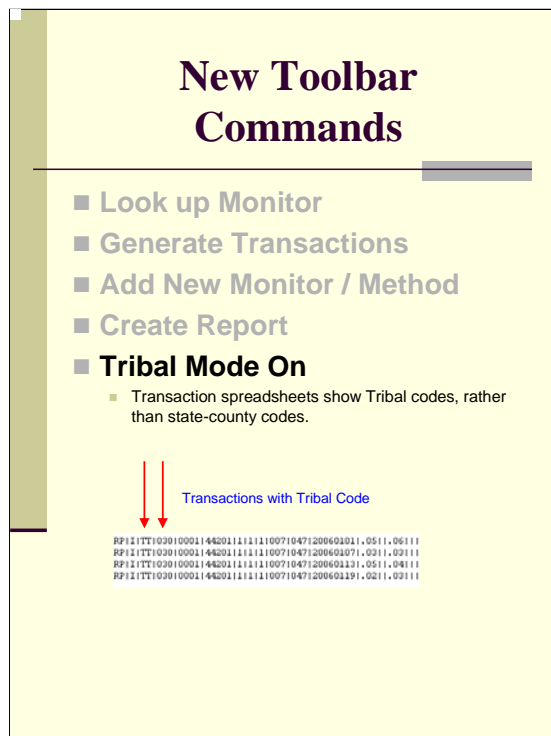
        Look Up Monitor retrieves monitors by tribe, rather than state – county.

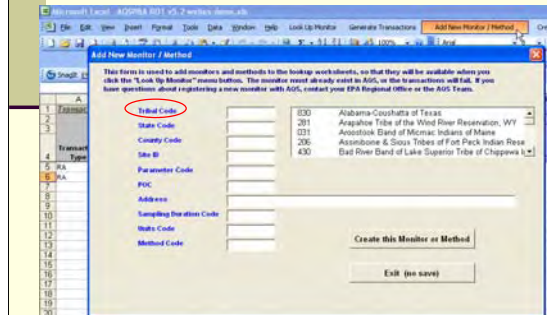   Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.

        Generate Transactions outputs transactions in Tribal Code format.

        Add New Monitor / Method includes Tribal code field.

->   Create Report creates report with Tribal codes.

New Toolbar Commands

- ■ Look up Monitor
- ■ Generate Transactions
- ■ Add New Monitor / Method
- ■ Create Report
- ■ **Tribal Mode On**
  - ■ Create Report creates report with Tribal codes.

Monitor	Parameter	Date	Prec ID	Actual Value (Primary for Collocated)	Method Code	Indicated Value (Primary for Gaseous)	Unit	% Difference
030 - 0001 - 44201 - 1	Ozone	20060101	1	05	047	06	Parts per million	20.0
030 - 0001 - 44201 - 1	Ozone	20060107	1	03	047	03	Parts per million	0.0
030 - 0001 - 44201 - 1	Ozone	20060113	1	05	047	04	Parts per million	-20.0
030 - 0001 - 44201 - 1	Ozone	20060119	1	02	047	03	Parts per million	50.0

Tribal Code

New Toolbar Commands

Tribal Mode On

Transaction spreadsheets show Tribal codes, rather than state-county codes.

Right-click looks up Tribal information.

Look Up Monitor retrieves monitors by tribe, rather than state – county.

Ability to add, change or delete Tribal codes to existing monitors from Look Up Monitor command.
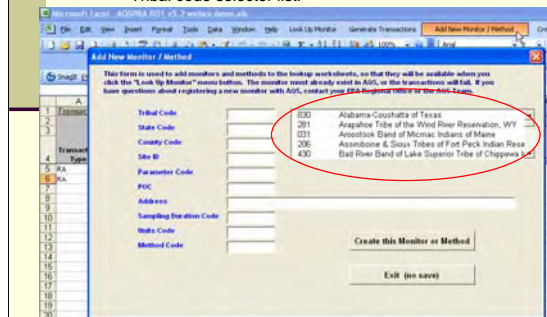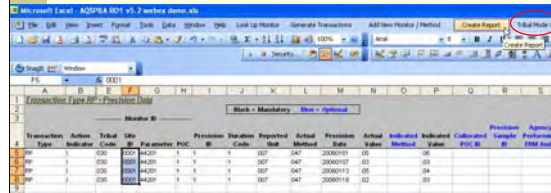
Generate Transactions outputs transactions in Tribal Code format.

Add New Monitor / Method includes Tribal code field.

-> Create Report creates report with Tribal codes.

Miscellaneous Topics

Miscellaneous

Miscellaneous tips

Miscellaneous Topics

- Worksheet structure must be kept intact
- Using Cut / Copy / Paste
- Deleting Cell values
- Excel functions available
- Getting Updates

Miscellaneous Topics

- Worksheet structure must be kept intact

By worksheet structure, I am referring to the worksheet names, column positions, cell validation formulae, and lookup table data.

Miscellaneous Topics

- Worksheet structure must be kept intact
  - Adding columns, moving columns, or adding look up table entries may disable VBA routines
  - If this happens, reload a "fresh" copy from the AQS website.

Miscellaneous Topics

- Worksheet structure must be kept intact
  - You can hide the 3 look up sheets.
  - Do not hide the Coding Manual sheet.
    - The Coding Manual sheet must be visible for data element look ups to work.
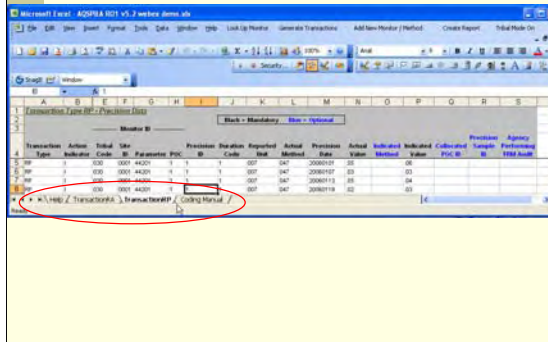
Miscellaneous Topics

- Worksheet structure must be kept intact
- Using Cut / Copy / Paste
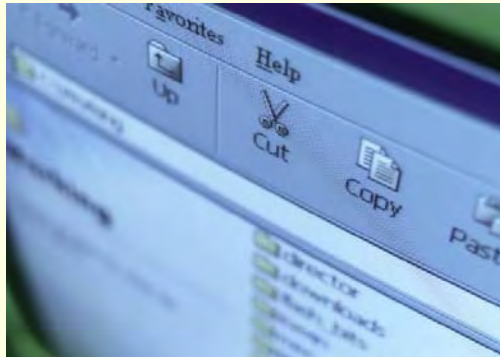
As mentioned earlier, the mouse right click has been reprogrammed to perform field lookups. So the right click menu will not appear. Instead, use the menu commands at the top of the application.

Miscellaneous Topics

- Worksheet structure must be kept intact
- Using Cut / Copy / Paste
  - The default "right-click" menu of commands is not active on the worksheets (cut, copy, paste, insert, delete, clear, format, etc.).

You can perform these functions by using the Excel command menu toolbar.
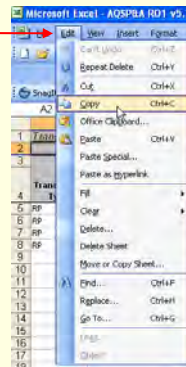
Here is an example of using the menu for the "Copy" function.

Miscellaneous Topics

- Worksheet structure must be kept intact
- Using Cut / Copy / Paste
  - Choose "Paste Special" when pasting.
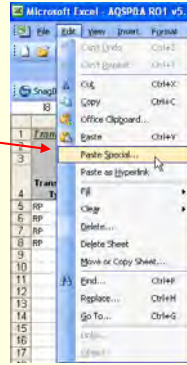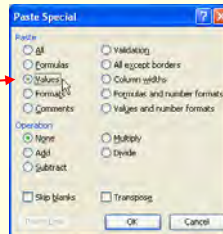

This will give you additional Excel Paste options.

Miscellaneous Topics

- Worksheet structure must be kept intact
- Using Cut / Copy / Paste
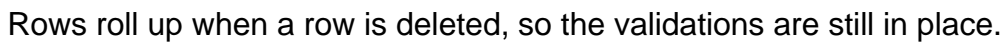 - Choose "Paste Values Only".

This will keep the formatting and validation in place for the selected cells

Miscellaneous Topics

- Worksheet structure must be kept intact
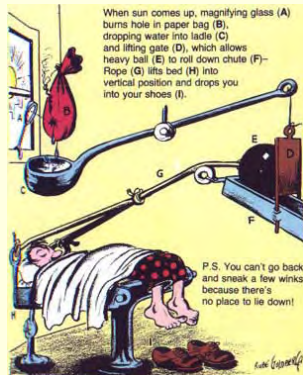- Using Cut / Copy / Paste
- Deleting Cell values

Rows roll up when a row is deleted, so the validations are still in place.

Miscellaneous Topics

- Worksheet structure must be kept intact
- Using Cut / Copy / Paste
- Deleting Cell values
- **Excel functions available**

When sun comes up, magnifying glass (A) burns hole in paper bag (B), dropping water into ladle (C) and lifting gate (D), which allows heavy ball (E) to roll down chute (F)–Rope (G) lifts bed (H) into vertical position and drops you into your shoes (I).

P.S. You can't go back and sneak a few winks because there's no place to lie down!

Excel has many built in functions. You can use them if you are careful not to modify the workbook structure.

Miscellaneous Topics

- Worksheet structure must be kept intact
- Using Cut / Copy / Paste
- Deleting Cell values
- Excel functions available
  - Sorting
  - Filters
  - Save as
  - Excel Functions

Here is an added function to calculate the percent difference for each pair of values. The formula is out past the transaction fields.

Here, the standard deviation of the percent differences is calculated.

Keep in mind that not all percent differences are used when AQS calculates standard deviation for collocated monitors. Both values must be above the following limits for the percent difference to be used in the precision calculations:

TSP   20 μg/m^3

SO$_2$ 45 μg/m^3

NO$_2$ 30 μg/m^3

Pb   0.15 μg/m^3

PM$_{10}$ 20 μg/m^3

PM$_{2.5}$ 6 μg/m^3

Note: If you have data on your worksheet, and if you are going to experiment with functions, then make a backup copy to prevent retyping. You can always cut and paste data back into a fresh copy.

Miscellaneous Topics

- Worksheet structure must be kept intact
- Using Cut / Copy / Paste
- Deleting Cell values
- Excel functions available
- Getting Updates
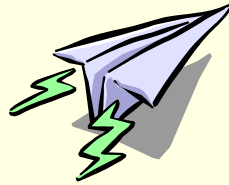
How do you get new files with updated look up tables and updated code?

Miscellaneous Topics

■ Worksheet structure must be kept intact

■ Using Cut / Copy / Paste

■ Deleting Cell values

■ Excel functions available

■ **Getting Updates**
  ■ Click on link to check for new updates
  ■ New updates will have a different version number
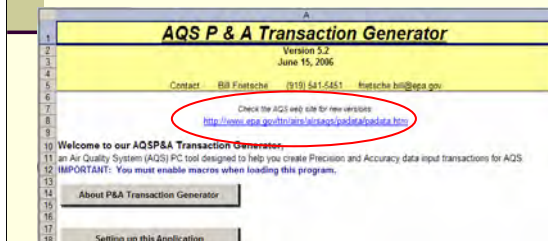
Questions

- User Support
  - Bill Frietsche
  - (919) 541-5451 or frietsche.bill@epa.gov

And you can always call me. Without feedback from you, I don't know how things are going… so I always appreciate hearing if there is a problem or confusing aspect with the application.

Thank You

- Would you please fill out the evaluation questions?

Thank You

Thank you for participating. I would appreciate it if you would fill out the test questions