#### Student Exercise 1.4 Day 1 – Standard Retrievals

Goal: Answer real data questions using the appropriate AQS Standard Report

# Part 1 - Site Description Report (AMP380)

You have been asked to review all the sites in a particular county – where are they located, what date was each established, who is the supporting agency, etc.

- Step 1. Start AQS & Logon using your training user id and password
- **Step 2.** From the menus select "Retrieval"  $\rightarrow$  "Standard Report Selection"
- Step 3. Enter (or select from Drop-Down) "AMP380" in the "Report Code" field
- Step 4. Click on the "Monitor Selection" tab
- **<u>Step 5.</u>** Select your state in the "Site Monitor Criteria" section
- **<u>Step 6.</u>** Click on the "Report Options" tab
- **Step 7.** Select "Yes" under Merge PDF files
- **<u>Step 8.</u>** Generate the report. Review. Close Acrobat.

# Part 2 - Run the Quick-Look Report (AMP450)

You have been asked to review data for the criteria pollutants reported for your agency. For example, for ozone, for a particular year, what were the valid number of days measured and required, what was the 4<sup>th</sup> highest daily max, and was the data certified? For PM2.5, what was the 98<sup>th</sup> percentile value?

You need to submit your data certification package. You need to submit an AQS Summary Report; provide the QuickLook for CO, NO2, SO2, ozone, PM10, lead (12128) and/or PM2.5.

Step 1. On Criteria Set tab, select "AMP450" in the "Report Code" field

- Step 2. Click on the "Monitor Selection" tab
- **Step 3.** Select NC, Wake County; Begin year of 2010; End year of 2010
- **<u>Step 4.</u>** Select "QuickLook" under the Pollutant Type
- Step 5. Click on the "Report Options" tab
- Step 6. Select "Include Events," "Yes" under Merge PDF files, and review the default "Applicable Standards."
- **<u>Step 7.</u>** Generate the report. Review. Close Acrobat.

### Part 3 - Run the Design Value Report (AMP480)

What design value was calculated for PM10, PM2.5, ozone, NO2, SO2 or lead (14129)? A design value for a year reflects that year + the previous two years, ie, a design value reflects a three-year period.

- Step 1. On Criteria Set tab, select "AMP480" in the "Report Code" field
- Step 2. Click on the "Monitor Selection" tab
- **Step 3.** Select state of NC ("37") in the "Site Monitor Criteria" section
- **Step 4.** Select Pollutant Type "Design Value" in the "Global Report Criteria" section
- Step 5. Select begin date "2008" and end date "2009" in the "Global Date Range."
- Step 6. Click on the "Report Options" tab
- **Step 7.** Select "Exclude Regionally Concurred Events," "Yes" under Merge PDF files, and review the default "Applicable Standards."
- **<u>Step 8.</u>** Generate the report and review. Close Acrobat.

### <u>Part 4 – Generate a Raw Data Report (AMP350) & Save</u> <u>Selection Criteria</u>

You have been asked to review a site's ozone measurements for July. Also, you want to know the daily maximum value and the daily mean value.

- **Step 1.** On Criteria Set tab, select "AMP350" in the "Report Code" field; Make sure both "Workfile" and "Report" are checked.
- **<u>Step 2.</u>** Click on the "Monitor Selection" tab.
- **Step 3.** Select State = 37; County = 183; Site id = 0014; Begin Date = 20050701; End Date = 20050731
- **Step 4.** Select "Criteria" under the Pollutant Type and "44201 (ozone)" under the Parameter Code in the "Global Report Criteria" section.
- Step 5. Click on the "Report Options" tab.
- Step 6.Select "Yes" under Merge PDF files; default Daily Statistic is "Max" Change Daily Statistic to "Mean."Review the "Applicable Standard." (Answer Question #1.)
- **<u>Step 7.</u>** Generate the report.
- Step 8.When the report comes back, review the report (both the workfile and the pdf versions.) Close the report.Step 9.Click on the "Criteria Set" tab.
- **Step 10.** Enter "Training Sample CS" under the "Criteria Set" field; Write "This is a test criteria set" under "Desc". **Step 11.** Click "Save."
- **Step 12.** Click on the "Session" selection from the main menu.

Questions:

- 1. In the Report Options screen, what do you think the "Alternate Standards" section of the report means?
- 2. What is the difference between saving criteria set as "PRIVATE" vs. "PUBLIC"?
- 3. In the workfile, what do you think the "#" symbol means in the first few lines of the workfile?

### Part 5 - Extract Site And Monitor Data (AMP500)

You have been asked to establish a new site. You will be monitoring for PM10 at LC (85101) and 23 PM10 metals, such as PM10-arsenic, PM10-thallium, etc. You do not want to set all these monitors up online! Here's a tip: set up the site, and add one monitor online (you could do PM10.) Save. Now your site is at Production.

Run the 500 extract for the M\* transactions with an Action of "Insert."

What you get in the AMP500 output are the monitor transactions you used to set up that first monitor for PM10. The monitor metadata, aside from the parameter code, is the same. Use a text editor to copy these set, each time changing the parameter code to reflect the next of the 23 parameters. You'll need to know the parameter codes; for example, Arsenic PM10 at LC = 85103, and Thallium PM10 at LC = 85173. Save the file. Load the file into AQS.

- **<u>Step 1</u>**. On Criteria Set tab, select "AMP500" in the "Report Code" field.
- **Step 2.** Click on the "Monitor Selection" button.
- **Step 3.** Select the state Pennsylvania (42), Allegheny county "003" and the site "9002".
- Step 4. Select "85101" under the Parameter Code in "Global Report Criteria" section.
- **Step 5**. Click on the "Report Options" tab.
- **Step 6**. Click "Uncheck All", and then select all records beginning with "Monitor." Select "Insert" under Action Indicator and "No" under Merge PDF files.
- **Step 7.** Generate the report. Open the zip file, and click on the txt file. *You can do your editing in this file.*
- **<u>Step 8:</u>** Close the zip archive and click on the "Criteria Set" tab in AQS.
- **Step 9**: Try the other extractions for your own state and county:
  - AMP501 Raw Data
  - AMP502 Precision and Accuracy Data
  - AMP503 Blanks data