



Student Exercise 2.1

Day 2 – Creating Records Online in AQS

Goal: To use the online Maintenance forms to create a new site and monitors, and to define an exceptional event.

To make updates online, use the “Maintenance” area. Use the “Cancel Query” icon  to exit “query” mode and enter “update” mode. (To enter “query” mode again, click “Enter Query” .)

Part 1 – Create a New Site

Your agency has a new monitoring site. You must set up a site and then at least one monitor before your site will be "public." (There's no sense having a site available unless there is a data stream defined, ie a monitor, to supply data.) Some of this information may already be contained in your annual monitoring plan, as negotiated with your EPA Regional office. Information you will need to have for AQS:

State & county it is in + a unique Site ID -Site ID is your call; only prohibition is you cannot use one already taken; we have some guidelines, but usually we ask you to run this through your Regional Office

The following is usually available from your GPS:

Site Latitude & Site Longitude (in decimal degrees)

Datum (usually a setting on your GPS; if using Google Earth, WGS84)

Horizontal Method (the method used to determine the lat/long)

Horizontal Accuracy (the accuracy as a range of the lat/long in meters)

Vertical Measure (the height, in meters, of the site above/below mean sea level.)

Vertical Accuracy (the accuracy of the vertical measurement in meters)

Vertical Method (how was vertical measure obtained?)

Other info:

Street Address of the site

Land Use Type (within a 1/4 mile of the site, is it residential, agricultural, rural?)

Location Setting (Urban/City Center, suburban, rural?)

Site Established Date (date must be before or on the date any sampling began)

Local Site Name (optional)

Agency Roles:

Supporting Agency (Who maintains this site? Presumably it is your agency.)

Primary Monitor Periods:

required for lead, NO₂, SO₂, PM_{2.5} (88101) and lead (14129 and 85129)

Step 1. Start AQS & Logon using your training user id and password.

Step 2. Select your screening Group.

Step 3. From the menus select “Maintenance” → “Site”

Step 4. Click on the “Cancel Query” icon. (This puts you in “update” mode.)

Step 5. Create a new site with the following information: (If a field is not specified, leave it blank.)

State Code: 37 (North Carolina)

County Code: 073 (Gates County)

Site: xx01; where “xx” are the last two digits of your training id.

For example, T50 would use a site ID of 5001.

In the “User Coordinates” area, enter Horizontal Datum = WGS84,

Site Latitude = +36.4136 and Site Longitude = -76.758

Click “Lookup Geography” → will populate Standard Coordinates

“Lookup Geography” accesses another EPA database (Envirofacts) to ensure that the lat/lon are in the county boundaries, and also calculates the “Standard Coordinates” from the user-entered lat/lon and datum. Wait until the information is returned before proceeding.

Horizontal Method = 103 (GPS)

Horizontal Accuracy = 10 m

Vertical Measure (the elevation of the site) = 50 m

Vertical Accuracy = 10 m

Vertical Datum = NAVD88

Vertical Method = 001

Street Address = Test Site for Training Class

Land Use Type = Agricultural

Location Setting = RURAL

AQCR Code = 168 {Use the Drop-Down to Pick}

Site Estab Date = 20060101

Time Zone Name = EASTERN

Step 6. “Check Completeness” using the button at bottom. Correct any field level errors. You will see “To enter a new Site record, you must enter a Supporting Agency Role record.”

Step 7. Click on the “Agency Roles” tab. Enter Role = “SUPPORTING”; Agency Code = 0776; Begin Date = 20060101 (Begin Date must be >= Site Established Date)

Step 8. Click on Save . Return to Basic Site Data tab.

Step 9. “Check Completeness” using the button at bottom. You will see “To enter a new Site record, you must enter at least one Monitor .”

Note: See the Status Indicator is “F” – means your site is not yet at “Production” or “P” status.

Before the site is at status “P” you must create at least one monitor record.

You must define a monitor record for each pollutant that will be measured.

Step 10. Click on the “Create Monitor” button.

Continue to Part 2.

Part 2 – Create a New Monitor

The information you will need to setup a monitor:

Monitor Basic

Project Class (type of sampling: “population-oriented,” “background surveillance,” etc)

Probe Location

Probe Height (how high is probe, in meters)

Probe Horizontal Distance (probe inlet to support structure, in meters)

Probe Vertical Distance (monitor probe to probe support structure, in meters)

Sample Periods

Begin Date (When did sampling begin? Must be on or after your “Site Established Date.”)

Monitor Type Assignment

Type and Begin Date (What type of monitor (SLAMS, NCORE, Tribal) is this? Can have more than one.)

Agency Roles

Analyzing - which lab analyzes the filters?

Collecting - who maintains the instrument in the field?

PQAO ** required** - who is responsible for QA, audits, etc?

Reporting ** required ** - who submits data to AQS?

Objectives

What is the objective of this monitor? (Background, Population Exposure. . .)

Required Collection Frequency

required for PM2.5, lead, PM10, 24-hr samples (duration 7)

Collocation

designate primary and QA collocated monitors

Step 1. Enter the following information in the “Monitor Basic” tab:

Parameter: 44201 (Ozone)

POC: 1

Probe Height = 3

Probe Horizontal distance = 0

Probe Vertical distance = 2

Probe Location: Top of Building

Step 2. Click on the “Sample Periods” tab

Step 3. Enter a Begin Date of “20060101”

Step 4. Click on the “Type Assign.” Tab.

Step 5. Enter a Monitor Type of “Special Purpose” and a Begin Date of “20060101”

Step 6. Click on the “Agency Roles” tab.

Step 7. Enter an Agency Role* of “Reporting”; Agency Code = 0776; Begin Date = “20060101”. Repeat this step for agency roles of “COLLECTING” and “ANALYZING”. (Hint: You can use the “Duplicate Record” icon.) Enter an Agency Role of “PQAO”; Agency Code = 0776; Begin Date = “20070101”

Step 8. Click on the “Objectives” Tab

Step 9. Select “GENERAL/BACKGROUND” for Monitor Objective Type; Urban Area Represented = “6639” (Raleigh)

Step 10. Click on the “Monitor Basic” tab

Step 11. Click on Save .

Questions:

1. What do you think it means when we leave the “End Dates” on these tabs blank?
2. If you have many monitors to establish, can you think of a way to do this via batch transactions?

Continue to Part 3.

Part 3 – Define an Exceptional Event

Step 1. From the menus select “Maintenance” → “Event”

Step 2. Click on the “Cancel Query” icon.

Step 3. Define a new event with the following information:

Qualifier Code: RT (Wildfire - US)

Event Begin Date: 20050101

Event End Date: 20050101

Event Description: “Training - Smoke from Peat Fire in NC, January 1, 2005”

Comment: “Smoke raised the monitored 8-hr ozone levels in eastern NC.”

Comment URL: “www.epa.gov/ttn/”

Step 4. Click on Save .

Step 5. Click on Exit .