

## Minutes of 07 October 2010 QAAG (Conference Call) Meeting

### Attendees:

Tracy Dombek – CAL  
Mark Rhodes – NADP PO  
Melissa Rury – USEPA  
Kristina Spadafora - HAL  
Greg Wetherbee – USGS

### Absent due to prior commitment:

Eric Hebert - EEMS  
Maria Jones – EEMS  
Marcus Stewart – MACTEC

### Unable to connect to the conference line due to technical problems:

John Sherwell – Maryland DNR

The meeting started at 1300 EDT/1200 CDT/1100 MDT/1000 PDT.

### Items:

**Minutes of 01 April 2010 meeting.** Greg motioned to accept minutes from the spring 2010 meeting (conference call). Melissa seconded the motion. Motion passed.

**AMoN (New Initiative).** Greg provided an overview of the work completed by the AMoN Ad Hoc committee. That group reviewed the 12-point plan and QA documents and provided comments to the advocates of the new initiative. Most of the comments were small issues. There were no “deal breakers.” Melissa noted that the advocates are responding to the comments, and that a presentation will be made at the fall meeting. Melissa noted that the State of Maryland is supporting 2 AMoN sites, and that the Park Service has requested funds to support several sites.

**Status of Site Surveys.** Eric and Maria had previous commitments and were not able to participate in the conference call. Mark provided the update for Eric. Mark noted that EEMS is on schedule to complete 90 sites by the end of the calendar year. 73 sites have been surveyed since 01/01/2010, including 8 collocated NTN-MDN sites.

**PO Review.** Mark stated that the review was conducted 31 August to 02 September 2010. Marty Risch (USGS) led the review team. Other review team members included Pam Padgett (US Forest Service), and a local IT professional, Brandon Bowersox (OJC Technologies). There were 5 Findings, 8 Recommendations, and 4 items listed in an IT Addendum. Marty will present findings from the review to the Executive Committee during the fall meeting.

**QA Reports.** Mark noted that external review is being conducted on the 2009 HAL QA Report. That review should be complete by mid-November. Tracy noted that final formatting of the 2009 CAL QA Report is taking place. The report should be available prior to the fall meeting.

Kristina asked whether the  $3\sigma$  control values, as referenced in the QA Report, should be used at the laboratory level. Greg explained that this was not necessary. The lab could continue to use its current protocol for warning and control limits. The  $3\sigma$  values are useful for reporting purposes, but not necessarily operational purposes.

Tracy discussed operational limits that will be implemented at the CAL during the coming year.

Greg will send future QA samples to Kristina. This will allow the QA samples to be processed on a regular, monthly basis. This will allow the chemistry data to be available to USGS in a timely manner.

**AMNet.** Mark noted that QA documents for AMNet are in draft form and continue to be developed and revised. A possible point of concern is the closing of the meteorological monitoring stations at CASTNET sites. Due to funding constraints, the USEPA is ending these measurements. Several AMNet sites are collocated with CASTNET sites. AMNet hoped to use meteorological measurements from CASTNET.

### **Equipment Testing and Operational Problems.**

**N-CON bucket collector.** Greg noted that a report was made available earlier this week detailing work with the N-CON bucket collector at IL11 and VT99. The results of this work will be presented to NOS during the fall meeting. Further testing of the collector is planned for the current water year at MA01 and CA50. Other sites will be tested in the future.

**Aerochem collectors and Delrin bushing replacement.** Mark mentioned that the CAL is sending replacement bushing kits to NTN sites, and that EEMS is helping with this work during their site survey visits. It is hoped that the replacement bushings will help the problem of the collector arm pivot points freezing during winter operation, and reduce the number of motorbox replacements that are required.

**Aerochem vs N-CON sample loss.** Mark reminded the committee of the testing that is taking place at the State Water Survey, investigating sample loss on a weekly basis for an ACM and an N-CON MDN collector. Mark stated that while sample loss from the N-CON collector has remained 1-2 g/week, regardless of the mode of collector operation, 20-40 g/week of sample loss was observed with the ACM collector with the operation of the cooling fan. Testing was completed recently to determine the effect of sample loss. That is, whether sample, acid pre-charge, and/or mercury is lost. Kristina will investigate whether the chemistry results are available from that testing. Results of this work will be presented at the fall meeting.

**Dual-chimney N-CON MDN collector.** Mark described the plan for testing the dual-chimney N-CON MDN collector as requested by NOS at the last NADP meeting. That testing includes continued testing at the site in Seattle, WA, testing at a site in Wisconsin, and testing at a site in Pennsylvania. The collector in Wisconsin was installed last week. The collector for Pennsylvania is scheduled to ship from N-CON Systems this week. All three collectors will operate with the snow roof in place throughout the year.

**Documents.** Mark noted that Chris Rogers (current NOS Chair) is evaluating 4 documents (*Guidelines for Evaluation and Approval of Equipment*, *Guidelines for Processing Precipitation Data*, *MDN Operations Manual*, and *NTN Operations Manual*) for possible approval at the fall 2010 meeting.

The *NADP Network QAP* is under revision to include AMNet and possibly AMoN, if that network is approved as an official NADP network. The revised document should be available for approval at the spring 2011 meeting.

The AIRMoN Operations Manual is also under revision. Currently, there is no schedule for submitting that document for approval.

**Collocated e-gage/Belfort precipitation.** Greg noted that he will be presenting a poster at the fall NADP meeting comparing the measurements from collocated e-gage and Belfort raingages. Greg noted a positive bias for each of the e-gages compared to the Belfort raingage. For the PluvioN raingage, that bias is approximately 5%. For the ETI NOAA IV raingage, that bias is approximately 1%. Mark asked whether the study will be presented to NOS or Joint during the fall subcommittee meetings. Greg stated that the study will be mentioned, but no formal presentation is planned. Mark reminded the committee of the DMAS motion from the spring 2006 meeting in Riverside, CA. That motion requests 20-30 site years of collocated data for the Belfort with each of the e-gages. Greg confirmed that this requirement is met for each of the e-gages.

**Data Quality Objectives and Data Quality Indicators.** Greg described work that is being done to specify DQOs and DQIs for the NADP networks. Greg suggested that Kristina and Tracy should participate in this work so the laboratories are part of the discussion. This should help in setting DQOs and DQIs that are reasonable, and are attainable with current technology.

**NADP maps.** Mark and Greg described work that was completed by QAAG in conjunction with members from EROS and CLAD. The results of that work are described in a report that will be released either 07 or 08 October. A presentation is planned for the Joint subcommittee meeting at the fall NADP meeting.

#### NTN data.

**Bottle shipping test.** Mark described work that he is doing with Kim Attig (chemist at the CAL) to address the problem with NTN sample bottle leaks. More than 40% of the sample bottles received by the CAL in 2009 and 2010 leaked. In many cases, the shipping box was damaged as a result of the leak. Mark noted that Jason is conducting a similar study at the HAL with MDN sample bottles. Kristina will check with Jason regarding the results of this work. Results from the studies will be presented at the fall meeting.

Kristina asked whether it would be useful to test MDN shipping bags for total mercury. The group agreed that this would be useful information to have.

Tracy stated that she is not certain whether the NTN sample bottle bags are tested. She will investigate this, and will implement a testing protocol if they are not being tested. The fact that the NTN bottle bags have printing on the outside of the bags could be a concern.

**Suppression of data for pH/conductivity only measurements and low volume samples.** Mark noted that data from low volume NTN samples are suppressed on the NADP website. Though pH and conductivity measurements may be available for the sample, only data from samples with full chemistry are made available. Membership decided that it is necessary to determine the number of samples that are impacted in order to determine how best to proceed. Analysis should focus on sites in the desert southwest.

**NTN QR codes.** Mark described work that was completed to assign QR values to the NTN data. Currently, MDN and AIRMoN data are assigned QR values, but NTN data are not. For uniformity across the NADP networks, there is a desire for the NTN data to have QR values. 3 options were considered for

assigning QR values. The results of the work will be presented to DMAS at the fall meeting. It is hoped that one of the three options will be selected for implementation.

**Bromide.** Tracy provided an update of the bromide analysis work being done at the CAL. Preliminary maps have been generated and some small trends are apparent with the data. Additional QA is planned for the bromide analysis. Toward that end, Greg will add bromide to the interlaboratory samples that USGS provides. The advocates of this work may request that bromide become an official NADP analyte at the spring 2011 meeting.

The meeting adjourned at 1500 EDT/1400 CDT/1300 MDT/1200 PDT