

**National Atmospheric Deposition Program
Spring Meeting
Royal Sonesta Hotel
New Orleans, LA
March 25-26, 2003**

Minutes of the Meeting of the Network Operations Subcommittee (NOS)
Submitted by Karen Harlin, Secretary

Tuesday, March 25, 2003

AGENDA ITEM 1 – Mark Nilles, NOS Chair, called the NOS meeting to order at 1:00 pm. The agenda was approved. The meeting agenda is provided in **Attachment 1**. A motion to approve the minutes from the Fall, September 10-13, 2002 meeting in Seattle, WA was made by Scott Dossett and seconded by David Maxwell. The motion passed.

AGENDA ITEM 2 – External QA Findings and Future Plans, Greg Wetherbee, USGS, External QA Program Project Chief

A status report was given and the PowerPoint presentation is provided as **Attachment 2a and 2b**. Highlights of the report included the following:

- Updates to the program—major changes
 - Greg Wetherbee has been added to program
 - New York State Dept of Conservation added the program last year
 - The Blind Audit (BA) and Sample Handling Evaluation (SHE) programs were briefly described. The BA program has been changed and renamed as the SHE program. This change was done to eliminate variability due to sample mix-ups and confusion with the “dummy” samples required with the BA program and to minimize variability other than sample handling from the results.
 - Volumes used have changed to better reflect the volume of sample routinely collected. New volumes are 250, 1000, and 2000 mL. The 500 mL volume used for the BA was eliminated and the 2000 mL volume was added.
 - Collocated Program -- run on Oct to Sept schedule
 - 2002 results were presented for OR02 and WI98
 - bias and absolute errors evaluated—see presentation
 - new sites, OK00 and WI98 (2nd year)
 - NH02 was run for 2 years 2000 and 2001
 - WI98 also has a meteorological tower to look at weather effects to see if wind speed, etc. is associated with the errors observed
 - Future sites are TX04 @ Big Bend, AZ98, IN sites-- but still under discussion
 - Permanent collocated sites—are they needed to do more research?
 - A brief discussion of documentation needed to justify sole source purchase of site equipment occurred
 - Data Investigation Report 1988-2001

- Interlaboratory results, known concentrations shipped to CAL, Japan, Canada, Norway, and other US labs—CAL performing well and >90% of data are within control limits. May be a negative bias for ammonia. CAL reported improved results with a new NH₄ standard; found error for NH₄ was within NTN QAP requirements. Ca may have a negative bias. Source of solutions was reviewed.
- Intersite results—pH and specific conductance –see presentation; Fewer operators and fewer meeting goals in fall vs. spring study; Fall 2002 less than 90% OK
- 1995-1996 was the latest report; 1996-1999 will be available next month
- AIRMoN and MDN program issues discussed; data report backlog should be reduced, then can discuss expanding the program

MOTION #2: The DMAS is requested to report on the use of USGS intersite results for the purposes of qualifying Field Chemistry Data.

Moved by Louis Johnson, second by Scott Dossett.

Motion passed.

AGENDA ITEM 3 – NADP Collector Dimensions-the future, Scott Dossett, NADP Site Liaison (Attachment 3)

- Discussion of design issues for new precip collector
 - Blowing snow and minimum orifice size
 - Optimum aspect ratio (opening to depth)
 - Minimum volume needed for laboratory analysis

MOTION #3: NOS will appoint an ad hoc committee to address precipitation collector design issues and to formulate a protocol for the implementation of a 10” diameter orifice, 2.0 aspect ratio, bag container/field sample collection holder for use on the NTN program. This committee should issue a report detailing, where possible, hardware and procedural design at the October 2003 annual meeting. The ad hoc committee will consist of Scott Dossett, Chair, Louis Johnson, Tom Jones, and Greg Wetherbee.

Moved by Scott Dossett, second by John Sherwell.

Motion passed.

AGENDA ITEM 4 –Network Equipment Depot (NED) report, Scott Dossett, NADP Site Liaison (Attachment 4)

A review of NED operations and a discussion of repairs and problems

- Hybrid clocks are working (51 in field), rework of raingage clocks by NED staff
- 3-Day select UPS now used rather than 2nd day delivery to save costs
- alternate manufacturers for motors and sensors
- Barely keeping up with needed parts and repairs
 - Aging equipment & problems with parts being repaired multiple times
- Under funded (see attachment for details) and in deficit at \$2/wk (<\$35,000/year)

AGENDA ITEM 5 – Archive sample utilization report and approvals, Karen Harlin, NADP Assistant Coordinator (Attachment 5)

- Status report distributed
- Three pending requests for samples
 - B anthracis update: proposal not funded
 - Plant pathogens transmitted via rain proposal submitted by UI researcher (specific sites pending—informational only)
 - Illinois State Geological Survey, antibiotics in rain downwind of large feed lots (specific sites pending—informational only)
 - Dr. Carol Kendall, USGS, altered request from 100 sites to 130 sites for isotopes of N and O in precipitation; Harlin will email executive committee for approval of altered request.
- Discussion on payment for samples. Resolved that CAL is allowed to only recover costs.

AGENDA ITEM 6 – ATS External Site Survey/Audit Reports and plans, John Shimshock and Tom Jones, ATS (Attachment 6a and 6b)

- Site audits through Feb 2003 are at Program Office.
- 110 site audits in 2003; as new sites come on line ATS will attempt to visit the site while in the area. 15 done to date (9 NTN, 5 MDN, 1 AIRMoN)
- NTN, MDN, and AIRMoN sites all included in audits now
- Recurring NTN problems include: replacement operators not properly trained; vegetation control (esp. trees); backup battery maintenance is a big problem (gel cell preferred)
- AIRMoN problems include: accuracy of the 8”stick gage (a positive bias found—see presentation)
- Fine adjustment screw now being replaced by “red screw” in Belfort during site audits (see Spring 2002 minutes for details)
- Data from 2002 Site audits were presented (81 sites with complete data) (see presentation)
 - Sorted as ‘new’, first visit (34) site vs. ‘revisited’ (47) sites
 - Siting criteria reviewed
 - Evaluate if operator maintains sample integrity in sample transfer
 - Belfort raingage evaluation & results
 - New & old sites about same problems with equipment and siting criteria; New sites more Belfort raingage problems

AGENDA ITEM 7 – NADP Siting Criteria Report of the ad hoc committee, Chris Lehmann, NADP QA Manager (Attachment 7) (moved to joint session)

Meeting Adjourned at 5:15 pm.