NADP Technical Committee Meeting Minutes St Petersburg, Florida October 26 - 29, 1998

The NADP Technical Committee Meeting was called to order by the Acting Chair, Dennis Lamb. Dennis welcomed everyone to the meeting. This year marks the twentieth anniversary of site operations for the NADP. Dennis asked everyone to introduce themselves. A participant list is at the end of these minutes.

The approval of the minutes from the 1997 Technical Committee Meeting was deferred until Thursday.

Administrative Advisors Report

Wayne Banwart - NRSP-3

• An Administrative and Technical Program review took place at the ISWS on January 26-28, 1998. The review team was put together at the Technical Committee Meeting in 1997. Results of the review were sent to the agricultural administrative advisors in each of the SAES regions. Along with the final results of the review, Wayne received a letter from Edward Wilson, Deputy Director of CSREES, that stated in part that the review addressed current performance and future opportunities and felt NRSP-3 was a dynamic well-managed effort providing many benefits to University, Federal, State and private organizations throughout the United States. The report also recognizes the high esteem for the Program within the international environmental quality community. The letter goes on to talk about the recommendations to further strengthen this organization. Wayne is optimistic that the view from on top at CSREES is positive and hopefully we can continue moving along.

Program Office Report

Van Bowersox presented the Program Office Report (Attachment 1)

- The new ISWS reorganization chart was presented
- The Program Office organization chart was presented, and Karen Harlin was introduced as the new Assistant Coordinator.
- There is stable funding from NRSP-3 for FY99 with approval from all four regions.
- The CSREES Cooperative Agreement with the University of Illinois is in place as of May 1998 which provides funding from nine federal agencies.
- The Memoranda of Agreement is broken down as follows:

0	NADP/NTN	35 agreements for 55 sites
0	NADP/AIRMoN	2 agreements for 2 sites
0	NADP/MDN	24 agreements for 38 sites

• Site Status - Van outlined the operating status of sites in all the networks in NADP with NTN

having 199 active sites, AIRMoN having 10 active sites and MDN having 38 active sites.

- Van outlined the meeting support at the Program Office.
- Archive sample disposition was discussed. Two requests for archival samples await Executive Committee action. The request from Dr. Ito was approved by the ad hoc committee. The request from Dr. Welker was received via e-mail on 23 October.
- The Nutrient brochure will be reviewed by the Environmental Effects subcommittee at this meeting.
- Site Support Services
- Personnel
- Site Documentation Information from the ATS performance reviews are being received and added to the NADP files. The web page will be updated using these data.
- Site Liaison The new Instruction Manual for Site Operation is in final review. There were no site moves and no site modifications.
- On-site Systems and Performance Surveys ATS has completed 56 site visits through September 23, 1998.
- Site Operator Training Course held from 22-24 September, 1998, with 29 operators from 28 sites in attendance.
- Network Equipment Depot (NED) statistics reported.
- Data & Information Services Van outlined the changes implemented in the past year to the Web page as well as changes and improvements under development. Statistics were presented on web page activity and data turnaround. A high priority will be given to improving data turnaround and accessibility on the Web site.
- Date Reports / Requests The 1997 NADP Wet Deposition Summary is in preparation and will include 16 pages instead of 12, adding AIRMoN and MDN data. The 1996 and 1997 *Ouality Assurance Report* is under review with publication expected by the end of the year.
- Quality Assurance The QA Manager position is still open because of failure to attract a candidate. The position will be re-advertised with hopes of hiring someone by January 1999.

Budget Advisory Committee (BAC)

Mark Nilles reported on the BAC.

- Two new representatives were added, Clyde Sweet for MDN and Bruce Rodger as the state representative.
- All in all there is stable funding, although the State of Wisconsin sites are an unknown.
- There is \$1.4 million through federal agreements.
- \$2 million is expected for analytical services and Program Office support with all other sources included, such as independent sites.
- Adding in the value of the USGS and EPA QA/QC programs the program total is around \$4 million.
- The USGS-BRD sites are being picked up by BLM for the most part.

Laboratory Reports -

- CAL Report
 - The CAL report was given by Mark Peden (see Attachment 2).
 - Reorganization of the CAL

- New CAL Personnel Tom Bergerhouse, computer support and Tracie Klotz, sample preparation lab.
- pH electrode update 128 electrodes sent out from November 1997 to October 1998
- QA report combined 1996/97 QA report is ready for review and to be published by the end of 1998.
- Training Course 32 attendees at CAL training from September 22-24, 1998.
- Interlaboratory comparison studies -
 - WMO/GAW
 - National Water Research Institute (NWRI) ecosystem Interlaboratory QA Program studies FP72 & FP73 - Rain and Soft Waters
- Network Equipment Depot (NED)
- Operator's manual revision
- Annual lid seal replacement
- AIRMoN
 - 10 active sites; since 1 October 1992, 6567 samples collected; 410 DF/DK (field blank) analyzed; 188 internal blind samples sent in by IL11
 - Data through the end of June 1998 (lab ID number AA7350L) have been finalized; preliminary data through October 1998 (AA776L) are available for distribution.
 - A standardized set of pictures of most of the sites are on hand and these will be digitized and put on the Web page.
 - Special studies include the thymol preservative study, the Australian study, the CAPMoN raingage study ended in Fall, 1997 (with results being reviewed), the Nipher-shielded Canadian snowgages study has begun with gages installed at 4 sites for at least two years.
- Computer upgrades in the lab
- Special research projects
 - Gelman filter study shows a definite decrease in sodium contamination
 - pH 4.3 check solution shelf-life study is 1.5 years into the two year shelf-life study and there is still no evidence of any degradation of the nitrate in the solution.
 - The stability study is looking at filtration vs. refrigeration as preservation methods for precipitation samples.
- HAL Report
 - The HAL report was given by Eric Prestbo (see Attachment 3).
 - In 1999, Frontier Geosciences is re-organizing the laboratory from 3 independent groups to 2 interdependent groups. There are no expected changes in HAL staffing in the near future.
 - Quality assurance and quality control
 - Field and system blanks currently on hold until decision finalized about better approach
 - Intercomparison with parallel MIC-B sample system at ME98 initial results show good agreement with the MIC-B
 - This month 15 MDN samples per quarter will be sent to 3 Mercury deposition labs (5 each) for intercomparison
 - Parallel MDN Aerochems at WA18

- Draft MDN specific SOP's written will be complete MDN QA manual by end of Fall, 1998
- Scientific Initiatives
 - Measurement of trace metals in MDN samples
 - Dry deposition methods intercomparison
 - In progress: Tekran Auto-analyzer, waiting for arrival; peer reviewed paper this winter
- Network operations 1997 to present
 - Dual pen event recorder and new glassware in use
 - 2.0 liter bottle will be standard by January 1999.
 - Startups at CO97 and 3 Louisiana sites
- Data Management and analysis
 - 1997 data submitted to the Program Office, first 2 quarters of 1998 will be submitted to the PO by mid-December
 - Future data turnaround will be on a quarterly frequency with approximately a 3 month lag time and no longer than 6 months.
 - Excel interface added to the MDN Access data base which will enhance quarterly draft reporting to site sponsors
 - MDN Annual Report in progress

<u>AIRMoN</u>

The AIRMoN report was presented by Rick Artz. He commented on site status, the CAPMoN study and the National Geographic Kids Network.

Bruce Hicks is combining AIRMoN wet and dry data for total deposition estimates. The University of Virginia has a contract to examine AIRMoN wet and dry data.

<u>MDN</u>

Clyde Sweet presented the Mercury Deposition Network report. He showed a map of the proposed sites in Ohio, Pennsylvania and New Brunswick, Canada. About half of these sites are collocated with NTN sites.

Van commented that the Program Review asked for a network design for MDN. Bill Schroeder is working with Clyde on a design to include Canada and Mexico. Clyde in now Planning the network design, an external laboratory audit and a field QA program with ATS.

There will be a small price increase to cover total MDN costs. The price increased from \$159 to \$169 per sample starting in October 1999.

<u>Agency Reports</u>

USGS -

The USGS report was presented by Mark Nilles.

There are five papers in progress for publication by USGS staff using the NADP data. USGS is involved in education by sponsoring NSTA teacher's activity guides by using an on-line data base of NADP data. The external QA programs are continuing, along with the raingage tests. The USGS supported a workshop given by the Ecological Society of America in Washington, DC in March.

The external QA effort for NADP will continue and Mark is working on a network equipment modernization plan.

FWS

Ellen Porter presented the FWS report.

The Brigantine site in New Jersey is up and running. FWS sponsors 3 NADP and 2 MDN sites. Inquiries are being made about MDN because of mercury in fish and other wildlife. There is a need for the mercury brochure. The Federal Land Managers (FLAG) has work groups in ozone, visibility, policy, and air to evaluate effects. FLAG says NADP is the source of snowpack data and deposition data for Class 1 areas. The nutrient brochure should be ready by the end of the year.

<u>NPS</u>

Kathy Tonnessen presented the NPS report.

NPS sponsors 24.5 NTN sites with the newest being near Canyonlands and the Virgin Islands. Volcanoes National Park in Hawaii is still under consideration for a future sites.

NADP data are used for GIPPER reporting with some trend analysis and by ranking sites by wet deposition of sulfur and nitrogen. The INDEX site network, in conjunction with EPA, has 14 NPS sites, all have a full complement of air quality monitoring including wet and dry deposition, UV monitoring, visibility and ozone. NPS is examining 6 years of snowpack data in comparison with NADP data in the Rockies. Kathy discussed other uses of the data in various parts of the country at NPS facilities and parks.

<u>USFS</u>

Dick Cline presented the USFS report.

Dick reported that funding was stable with the same number of sites as in the past.

<u>NOAA</u>

Rick Artz presented the NOAA report.

The NAPAP report is at the printers and a hypoxia study will be reported.

Funding is stable for the NOAA sites.

<u>EPA</u>

Rona Birnbaum presented the EPA report.

EPA provides continued support for the site audit program (ATS). There has been positive feedback about this program.

Rona reported several site status related items. They are working on a contracting glitch for GA20. Twenty CASTNet sites will be added to the NADP in February 1999. There are funds for five North American Tribal sites to be added to the network sometime in February 1999.

Final Technical Meeting 10/29/98

Subcommittee Reports

Data Management and Analysis Subcommittee

Luther Smith presented the Data Management and Analysis Subcommittee report.

- New officers are Luther Smith, Chair; Bob Brunette, Vice-Chair; and Gary Lear, Secretary
- Data products and availability have improved
- Email will continue as a discussion and voting venue for the committee
- Sign up and sign off options will be created for subcommittee membership
- The handling of CASTNet sites was discussed
- Screening protocols from the Program Office will be discussed at the Spring meeting
- The DMAS voted to discontinue collecting dry-side samples

The report was accepted

Network Operations Subcommittee

Scott Dossett presented the Network Operations Subcommittee report

- Susan Johnson is the next secretary for NOS
- Lab audits: CAL- 1999 target date with the team of John Gordon, John Robertson, Mary Ann Allan and one other person to be named conducting the audit. MDN- audit is being planned.
- The NOS voted to discontinue collecting dry-side samples

Motion: Joel Frisch moved to allow FGS/MDN to implement the field blank program with the following features.

- must be a week with no opening
- pour faux rain into the field sample train
- return the sample to the HAL

Discussion followed about the lack of dry periods. HAL will rewrite the SOP to reflect the use of ultrapure to faux rain. Motion carried.

The report was accepted

Environmental Effects Subcommittee

- Brochures: The Nitrogen brochure is ready for review. The design and layout still need to be done. A Mercury brochure is the next project for the EES. They will work with Clyde to develop an outline for the brochure.
- The EES discussed the benefits of coordinating with other organizations and entities involved in atmospheric monitoring and research.
- New avenues of research to explore include cloud water, large particle dry deposition, pesticides and mercury speciation at several MDN sites.

Motion: Stop dry-side analysis of NTN samples as of 11.11.98. Scott Dossett seconded. Motion carried.

Motion: Write a standardized method for collecting cloud water. Eric Prestbo seconded. Discussion followed. Ellen Porter asked what could EES do to encourage the EPA & NADP to further the measurement of cloud water, fog, etc. The consensus was that a letter needs to be drafted to the Program Office that would be presented to the Executive Committee then go from the Executive Committee to the Technical Committee. The motion was tabled. Bob Bachman will draft a letter with the proposal and methodology.

Motions: To put reports on the web for the general user community. Discussion followed. Rich Grant suggested to amend the motion to state that the NADP remind the user, via email, to report any publications or reports where the NADP data were used. John Sherwell accepted the amendment. Motion carried.

The report was accepted.

Executive Committee Report

Dennis Lamb presented the Executive Committee Report

- A set of by-laws are being formulated. Mark Nilles and Gary Lear will put together a draft set of by-laws with a tentative vote at the interim Executive Committee meeting. It will then be brought to the Technical Committee.
- The name of the program will be NADP with the networks being NTN, AIRMON and MDN with future networks being under the umbrella of NADP. Jim Lynch so moved. Bob Brunette seconded. Motion carried.
- Ito's archival request was passed by the Executive Committee.
- The Nominating Committee put forward the nomination of Secretary to be Rick Artz. Rick accepted the nomination. Van Bowersox moved to accept the nomination through acclamation. Joel Frisch seconded. Motion carried.
- Jim Lynch presented plans for the 1999 meeting. Jim would like to have the meeting in the west with suggestions for Sacramento or Seattle. Mary Ann Allan and Joel Frisch will help Jim to make contacts in that area. Dennis suggested that a committee of three be maintained to plan future meetings. This could include the vice-chair, the secretary and another designated person. Van said there are monies earmarked to invite 4 or 5 speakers.

Jim Lynch thanked Dennis again for taking on extra duties of Chair for this year's meeting in the absence of Stephen Vermette.

Van Bowersox moved to adjourn the meeting.

PARTICIPANT LIST

NADP Technical Committee Meeting

October 26-29, 1998 St. Petersburg, FL

Mary Ann Allan Lee Alter **Richard Artz** Thomas D. Atkeson Robert G. Bachman Sue Bachman Wayne L. Banwart Stephanie Rose Benkovic Rona Birnbaum Van Bowersox William H. Brown **Boris** Chevone **Richard Cline** David Clow Timothy Coleman Stan Coloff Wayne Cornelius Ellis B. Cowling Brigita Demir L. Kellie Dixon Scott Dossett Kathy Douglas Charles T. Driscoll William Dunn Arthur E. Elling Dale Evarts Neil Frank Joel Frisch Cari Furiness Karen Harlin Kristi Heuer Bruce B. Hicks Elizabeth Holland Laura L. Hult Thomas G. Huntington Don Gatz Constance N. Geller John Gordon Richard H. Grant Holly Greening Hiroshi Hara

George Ingersoll Anthony Janloki Susan Randall Johnson Daniel Jones Mike Kelly **Dennis Lamb Bob** Larson Gregory B. Lawrence Gary Lear Steve Lindberg Mark Losleben James A. Lynch Dave MacTavish Robert P. Mason Lee A. Maull Mark A. Mesarch Paul E. Miller Stuart Nagourney Mark Nilles Dan Orr William Parton Mark Peden Ellen Porter Eric Prestbo **Raymond Pribble** Dudley J. Raynal Al Riebau John K. Robertson Louraine Robertson Jane Rothert Alexey Ryaboshapko LeRoy Schroder John Sherwell John P. Shimshock Gilbert C. Sigua Luther Smith Lee E. Sommers Alexandre Soudine Ariel Stein Gary Stensland Robert K. Stevens

Kenneth W. Stolte Barbara Stunder David Sumner Clyde Sweet Thomas Tamanini Julie Thomas Kathy A. Tonnessen Michael Uhart Fred VandeVenter Elon Verry Robert Vet Randy Waite John Walker Jerry T. Walker Dirk Wallschlaeger G. Bruce Wiersma Derek Winstanley Rosemary Wolfe