

The National Atmospheric Deposition Program (NRSP-3)
Technical Committee Meeting
October 25 - 28, 1999, Sacramento, CA
Minutes
Tuesday, October 26, 1999

Opening Business Meeting

Welcome and Introductions ---

The 1999 NADP Technical Committee Meeting was called to order by the Program Chair, Dennis Lamb. Dennis welcomed everyone to the meeting and gave a brief overview of the program. Dennis invited everyone to introduce themselves. A participant list appears at the end of these minutes.

Approval of the minutes from the 1998 Technical Committee Meeting was deferred until the business meeting on Thursday.

Jim Lynch described the technical program. An agenda with presentations is attached.

Dennis announced that seven papers presented at the Technical Committee Meeting in St. Petersburg, FL, had been accepted for publication in a future issue of the journal, *Atmospheric Environment*. The papers will appear in a special section entitled National Atmospheric Deposition Program. Dennis suggested doing something like this on a five-year time scale. *Atmospheric Environment* will provide NADP with 25 free reprints and the publication can be accessed on-line.

New guidelines for the NADP were discussed along with a short history of their development. Dennis asked that the guidelines document be reviewed by all Technical Committee members and voted up or down at the final business meeting on Thursday. This document should provide structure to the Program which can be revised over time.

Reports ---

Administrative Advisors -

Wayne Banwart - Lead Administrative Advisor, Northcentral Region

- Impressed by the visibility of the NADP through its web site and publications, such as Inside Rain.
- Expects no changes in NRSP-3 support for the upcoming year.
- Meeting authorization problems for Agricultural Experiment Station members should be addressed to Wayne.

CSREES -

Dan Brown - CSREES

- New legislation, the Agricultural Research Education Extension Reform Act of 1998, caused some disruptions in awarding of grants for FY99. This did not affect any of the transfers from federal agencies.

NTN Advisor -

Mark Nilles - USGS

- Reported that the NTN has experienced good visibility and that the number of sites is increasing.
- Sees a continued interest in deposition monitoring, nitrogen and mercury loading, and the effect of SO₂ emissions reductions on loading and on aquatic and terrestrial systems.
- Anticipates renewed interest among agricultural participants because of the effect of emissions from animal confinement facilities. NTN data on ammonium deposition is a valuable resource that can be used to examine this issue.
- Wants the NADP to look to the future concerning equipment modernization.
- Discussed the important advantage NADP has in its coast-to-coast and border-to-border coverage, which places the network in a good position to address future environmental problems related to atmospheric deposition. New equipment is needed if we are to have the versatility to address emerging issues.

AIRMoN Advisor -

Rick Artz - NOAA Air Resources Laboratory

- Showed the AIRMoN site map and talked of the need for more coastal sites, although budget limitations prevent any additions to the AIRMoN at this time.
- Commended Mark Nilles on his service on the Commission on Environmental and Natural Resources (CENR). AIRMoN has worked with Mark and other CENR members to emphasize the need for modernizing NADP equipment.
- Reported briefly on a project to study the impacts of adding a chemical preservative to AIRMoN sample containers. (See Jane Rothert's poster on the use of thymol.)
- Discussed plans to develop the capability to present trajectories accompanying chemical analysis results on the web in the next year or two.

Program Office -

Van Bowersox, NADP Coordinator - Illinois State Water Survey

- Site Status (as of 15 Oct 99)
 - (1) NTN
 - active 217
 - intercomparison 2 02NH & 08CO
 - TOTAL 219
 - (2) AIRMoN
 - active 9
 - (3) MDN
 - active 38
 - intercomparison 1 18WA
 - TOTAL 39
- Showed NTN site map, especially noting new sites and sites in jeopardy
- Showed AIRMoN site map, especially noting site recently closed (Sarasota, FL)
- Presented a summary of NADP cooperators for NTN, AIRMoN, and MDN sites
 - State Agricultural Experiment Stations 45 sites
 - National Parks, Monuments, Lakeshores, Seashores, and Rivers 36 sites

State & Local Government Agencies	30 sites
Universities	27 sites
National Forests & Forest Experiment Stations	14 sites
Private Companies	10 sites
National Wildlife Refuges	8 sites
Indian Tribes	6 sites
Canadian Government Agencies	4 sites
Other U.S. Government Agencies	18 sites

Clyde Sweet, NADP Associate Coordinator, Toxics - Illinois State Water Survey

- Showed latest MDN site map. Canada now operates 4 MDN sites with 5 to 7 new ones planned, including one on the Hudson Bay. Other new sites are planned in Pennsylvania (4), Alabama, Georgia, Mississippi, and California (San Francisco Bay). MDN is expected to grow from ~40 to ~55 sites in the next year.
- Reported on recent presentations about MDN:
 - paper at Air and Waste Management Assoc. (A&WMA) meeting in St Louis
 - A&WMA specialty meeting on mercury in Minneapolis, MN
 - EPA workshop on persistent pollutants in Durham, NC, which was an effort to coordinate monitoring and data analysis with the Europeans and Canadians.
- Reported on planned systems and performance review of Mercury Analytical Laboratory in 2000.

Central Analytical Laboratory -

Karen Harlin, Manager CAL, Illinois State Water Survey

- CAL Status
 - (1) NTN - 192,800 samples received to date (11,500 per year) AIRMoN - 9530 samples received to date (1550 per year)
 - (2) Data to Program Office - NTN through December 1998 & AIRMoN: through July 1999
 - (3) CAL staff reorganized into functional groups
 - (4) Site Operator Training Course held May 1999, with 31 participants
 - (5) 1996/1997 CAL Quality Assurance Report published in April 1999
 - (6) New *NTN Site Operation Manual* mailed to NTN site operators and supervisors in October 1999; also available on NADP Internet site.
 - (7) CALendar 2000 shipped to sites October 1999
 - (8) Monthly site reports reformatted
 - (9) Dry-side sample analysis terminated in November 1998
 - (10) Dry-add sample analysis replaced with lab type D in February 1999
 - (11) Special Projects - (a) study of decasplitter used in interlaboratory comparison sample preparation, (b) evaluation of potential bucket and bottle background contamination due to lack of mailer rotation
 - (12) Standard Operating Procedures reorganized in USEPA format
 - (13) Computers, lab equipment, & data reduction software is Y2K compliant
 - (14) CAL interlaboratory comparison participation - USGS, WMO/GAW, NWRI and EMEP
- Reported that a 5-member team, led by John Robertson, conducted a systems and performance review of the CAL on Sept 20-22, 1999; CAL will provide a written response at Spring Subcommittee meetings.

- Future plans for CAL - (1) Develop CAL Web page, (2) Complete revisions to appendices of operator's manual, (3) Computerize pH and conductivity measurements, (4) Develop database and bar code system for site supplies, (5) Update data validation programs, (6) Data to Program Office on schedule.

Mercury Analytical Laboratory (HAL) -

Bob Brunette, Frontier Geosciences, Inc.

- HAL Status
 - (1) MDN facilities being expanded and updated
 - (2) 17 people full or part time for MDN
 - (3) New Tekran auto-analyzer
 - (4) New FTP data access for site operators
 - (5) 1998 Quality Assurance report completed
- Presented MDN data turnaround schedules.
- Reported on interlaboratory comparisons and audits that solidified a new certifications with state organizations

Awards ---

NADP Chair, Dennis Lamb, presented site operator service awards for 5, 10, and 15 years:

5-year awards (paper certificates)

CAL Code	Name	Site Name	Start Date
CO93	Cap Kunej	Buffalo Pass-Dry Lake	101486
CO97		Buffalo Pass-Summit Lake	020784
ME98	William Gawley	Acadia NP-McFarland Hill	111081
MI26	Nina Consolatti	Kellogg Biological Station	062679
OK00	Roger Hill	Salt Plains NWR	121383
VA28	Shane Spitzer	Shenandoah NP - Big Meadows	051281
WI98	Kathy Molitor	Wildcat Mountain	080189
WY00	Allan Ellsworth	Snowy Range-Glacier Lake	042286
WY95		Brooklyn Lake	092292

10-year awards (5x7 plaque)

IN41	Kenneth Scheeringa	Purdue University Ag Farm	071382
OR18	Cheryl Borum	Starkey Exp Forest	030684
TX02	Glenda Copley	Mulshoe NWR	061885

15-year awards (8x10 plaque)

CO02	Mark Losleben	Niwot Saddle	060584
CO94		Sugarloaf	110486
KY22	Michael Brotzge	Lilley Cornett Woods	090683
MN18	Christine Barton	Fernberg	111880
MN23	Mary McGuire	Camp Ripley	101883
MS10	William Morris	Clinton	071084
ND08	Karen Duray	Icelandic SP	102583
WI99	Ted Peters	Lake Geneva	060584
WY02	Greg Bautz	Sinks Canyon	082184

Thursday, October 28, 1999

Closing Business Meeting

Dennis Lamb opened the business meeting. Minutes of the 1998 Technical Committee were approved.

Nominating Committee —

Wayne Banwart reported on the deliberations of the nominating committee appointed by Technical Committee Chair Dennis Lamb. Committee members were Wayne Banwart (Lead Administrative Advisor), Joel Frisch (U.S. Geological Survey), and John Sherwell (Maryland Department of Natural Resources). Kathy Tonnessen of the National Park Service was nominated for Technical Committee Secretary for the 1999-2000 term. She agreed to the nomination. Wayne moved to accept the nomination, Van Bowersox seconded. No other nominations were presented. Nominations were closed.

Motion: Van Bowersox moved to approve Kathy Tonnessen as NADP Secretary by vote of acclamation.

Lee Maull seconded.

Motion carried.

Technical Committee Officers for 1999-2000 are:

Chair: Jim Lynch

Vice Chair: Rick Artz

Secretary: Kathy Tonnessen

Past Chair: Dennis Lamb

Executive Committee Report —

Dennis Lamb, Technical Committee Chair, Penn State University

- Reported that the Executive Committee voted to move ahead with promoting development of a new wet deposition collector for use in all three NADP networks. Specifications for a new precipitation gage and collector were accepted. An ad hoc committee consisting of Mark Nilles, Rick Artz, Van Bowersox, Eric Prestbo, and Rich Grant has led the effort to develop specifications for new equipment.
- Reported on a new ad hoc committee charged with developing a site classification scheme based on factors such as land use, source distribution, population, etc. This committee consists of Luther Smith, John Sherwell, Susan Johnson, Bob Larson, and Scott Dossett.
- Reported on approval of archival sample requests from Ed Harvey of the University of Nebraska for samples from NE99 and Ty Coplen of the USGS for samples from co-located NTN and AIRMoN sites.
- Reported on a sub-sampling request from Dave MacTavish, CAPMoN manager, to look for haloacetic acids.
- Guidelines Governing the National Atmospheric Deposition Program

Motion: Luther Smith moved to have the guidelines accepted.

John Sherwell seconded.

Motion carried.

- The voting membership of the Executive Committee currently includes the Technical Committee Past Chair, Chair, Vice-chair, Secretary, Chair of the Network Operations Subcommittee, Chair of the Data Management and Analysis Subcommittee, and Chair of the Environmental Effects Subcommittee.

Motion: Rick Artz moved that the Co-chair of the Budget Advisory Committee be a voting member of the Executive Committee.

Kristi Heuer seconded.

Discussion: Lee Maull raised a concern that there would be eight members with voting status, creating a potential problem with breaking ties. Luther Smith mentioned that in a simple majority a tie vote fails. It was stated that the current Co-chairs are the Chair of the Executive Committee and at present the USGS representative.

Motion carried.

Subcommittee Reports —

Network Operations Subcommittee (NOS) -

John Gordon, NOS Chair

- The NOS reported on 1999-2000 officers: Jane Rothert (Chair), Susan Johnson (Vice-chair) and John Shimshock (Secretary).
- NOS actions
 - (1) Approved minutes of the Spring 1999 NOS (Boulder, Co)
 - (2) Recommended CAL and HAL audits be conducted every three years; amendment: conduct a paper review within 12 months of a 3-year audit
 - (3) Recommended Program Office (QA Manager) to follow up on problems uncovered from ATS site audits, report on corrective actions, and document and report this information to the NOS twice a year
 - (4) Approved specifications for modernization of precipitation gage and collector; amendment: the specifications on the web site be deemed preliminary
 - (5) Changed minimum sample volume from 300 mL to 250 mL for samples sent to the CAL; amendment: add requirement that samples be shaken before any sub-sampling (never take more than a 100-gram sub-sample)
 - (6) Approved replacing use of USGS decasplitter with simply pouring samples for the USGS laboratory comparison study
 - (7) Endorsed the use of LODA sensors as equivalent to ACM sensors
 - (8) Endorsed the use of motorboxes equipped with the Pittman high output motor as equivalent to the ACM motorbox
 - (9) Appointed an ad hoc committee of the two past NOS chairs and current chair to document NOS officer duties

Motion: Gary Lear moved to accept the NOS report.

Sue Bachman seconded.

Motion carried.

Data Management & Analysis Subcommittee (DMAS) -

Luther Smith, DMAS Chair

- Reported on 1999-2000 officers: Bob Brunette (Chair), Gary Lear (Vice-Chair) and Bob Larson (Secretary).
- DMAS actions

- (1) Recommended Web page changes that would allow users to choose between concentrations or depositions for NTN, AIRMoN, and MDN
- (2) Appointed ad hoc committee to develop a site classification scheme based on factors such as land use, sources, population, etc; committee consists of Luther Smith, John Sherwell, Susan Johnson, Bob Larson, and Scott Dossett
- (3) Received John Robertson's report on database comparisons
- (4) Recommended a review of data management at the CAL and Program Office before spring 2001
- (5) Finalized decisions on how to present trends on the Web

Motion: John Gordon moved to accept the DMAS report.

Rick Artz seconded.

Motion carried.

Environmental Effects Subcommittee (EES) -

John Sherwell, EES Co-chair

- Discussed tracking the progress of other networks such as NDAMN and USDA, UV-b
- Reviewed nitrogen brochure - final comments must be sent to the Program Office by November 10; recommended brochure be available on the NADP Web site and notification of new brochure be sent via e-mail
- Proposed future goal to develop a mercury brochure

Motion: Gary Stensland moved to accept the EES report.

Luther Smith seconded.

Motion carried.

2000 Technical Committee Meeting —

Rick Artz announced that the next Technical Committee meeting would convene in Saratoga Springs, NY. It will be the 10th anniversary of the Clean Air Act Amendments. Rick suggested the program focus on wet, dry, and total deposition changes since passage of the Clean Air Act Amendments. He also suggested a session on climate change. A suggestion was made to move the meeting back a week or two to accommodate the weather. Field trip possibilities include Whiteface Mountain or the Catskills. Another suggestion for a future meeting location was the Great Smoky Mountains National Park, because of acid rain and ozone problems in East Tennessee.

Closing —

Dennis Lamb presented the official NADP gavel to the new Chair, Jim Lynch. Dennis thanked Jim for his hard work on the program and the success of the meeting. He also thanked Kathy Douglas for her help with the meeting. The meeting was adjourned by Jim Lynch.