National Atmospheric Deposition Program (NADP) Fall Meeting Halifax, Nova Scotia September 21-24, 2004

DRAFT

Minutes of the Joint Committee Session Submitted by Mike Kolian, NOS Secretary

Agenda Items 8:00-10:00 am Tuesday, September 21

1) Introduction - welcome and instructions

Chris Rogers called the meeting to order. Pam Pagette and Natalie Latysh were introduced as well.

2) Field Chemistry Whitepaper, Chris Lehmann

Cari F., Natalie L., and Chris L. were tasked to come up with this paper as they represent the adhoc committee. Field chemistry history entails a motion made to end field chemistry in the Seattle NOS spring meeting of 2002, it was met with mixed reviews, then the issue essentially dropped from the scene. Spring 2004 Business meeting at Point Reyes the motion was again presented and passed which then put in front of the Exec/budget committees this last summer. Having gone through approval it now awaits approval by the Technical meeting of the Fall 2004 gathering. Chris Lehmann went through the major sections of the whitepaper which detail the history and data behind reasoning for discontinuing field chemistry. Analysis in the whitepaper includes presenting the differences between laboratory and field pH. If anyone has any comments or questions on the report please contact the members of the committee. The report will be sent by the end of 2004 in advance of the impending field chemistry discontinuation. Historical differences between the field and lab - were also presented by Natalie L. in Spring Business meeting 2004. There's a paper in press Latysh and Gordon (Water, Air, and Soil Pollution) compared differences in Lab and field pH from 135 sites from 1986-1999. Differences to point solution changes from field to lab transit. One noteworthy issue in the historical data was the sample handling protocol change in 1994 which is visible in the concentration data (acidity, pH).

<u>Discussion</u>: Who is actually using the data? What are the options? Frees resources for other program office activities. AIRMON will continue to report and perform field chemistry measurements as this will only affect NTN sites. Technical committee (Fall 2004 in Halifax) will actually have the final vote for whether this officially goes through. There will be a communication memo sent to Site Supervisors and Site Operators from Van indicating the Executive Committee voted to discontinue support of field pH and conductivity measurements at all NTN sites effective Jan. 1, 2005 - so they are informed.

<u>More Discussion:</u> Some sites receive a little funding for this - where can they channel it if field chemistry is stopped? How will this affect data products developed by NADP? Executive Committee, Sub-committees have voted against field chemistry and Budget Committee has voted to defund it so unless there is a motion, it will be carried forth to the Technical session.

Recommendations from the adhoc committee was to continue with a sub-set or core group of sites that would continue to be supported to perform field chemistry. Otherwise all other field chemistry would be voluntary on a site basis. AIRMON will continue field chemistry measurements indefinitely. Members of the Joint Committee indicated that maintaining a sub-set of sites continuing with field chemistry would defeat the purposes of cost savings and reduced logistics associated discontinuing support altogether. For more information see Attachment 1.

3) Mercury dry Deposition at MDN sites in Indiana, Eric Prestbo

Dry deposition is quite significant in parts of the U.S. however, numbers are modeled and not all that accurate. Most of the atmospheric mercury is elemental Hg. RGM and particulate mercury are the main pathways to the earth's surface and can be feasibly measured. Eric proposed a National Plan for Hg measurement such as doing litterfall measurements at LTER sites and add MDN sites interested in it, measuring Hg using a manual method and apply an approach similar to CASTNET and continue to support super sites that are measuring Hg on a regular basis. Marty Risch and Eric are involved in an Indiana program/pilot study which is providing a lot of useful information, regarding logistics (i.e., detailed SOPs have been established), costs are stable, reliability, ect...

Eric Prestbo and Marty Risch have proposed an initiative to include dry deposition mercury monitoring into NADP. One idea is to develop an advisory committee to look at this issue of perhaps getting NADP to consider incorporating the plan into the networks. Of course, participation will be required so it will be important to gauge cooperation from US EPA, USGS, USDOE, Environment Canada, and others. It will also be useful to determine interest from current site sponsors. The desert southwest has more need for dry deposition. For more information see Attachment 2.

Chris Lehmann makes a motion - To form an advisory committee with Eric P. as the lead and to report back to the Joint at the Spring Business Meeting in Savannah, GA. Scott seconds. Vote. Passed. No disscussion. Motion carries.

3) July 2004 Program Office Quality Systems and Data Management Review, Rich Grant Rich provided an update on the review process and the major points of the review. Quality System and Data Management Review was a review of how well positioned this plan is to implement and not so much on the plan itself. Three main points:

SOPs - many in place but ill defined (data management), its necessary for routine operations for data to go through a systematic series of checks.

QMP - can be a catch all and the plan should not getting bigger and more unmanageable. DQOs - if objective is not met then there should be remedial actions taken. More time should be taken to quality assure the data and take corrective actions. Chris will deliver a written response to the review at the Spring 2005 Business Meeting. No presentation given.

4) HAL report, Bob Brunett.

Approximately 10-15 sites are added to the MDN network each year. This includes 9 recent startups and 12 sites pending for inclusion into the network. One site in Mexico has hit offical status as an NADP MDN sites HD01 and there is one that was voted in by petition by David Gay (see NOS minutes). Mexico sites are remote and shipping costs are astronomical - as well as not that reliable. Sample schedule is not normal and has presented some problems. Funding came

from the tri-lateral commission. MDN is sponsoring the sites, NADP gave them the samplers, NACEC North American Commission of Environmental Cooperation. Bracing for growth of network. Purchasing 10 sets of equipment. Merged total and methyl mercury databases - completing a key goal. Trace metal work is being sponsored by external sponsors and on-going. General updates based on progress to HAL audit. Bob presented the status of addressing the hit list from the HAL audit. All but four items to be fully resolved by the end of 2004. Frontier will be hosting a field training course this fall in October in Seattle (15 site operators to attend). Trace Metal studies to date - EPA is not involved in any of these. Storm event based sampling of tropical storms that have been sampled by MDN network results from 2002-2004 will be compiled and presented - 2004 storms captured Bonnie, Ivan, Charlie. For more information on the HAL activities see Attacment 3.

5) CAL report, Karen Harlin

Karen submitted the report hard copy on the CAL. 261 NTN sites, 8 AIRMoN, April 2004 Field Operations Training Course (25 sites represented). Karen continued to update the committee in important activities of 2004 (i.e., 4-1 shipping, lab processing figures, etc...) 81 of 261 sites are now on the shipping protocol (31%). The goal is to have all sites converted to the protocol by Dec. 2005.

Reagent free IC from Dionex. American Chemical Society project and communication outreach project 'Chemists Celebrate Earth Day 2004'. Karen concluded by providing information on the next Spring Business meeting in Key West, FL - which has been switched to Savannah, GA.

For more information see Attachment 6 as well as the CAL Report to NADP, September 2004 submitted by Karen Harlin.

6) Precipitation Chart Reading: NTN vs MDN, David Gay

At co-located MDN and NTN sites, a single precipitation gage is used to report daily and sampling period total precipitation amounts. At most of these sites the MDN operator is also the NTN operator and the precipitation reported on the respective MDN and NTN field forms is the same. The HAL and CAL utilize different data review processes that can lead to different precipitation amounts reported from this gage. At its 26 March 2003 meeting, the NOS resolved that "the Program Office report one reading for precipitation amounts for NTN and MDN co-located sites when the same rain gage is used for both networks". NTN/MDN collocated sites many cases there are 4 or 5 raingage chart readings - this leads to differences in precipitation amounts coming from the same gage. HAL double checks rain gage charts that the site operators report. If the two amounts differ HAL will verify and enter the HAL amount. Differences are less then 0.05 inches over the week. HAL continues to read every chart as they are doing to the nearest 0.01 inches. If NTN and MDN readings to do not agree then a procedure for reconcilation will be followed. A final answer will be reported after reconcilation. Check only important (large) differences. Database needs to represent the **final** answer. Recommendations were proposed to the procedures (i.e., SOPs) and documentation at the HAL and CAL.

For more information on the proposal see Attachment 4.

Scott Dossett makes a motion "to accept David's report and proposal and to review, finalize, and make necessary plans to implement the procedures outlined starting January

1, 2005. Cari Furiness amends motion to add the date. Amendment accepted by Scott Dossett. Disscussion. Pam Pagette seconds, discussion was about the new _ppt field to reflect all differences. Amended dataset may be necessary. Vote is unanimous. No discussion. Motion carries as amended.

7) Siting Criteria, Chris Lehmann

October 1st abstracts due for the Minneapolis, MN meeting. Chris Lehmann and Chris Rogers are co-chairing a panel on atmospheric deposition studies.

The siting criteria document is near a final state and Chris Lehmann wants to bring to the Spring Business Meeting 2005 for a final vote.

Discussion: Scott Dossett makes a point on the document. A priori decision making on siting of new sites. Need a RULE for proximity to developed areas be set to 5km. Source influenced sites could be a classification scheme. Urban sites have important influences and should classified separately outside of where it is sited related to pop or towns. Pam has problem naming a distance to the siting of new sites. Sites that violate 5km right now and what do you do with sites that do no meet that distance. Need a baseline proximity - weighting. For more information on Scott's question of how far should sites be from towns see Attachment 5.

Not enough information to make a decision on the final document. Web forum will be set-up for comment over the coming months.

8) Final announcement, Van Bowersox: Scott Dossett set to retire in November 2005. NED will be taken care of by David Gay. Siting Criteria/support will be taken care of by Roger Claybrooke.

Motion to Adjurn the NOS meeting for this session, Kristi Morris. Second Scott Dossett Motion carries and meeting adjourned.