

Minutes of the Network Operations Subcommittee Meeting in Jackson, Wyoming September 27, 2005

Activities of the Network Operations Subcommittee (NOS)

Motions

1. A motion was made to approve the NOAH-IV and the OTT-NADP rain gages as replacements for the Belfort rain gage only if they are equipped with a Campbell data logger or comparable data logger that could be programmed by the user. [Motion was made by Cari Furiness and seconded by Scott Dossett. Motion was approved unanimously by voice vote.]
2. A motion was made to recommend that the Program Office continue testing and refinement of the LODA redesign of the Aerochem sampler demonstrated at the Fall 2005 meeting. The Program Office should report their progress on the sampler at the Spring 2006 meeting. [Motion was made by Jane Rothert and seconded by Scott Dossett. Motion was approved unanimously by voice vote.]
3. A motion was made to table discussion, until the Spring 2006 meeting, of the NADP Siting Criteria from the NOS ad-hoc committee (Attachment 4), presented by Chris Lehman. As part of the motion, NOS members were encouraged to read the summary document and be prepared to complete the discussion at the Spring 2006 meeting. [Motion was made by Van Bowersox and seconded by Greg Wetherbee. Motion was approved by show of hands, 21 in favor, 1 not in favor.]
4. A motion was made to nominate Greg Wetherbee of USGS as the secretary of the NOS. [Motion was made by Mike Kolian and seconded by Natalie Latysh. Motion was approved unanimously by voice vote.]

Discussion and Reports in the NOS meeting

Please see attachment 1 for the agenda of the NOS. Many agenda items were accompanied by powerpoint slides and the minutes incorporate those slides by reference. The following information supplements the motions and slides.

Karen Harlin called the NOS meeting to order and minutes from the Spring 2005 meeting were approved.

Van Bowersox provided information (attachment 2) for a discussion of the two new rain gages. A key difference between the OTT-NADP and NOAH-IV is the function of data capture and data processing, particularly for sampler open/closed status, operating voltage, precipitation amount, time of precipitation, and temperature. The OTT-NADP has a data logger with proprietary software that would not have the capacity to the data capture frequency and download speed desired by NADP. The NOAH-IV has a Campbell CR10X data logger that is user programmable and capable of the desired data capture frequency and download speed. The price difference between the more expensive NOAH-IV and the OTT-NADP is approximately the cost of a Campbell CR10X data logger. Van asked the NOS how the Program Office should proceed to resolve this issue. Mark Nilles reminded us that the original vision in upgrading the rain gages was to not be limited to a single model. Scott Dossett mentioned that it was not known if the OTT-NADP was compatible with the Campbell data logger. Also, Van noted that the current CR10X model will be retired by the manufacturer when a new model is available. A

motion was approved to accept the two rain gages only if they are equipped with a user-programmable data logger comparable to the Campbell, but not specifically the Campbell CR10X.

David Gay demonstrated and described the LODA redesign features for the Aerochem sampler: a screw-jack activator arm; waterproof, pull-out power and control boards; 6 operator signal lights; sensor logic on the control board instead of the sensor; inside clearance for second sample chimney; capacity for multi-height buckets; and adjustable seal on the bucket (attachment 3). He reminded us of the potential savings and reduced downtime from repairs to motor boxes and sensors that the redesigned sampler could achieve. He said the current cost for a new unit was \$2300 and a retrofit kit was \$1250. David said the Program Office will continue testing of the redesigned sampler, including operation in a freezer for 30 days cycling open/close every 5 minutes and outdoor operation at Bondville starting by January 2006. A motion was approved to have the Program Office continue the testing and to report at the Spring 2006 NOS meeting.

Bob Brunette provided the report for the HAL (attachment 4). Four new MDN sites in Ohio, Arizona, Virginia, and Oklahoma started in summer 2005 and Mexico's two sites were funded through November 2005. HAL has the capacity for MDN growth with 6 more staff and extra supplies for 10 new sites. Doug Disney replaced Nicholas McMillan as MDN operations/logistics manager. Doug has worked at Frontier for 2 years and operated WA18. As of June 2005, one data base at the HAL contains total Hg, methyl Hg, and trace metals data. Look for new versions of QAPP, site operator, and data base user manuals by the end of 2005. Look for several posters from the HAL at the Fall 2005 science symposium.

Karen Harlin provided the report for the CAL (attachment 5). NTN has 256 active sites and AIRMon has 8 sites. CAL receives about 1200 samples per month. All sites were using the 4-in-1 shipping as of August 2005. Estimated yearly savings for CAL from this shipping method are \$9000. Matt Layden was hired in August 2005 as the NTN liaison. New ion chromatographs went on line in 2005. New facility construction and temporary quarters will continue through early 2006. QA reports for 2002 and 2003-2004 will be available by end of 2005. New methods for blanks, QC reviews, and method detection limits have been implemented. Elimination of field chemistry required data management changes affecting data transfer, monthly reports, and the LIMS. Look for a number of posters from the CAL at the Fall 2005 science symposium.

Eric Prestbo gave an update on the proposal developed by the Hg dry deposition work group for a new MDN dry deposition network. The proposal calls for an initial 12 stations in the U.S., equipped with air samplers for monitoring speciated Hg concentrations. Data from these stations could be used to estimate Hg dry deposition rates and (combined with MDN wet deposition data) to estimate total atmospheric deposition of Hg. Eric reported that the proposal had been presented to the Executive Committee at the June 2005 and approved as an NADP initiative. In September, NADP sent a letter to the EPA requesting a meeting to discuss potential collaboration for the proposed network. Progress will be reported at the Spring 2006 meeting.

Greg Wetherbee gave a report on the USGS QA program in 2005 (attachment 6). For the NTN, this included: a field audit of the entire network; continuing the NTN inter-laboratory comparison with 8 labs; and continuing the long-term collocated sampler

program at 3 sites. For the MDN, this included: system blanks for the entire network; continuing inter-laboratory comparisons with 6 labs; the MDN blind-audit pilot program; and a site operator training video. New items for the USGS QA program include: an updated website, a MS Access data base, improved laboratory and offices, and several new publications. In 2006, plans for the site at Arvada are to test the Yankee sampler and to run an evaporation study that includes weather data.

Chris Lehman presented for discussion and approval the updated NADP Siting Criteria (attachment 7), the result of his work with the ad hoc committee on siting. The handout included a summary of critical changes that are not part of attachment 4. The committee started in 2001 to review and revise criteria established in 1978 and last modified in 1984. A total of 19 proposed changes to the siting criteria are included in the new document. A motion was made and seconded to accept the committee's report as written and to provide feedback for the committee. During discussion, issues regarding windshields, orifice heights, and treated lumber could not be resolved in the time available. Due to the number of proposed changes and the need to complete discussion, a motion was approved to table discussion until the Spring 2006 meeting, with encouragement to NOS members to read the criteria before the next meeting.

Karen Harlin reminded the NOS that this was her last meeting as chair. Mike Kolian of USEPA will be the chair in 2006 and Marty Risch of USGS will be the chair in 2007. (The progression for a nominee is secretary, chair-elect, then chair.) Greg Wetherbee of USGS was unanimously voted nominee for NOS secretary in 2006.