

**MINUTES--Quality Assurance Advisory Group**  
NADP Scientific Symposium and Technical Committee Meeting  
Seattle, WA; September 10, 2002 11:30 - 1:00 PM

**Present:** Christopher Lehmann (chair), Bob Brunette, Scott Faller, Natalie Latysh, Gary Lear, Jane Rothert, John Sherwell

1. Status of QA Advisory Group--Executive Committee Decision

The formation of a QA Advisory Group was formally approved at the July 2002 Executive Committee meeting. The composition and charges/responsibilities of the QA group are described in the minutes of the Executive Committee, and were previously distributed to QA group members.

2. Progress and status of NADP Quality Management Plan

Draft copies of the NADP Quality Management Plan (QMP) through Chapter 4 were distributed to the group. The final draft of the QMP is on schedule for release in November, 2002.

3. Inventory of Quality Assurance Activities for laboratories and field sites, identifying DQIs.

The group agreed that an inventory of all NADP quality assurance activities would be beneficial to assess the level of QA activities across the networks and laboratories, and to determine the data quality indicators these activities provide. A list of the CAL's QA activities, from the CAL QA report, was presented with the corresponding DQIs. It was noted that the HAL QA report had a corresponding list of activities.

The group discussed at length the lack of uniformity in QA programs in MDN, NTN, & AIRMoN. Within the NADP structure, the Network Operations Subcommittee approves and oversees network QA activities. One issue that was raised is an initiative in MDN for field operators to perform monthly 6 point raingage calibration checks. Although such a QA activity is beneficial, it creates an inconsistency, as it is not done in the NTN or AIRMoN. This activity should be brought to the attention of NOS, as the group agreed that monthly raingage calibration checks would be good to have in all three networks. It was noted that a set of lab-built calibration weights would run ~\$22/set per site.

Quality assurance activities within the laboratories were also discussed. It was noted that the CAL repeatedly claims that ammonia measurements are not stable, but such claims should be backed up with field studies. Such data may include collocated measurements, with the use of a preservative for one group of samples. The lack of phosphorous data reporting is also of concern.

Laboratory intercomparisons for the HAL were also discussed. It was noted that not many laboratories are equipped to analyze low-level samples, making such intercomparisons difficult.

4. Discussion on NADP Data Quality Objectives for networks and laboratories

After some discussion, it was decided that the best course for developing DQOs for the NADP would be to begin with DQOs that complement CASTNet's. Thus, the group decided to adopt "working DQOs" for the NADP as follows:

- Determine wet deposition
- Detect and quantify seasonal and annual trends in concentrations and wet deposition
- Define spatial distribution of precipitation chemistry

The next step will be to state the data required, conditions for data collection, and limits on data use. A list of DQIs will also be established. In establishing DQOs, the analytes of primary concern would be mercury, sulfate, nitrate, ammonium, and pH. DQO levels would be established for each analyte, with less stringent DQOs for analytes of less concern.

#### 5. Other issues?

Various members of the group noted that NADP QA activities have historically focused on laboratory operations, with less oversight given for field issues. It was decided that field QA issues should be given more attention, especially to evaluate the relative efficiency and variability in field equipment. It was noted that one issue is the inconsistent use of wind shields for rain gauges. The group should provide QA guidance as new NADP equipment is deployed to ensure network consistency.

C. Lehmann; October 23, 2002