# National Atmospheric Depostion Program 2002 Scientific Symposium and Technical Committee Meeting Seattle Center Seattle, Washington

## Data Management and Analysis Subcommittee Minutes

Tuesday, September 10, 2002

### Overview

- Bob Larson gave a report from July 2002 Executive Committee Meeting:
  - Site Classification Scheme was approved by Executive Committee.
  - Animation maps also approved Graphic artist doing in flash (previously in PowerPoint)
- Officer situation –
  Motion by Bob Larson: Chair and Vice Chair/Secretary to replace preexisting 3 officer structure
  Seconded by Bob Burnette.
  Motion carried.

## **Officer Elections**

Bob Larson remains Chair for another term (ending with 2003 Scientific Symposium) Chris Rogers elected Vice Chair/Secretary

## **Database Audit**

Presentation by Chris Lehmann (see attachment 1).

- Direction and structure of audits discussed
- 1999 audit by Dr. John Robertson showed internal inconsistencies in CAL database compared with PO database
- Chris Lehmann proposes doing audit of HAL

Proposal: 6 month study (pilot study)

- Mercury data 20% audit
- Select 14 sites sequentially per week, comparing field forms, HAL data sent to Program Office, and data reported to data users
- Hand calculations of first site each week
- Methyl Mercury data 100% audit

<u>Proposal</u>: Data audits done informally at end of CAL audit? Noted that it requires different expertise, etc.

- Currently 3 MDN data sets:
- 1. Frontier
- 2. PO after Bob Larson modifies
- 3. Clyde's database

New Database Changeover:

Bob Burnette – Frontier will aim for 4<sup>th</sup> quarter 2001 data submittal for changeover. Bob Larson suggests using 4<sup>th</sup> quarter 2001 for pilot program. Then also compare old data sets. Data prior to 1998 must be recoded using new scheme. Some 1998-2001 data recoded by hand by Clyde.

Ro brought up version control.

Chris Lehmann asked Bob Larson if he tracks changes (Bob reported that he does, but the information is not currently made public).

Gary Lear suggested better use of the modification date.

Discussion was refined to 2 issues: Pilot program – small subset Formal audit – once every 4 years for each network

*Motion by Chris Lehmann:* QA manager will perform a database audit on the new MDN database for 4th quarter 2002 and 1st quarter 2003.

- Audit will track data from the MOF to the web
- 5% of samples will be evaluated
- Report by Fall 2003 meeting

Seconded by Luther Smith.

Motion carried.

Motion by Luther Smith: Audit older MDN data form 1996 to 2002

- Data entered into older system at HAL and transferred to newer system by the PO.
- 5% of samples
- Double data entry of audited samples

Seconded by Gary Lear.

Motion carried.

*Motion by Gary Lear:* HAL institute double data entry starting 4th quarter 2002. Seconded by Bob Larson. Motion carried.

*Motion by Luther Smith:* DMAS recommends to TC that Lab audits include two members two members specifically to perform a data systems audit to supplement three current auditors and the QA manager.

- Audit scope should include data management, lab operations, and PO operations
- Audit team members should be selected by DMAS and NOS chairs
- Each committee should vote to accept audit reports.
- Seconded by Gary Lear.

Motion carried.

### **Reporting Limits**

- The NADP has traditionally set MRLs at approximately the MDL values.
  - If MDL values did not vary significantly from year-to-year, MRLs were not changed.
- It is proposed to set the MRL at twice the LT-MDL.
  - Statistically balances chance of false positives and false negatives
  - LT-MDL determined from variability low concentration standard data (FR10) over a period of one-two years.

Chris Lehmann presented update (see attachment 2) of the current issues:

- Fix MRL at 2×LT-MDL?
- How long of period for LT-MDL?
- Long term data stability.
- Include variability due to field operations.
- Data censoring.
- Isopleth maps.
- HAL data.

The committee agreed to disregard the field operations variability component.

*Motion by Gary Lear:* QA manager should make a presentation on implications of fixing MRL at 2xLT-MDL or 3x LT- MDL including data censoring and historical (pre-2000) data issues. Seconded by Luther Smith. Motion carried.

#### **Additional Agenda Items**

The following agenda items were not discussed:

- 1. Annual deposition computation method
- 2. Site classification: future direction
- 3. Methyl Mercury