

National Atmospheric Deposition Program
Spring 2004 Interim Meeting
Data Management and Analysis Subcommittee
March 23-24, 2004
Draft Minutes

March 23, 2004

Attendees: Chris Rogers (chair), Bob Larson (secretary), Kathy Douglas, Gary Lear, Bob Brunette, Gerard Van Jagt, Chul-Un Ro

MDN Methyl Mercury database

Gerard reported that the methyl mercury database has been integrated with the total mercury database. A demonstration was postponed due to ambient light levels. Also discussed were areas where dual data entry should be performed, and the composite selection step was identified. Bob Larson reported that he has discovered numerous sample volume discrepancies between the total Hg and methyl Hg databases.

Motion: The HAL, with assistance from the PO, develop dual data entry for methyl mercury composite selection and composite volumes and report progress to DMAS at the fall meeting

Motion: Program Office and the HAL will determine the causes of differences found between the total and methyl mercury databases, and report to Executive Committee in 60 days.

MDN review follow-up

Much of the discussion regarded the need for the HAL to develop dual-data entry or LIM use of analytical results. They currently are using a dual data entry system for the field data. Gerard showed a new quarterly data report that shows the quality rating for each sample, as recommended by the review team.

Motion: PO QA Manager, PO Data & Information Manager, MDN

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Coordinator and the HAL resolve the remaining dual-data entry deficiencies at the HAL and report progress to the Executive Committee.

MDN data review

Chris Lehmann gave a report on his effort to review the MDN database. He has had a student enter a subsample of field form data from 2002. All field forms from two sites and 100 randomly selected forms from other sites have been entered. He is still reviewing the results, but has noted inconsistencies. Bob Brunette asked for a copy of the data.

Motion: Chris Lehmann should report his findings to the Executive Committee within 60 days.

March 24, 2004

Attendees: Chris Rogers (chair), Bob Larson (secretary), Kathy Douglas, Gary Lear, Bob Brunette, Gerard Van Jagt, Chul-Un Ro, Chris Lehmann, Van Bowersox

North American wet-deposition maps

Chul-Un Ro provided examples of wet deposition maps that could be developed that cover much of Canada and the United States. Suitable coverage exists for approximately east of the Mississippi River and north to the southern tip of Hudson Bay. Where coverage does not exist, a possibility would be to use site data that is color coded identically to the isopleths. It was suggested that these maps could be used in the 2003 NADP annual summary, possibly on the cover. Since maps using the most recent (2003) data are not possible, it was suggested that multi-year periods be mapped, such as early 1990s and late 1990s. Suggested maps included sulfate, nitrate, and total N. Ro will provide draft maps by the time of the Executive Committee. Bowersox asked that Ro also prepare a brief description of the NAtChem program for the annual report.

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Progress Report on MDN Isopleth Maps

Larson gave an update on the effort to produce isopleth maps for total mercury. Progress has been made in developing a method that objectively determines where sufficient coverage will allow spatial interpolation. The program office will continue development with a goal of producing mercury isopleth maps for the 2003 annual report. Bob will utilize the web forum if feedback from DMAS is needed.

AIRMoN Annual/seasonal completion criteria

Larson reported on his efforts to put AIRMoN annual and seasonal aggregate data on the web site. The nature of how AIRMoN handles low-volume samples creates a unique situation regarding data completion criteria 1, the percentage of the total measured precipitation associated with valid samples. Since low-volume AIRMoN samples often result in partial set of analyses, multiple values of Criteria 3 will be developed. These will correspond to the groups of analytes:

- a) pH, Conductivity
- b) NH₄, PO₄
- c) SO₄, NO₃, Cl
- d) Ca, Mg, K, Na

The criteria will be labeled 1a, 1b, 1c, and 1d accordingly. For example, Criteria 1a will be described as the percentage of the summary period for which there are valid measurements of pH and conductivity. Similarly, criteria 1b will be the percentage of the summary period for which there are valid measurements of NH₄ and PO₄. The goal is to have the seasonal aggregates on the website by the fall meeting.