National Atmospheric Deposition Program DMAS Minutes Halifax, Nova Scotia Sept. 21, 2004

Attendees: Bob Larson Chris Rodgers Bob Brunette Gerard Van der Jagt

Eric Prestbo Chul-Un Ro Julie Narayan Markus Stewart

Source Influenced Sites

Bob Larson presented a method of displaying isopleth maps that differentiate source-influenced sites (Attachment 1). The source-influenced sites in this example were sites with an Urban site classification. These sites were excluded from the spatial interpolation process, but were displayed on the map as a dot with the same color-coding as the isopleth classes. Each color-coded sites dot was surrounded by a white border to differentiate it from the isopleth classes.

Motion by Gary Lear: Site Classification data is made available on the NADP web sites by the Spring 2005 NADP meeting. Motion carried.

Motion by Gary Lear: Starting with the 2004 isopleth map series, urban sites be excluded from the interpolation process, but shown on the map. Motion carried.

Gary also suggested that coastal sites be handled similarly. He suggested a criterion of all sites within 10 km of the coast. Bob Larson suggested that the program office should prepare some prototype maps to see what the effect would be. Bob will present these at the spring 2005 meeting.

Ro explained how NATCHeM handles source-influenced sites. Their siting criterion stipulates that sites are located such that no Sox or NOx emissions greater than 10 tons/yr are within 50 km of the site.

Ammonium map isopleth intervals

Bob Larson explained a change that the program office made to the isopleth intervals for the ammonium concentration maps. The increase in ammonium over the northern great plains had exceeded the capacity of the currently-used isopleth classes, resulting in a large area that was in the highest isopleth class. To make the maps comparable from year to year, the program office will be revising the ammonium maps from previous years. However, the maps contained in the annual data summary publications will not be updated.

MDN Mapping

Bob Larson explained the procedure developed to crate the MDN isopleth maps, and showed the results (Attachment 2).

MDN annual summaries

Bob asked for ideas for data products that could be used in a MDN Annual Data Summary report similar to the reports used for NTN. These reports provide a concise summary of data completion and basic statistics for a given site. NTN also uses a third page that summarizes the number of invalid samples for a site, as well as the reasons why samples were invalidated. This third page is used internally, and is not available to the public. Gary questioned the need for such a report, and Bob explained that while external use was limited, that they have proved to be a good vehicle for providing feedback to site operators and supervisors.

MDN Data Management

Bob Brunette gave a progress report on how the HAL is addressing issues from the HAL Audit. Gerard demonstrated the 2x data entry for lab data and methyl mercury. Bob Larson gave a progress report on the MDN database integration and proposed a standard method for handling low-volume samples, which have been handled inconsistently in the past.

Motion: The Program Office should post the integrated MDN data to the web ASAP, and report on progress at the Spring meeting. Motion passed

He also reported on his effort to fix the problem with the bottle caps changes. He found that the date on which caps were changed was unknown for 62 bottles. This resulted in 74 low-volume (< 50 ml) samples being invalidated. David Gay reported that a new median funnel size was determined by measuring 100 funnels. Larson will use this diameter to recompute the sample volumes for all samples in the integrated database that lack rain gage data.

Motion: **The new funnel diameter be accepted and used for all MDN samples**. Motion passed.

Chris Rogers was nominated and elected as the DMAS secretary















