

MINUTES: Technical Committee Meeting  
National Atmospheric Deposition Program NC-141

Time: November 15 - 16, 1978  
Place: Champaign, Illinois

Prepared by: J. H. Gibson, Program Development Coordinator

The meeting of the Technical Committee of the National Atmospheric Deposition Program was convened at 8:00 a.m. on November 15, 1978. Fifty-four members were present (see attached list). Because of the absence of Ellis Cowling, the meeting was chaired by Jim Gibson. Gibson presented a brief program status report indicating that the program became operational October 1, with the initiation of work by the Central Analytical Laboratory. At that time, there were approximately 30 approved monitoring sites. A number of these sites are still not operational because of a lack of equipment or other delays. This is expected to be of a temporary nature. Gibson indicated that he felt that by mid-1979, there would be between 45 and 50 sites operational. There still are relatively few sites projected for the west, southwest, and southern states, but there is growing interest and recognition of the program. He proposed that at this meeting major consideration be given to the effects area of the program objectives.

Keith Huston discussed briefly the current status of the program within the State Agricultural Experiment Station system. He pointed out that because of economizing at the federal level, SAES budgets would be tighter for the coming year. He emphasized the importance of coupling the effects research to the monitoring aspect of the program, since it is the effects objectives that are important to agricultural programs.

Gary Stensland and Mark Peden presented a status report on the operation of the Central Analytical Laboratory. Gary brought the group up to date on the current laboratory activity. He indicated that approximately 60 samples had been analyzed. Gary reviewed data for several sites from among the first 60 samples to be analyzed. This data indicated that there were several problems associated with sampling protocol which should be resolved. He presented a list of these problems and it was suggested that this be considered by the subcommittees 1 and 2.

Gary asked that each participant at the meeting who planned to establish a new site in the near future, indicate its location on the site map. Approximately 15 additional sites were entered on the map. This would bring the total number of sites to be operational in the near future to around 45. Following the status report, Gary and Mark announced a tour of the CAL for those interested.

The balance of the morning was made available for individual participant reports. Each participant at the meeting was asked to review briefly their program and if they were involved in the operation of the monitoring site, to indicate the status of their site and any problems. Each participant was encouraged to briefly discuss effects research in which they were involved.

Beginning at 2:00 p.m., Jim Gibson presented a report on the discussions and recommendations of the Executive Committee. (The Executive Committee met the prior day). Time was made available for discussions concerning these recommendations, and comments were solicited. Several questions of clarification were raised. In answer to a question concerning the selection of the USGS to handle the quality assurance program, Bernie Malo discussed briefly the USGS role and outlined the quality assurance steps to be covered. He indicated USGS will not become involved in visiting each individual site to monitor sample handling and operation of the monitoring equipment. This is a matter which will need to be considered in the future. Recommendations of the Executive Committee were approved by the

Technical Committee.

Following the report of the Executive Committee meeting, the balance of the afternoon was devoted to the subcommittee meetings. As recommended by the Executive Committee, the subcommittees concerned themselves with:

- 1) matters concerned with field sampling and operation of the CAL,
- 2) matters of data handling, management, and analysis, and
- 3) planning for effects research.

Recommendations from the subcommittee meetings were presented Friday morning. A summary of these recommendations follows.

Prior to the subcommittee reports Friday morning, Ellis Cowling (who was unable to attend the meeting on Thursday) presented a brief report on several activities within the National Atmospheric Deposition Program, and urged the Technical Committee members to give careful consideration to future effects research. Ellis pointed out that the monitoring efforts were in support of the need to understand deposition, both wet and dry, in order to assess biological effects. We now need to give consideration to this portion of the program objectives. He discussed the report that he, Jim Galloway, Eville Gorham, and Bill McFee had prepared for the Council on Environmental Quality. A draft of this report was mailed to the participants. This final report will be available within the next several weeks. Prior to a noon adjournment, Ellis Cowling suggested that the Technical Committee express its strong support for the outstanding work of Gary Stensland and Mark Peden in their effort to bring the Central Analytical Laboratory into full operation. Jim Gibson also thanked Dick Semonin and the staff of the Illinois State Water Survey for the fine arrangements for the meeting.

The facilities were very satisfactory and the group appreciated the economical pricing of the rooms.

## SUMMARIES

### Subcommittee 1 and 2

Subcommittee 1 and 2 were concerned primarily with questions raised by Gary Stensland and Mark Peden concerning certain operational matters in the field and Central Analytical Laboratory. The subcommittee, after considerable discussion, made several decisions concerning sample handling protocol, which enabled answers to be provided to each of the questions raised by the laboratory staff. Recommendations from sub-committees 1 and 2 were approved by the Technical Committee. (The list of questions are not included, since they are lengthy and applied specifically to the manner in which the CAL handled samples).

### Subcommittee 3 and 4

Subcommittee 3 and 4 reviewed needs for data analysis, handling, and management. Because the program is in its early stages, and there are no funds currently set aside for data management, Committees 3 and 4 recommended that a "temporary" approach be taken to the question of data handling. Because there will not be large quantities of data in the first year or so of the program operation, certain decisions concerning long-term questions of data management can be delayed until a later date. At that time it is hoped that the funding situation will be better defined. Specifically, the subcommittee recommended that the following data handling procedures be followed in the initial program phases:

- 1) The Central Analytical Laboratory should return data to the site for their review. It is hoped that this data will be made available back to the site within 2 to 3 weeks after receipt of the samples by the CAL. Any problems which site personnel identify should be communicated to the office of the Program Coordinator at the Natural Resource Ecology Laboratory. Necessary corrections will then

be made before the data is put in final form.

- 2) Data from the Central Analytical Laboratory will be made available to the Natural Resource Ecology Laboratory in computer compatible format. This will likely be in the form of tapes. A final decision on this will be made after a review by NREL and CAL personnel. NREL personnel will merge data from the CAL with information contained on the site forms. It is currently the plan to make complete data sets available to program participants and others on a quarterly basis. It is estimated that there may be as much as a 6-month lag initially.
- 3) As indicated, no resolution was made concerning long-term data analysis and management procedures, including various data summaries that may be desired in the future. It is the view of this committee that future data management protocols which are followed by the NADP should be compatible with those of other monitoring programs; specifically the MAP3S study, CANSAP, WMO, EPA, TVA, and NASA. At the suggestion of Don Pack, the committee recommended that a workshop be held with representatives from these programs. Don Pack will contact EPRI to determine their interest in supporting such a meeting. Jim Gibson was asked to see if such a meeting could be arranged.

#### Subcommittee 5.

Subcommittee 5 considered the development of effects research. It was generally agreed that there is urgency in putting together a report outlining the recommendations of National Atmospheric Deposition Program with respect to future effects work. The recommendations and plans formulated by this committee are summarized in the letter by John Skelly 11/29/78.

No participant list is available.