



Project Summary

Environmental Methods Testing Site Project: Data Management Procedures Plan

E. H. Barrows

The Environmental Methods Testing Site (EMTS) Data Management Procedures Plan identifies the computer hardware and software resources used in the EMTS project. It identifies the major software packages that are available for use by principal investigators for the analysis of data. It establishes standard methods for the transfer of data sets between the two principal operating locations. The procedures to add data to the EMTS data base, to extract data, and to generate reports are detailed. The responsibilities for the controlled, orderly and efficient use of the resources are delineated.

This Project Summary was developed by EPA's Environmental Monitoring Systems Laboratory, Research Triangle Park, NC, to announce key findings of the research project that is fully documented in a separate report of the same title (see Project Report ordering information at back).

Introduction

The purpose of the Environmental Methods Testing Site (EMTS) project is to advance the state of the art of assessing human exposure to environmental pollutants. Characterization of this site requires a well-managed computerized data base to store and efficiently retrieve data. The approach is to set up a single, well-characterized site, and then invite principal investigators to conduct relevant field studies at this site.

The EMTS Project has selected the Chattanooga Standard Metropolitan Statistical Area (SMSA) for this purpose. The SMSA contains the city of Chat-

tanooga, Tennessee and the six counties surrounding it.

The overall output goals of the EMTS project are to provide computer graphics and analysis and terminal views of data. These goals are met by providing a common data base for users, providing products that will assist users in the conduct and analysis of their studies, and providing products that will assist EPA in advancing methodologies for assessing human exposures.

Data Processing Configurations

The general flow of data in the EMTS will normally be directed from various originating sources into the NCC IBM 3090/200 computer at RTP for data collection and initial manipulations. These data will be stored in a relational data base environment using FOCUS, and from these data, customized subsets will be extracted for analysis and manipulations. Analysis resources of two principal types are available for the EMTS project: (1) statistical packages on the IBM mainframe may be used for analyzing tabular data sets, and (2) the Geographic Information System available on the DEC VAX 11/785 at the EMSL/LV facility may be used for analyzing spatial data sets. Data transmission resources include tapes and telecommunication facilities to move files between computer systems. Access methods available to the investigators to access the computer systems are discussed.

Responsibilities and Procedures

The EMTS Data Set Inventory System is a PC-based system maintained by the

ERC to provide an index of all data sets included in the EMTS data base. EMSL/RTP will process data sets and assist investigators in the statistical analysis of data. Selected data sets will be built by EMSL/RTP for transfer to EMSL/LV and entry into the GIS. The ARC/INFO system at EMSL/LV will be used to create spatial representations of data and to perform analysis of data.

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The complete report, entitled "Environmental Methods Testing Site Project: Data Management Procedures Plan," (Order No. PB 87-229 654/AS; Cost: \$11.95, subject to change) will be available only from:

*National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
Telephone: 703-487-4650*

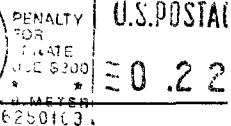
*The EPA Project Officers can be contacted at:
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