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Analytical Database Discussion Paper

Introduction:

It must be recognized that the analytical database will be only one segment of the larger database that will be required for verification of the CWC. The complete database available to the Technical Secretariat will encompass many functions which, though not required for analytical purposes, will be needed for reporting, auditing, accounting and similar administrative functions. We intend, in this paper, to consider only the requirements for chemical analysis to support verification; i.e., basic reference data, analytical methods, and the treatment of analytical results. We anticipate that even this segment of the total database will be complex since each of these functions will require a separate computer program, each with a different purpose, and to some extent different users and different sources of data. Many of the data handling tasks will have commonalities but the exact computer program for each function will probably be unique. User manuals and training programs for each functional area will be a necessity.

Types of Data

The types of data to be entered into the database will be of three general types: compound analytical reference data, analytical procedures, and the results of the analyses performed during inspections. Probably of most interest to date is the analytical reference data where several working papers have already been produced. The compounds to be entered into the database can be an almost infinite number. Therefore, we believe that criteria should be developed and agreed to place reasonable limits on this number. One approach would be to include only Schedule 1 compounds together with their precursors, degradation products and related derivatives. The data to be included for even this limited list become quite large and more stringent criteria might be necessary. Each compound should be precisely identified by CAS number. For at least the primary compounds, physical and chemical properties should be included and where available toxicity data by a standard method should be added.