

Use NEMI First: The National Environmental Methods Index as a Tool to Achieve Methods and Data Comparability

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Biographical Sketches

Herb Brass is the Analytical Methods Team Leader in the Office of Ground Water and Drinking Water at the USEPA and has over 25 years of experience in managing environmental methods and monitoring programs. He is also Co-Chair of the Methods and Data Comparability Board (MDCB) under whose auspices NEMI is being developed. **Katherine Alben** is a Research Scientist at New York State Dept. of Health and a faculty member in the Dept. of Environmental Health and Toxicology, State University of New York at Albany. For 25 years, she has contributed to development of analytical methods, primarily to assess water quality. She co-chairs the MDCB Biology Workgroup, which has helped to prepare biological methods for NEMI. **James Boiani** is an Environmental Chemist at DynCorp, and the Work Assignment Manager for NEMI under EPA's Sample Control Center (SCC) contract. Mr. Boiani specializes in the development of environmental monitoring methods and government regulations. **Larry Keith** chairs the NEMI workgroup and has over 35 years of experience with developing and using environmental methods. His current work involves developing an expert system for systematic planning with environmental monitoring and private consulting through Instant Reference Sources, Inc. **Dan Sullivan** is the lead developer of the NEMI database and website interface. A hydrologist with the USGS, he has over 17 years of experience in the fields of water quality and biology and associated databases. Mr. Sullivan is also the Associate Study Unit Chief for the Western Lake Michigan Drainages NAWQA Study Unit and the Webmaster for the Wisconsin District of the USGS. **Charlie Peters** manages the Multidisciplinary Water-Quality Assessment team in the USGS, Wisconsin District office, acts as the study unit chief for the Western Lake Michigan Drainages NAWQA study, and serves as co-chair of the National Methods and Data Comparability Board.

Abstract

The National Environmental Methods Index (NEMI) has been developed under the guidance of the Methods and Data Comparability Board (MDCB), an interagency collaborative panel whose mission is to coordinate and promote the use of comparable water quality monitoring methods for all water monitoring programs. NEMI is a web-based searchable compendium containing chemical, physical, radiochemical, and microbiological method summaries, that will be available to the general public in the summer of 2002. It allows the rapid communication and comparison of critical parameters of methods for use with methods selection and (or) methods modification and data comparability. NEMI contains over 35 data fields including analyte, instrumentation, media and matrices, interferences, sample handling, and method precision, accuracy, and relative cost. A summary for each method is given and, where available, hyperlinks to the full method and/or the method's source is provided. Users can search according to chemical, physical, or microbiological parameter, method, keywords, and meta data such as accuracy, precision, and detection level. The ability to search for available methods, to meet the data quality objectives of projects and programs, provides the user with a powerful, easy to use, planning tool not available previously. Future enhancements to NEMI will include the addition of biological and field methods and a front end user interface that will serve as an expert system. The capabilities and utility of the NEMI system will be explained during the presentation.