

## NEW FEATURES OF THE NATIONAL ENVIRONMENTAL METHODS INDEX

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### ABSTRACT

Selection of appropriate analytical methods is a critical part of planning for environmental monitoring projects; it also has a large impact on assessments of data comparability. Since 2002, thousands of scientists have used the National Environmental Methods Index (NEMI) (<http://www.nemi.gov>) to find, compare, and contrast methods for use in environmental monitoring efforts. The database has grown and now holds over a thousand methods and new features have been added that significantly improve its use for environmental monitoring.

Methods for biological population/community sampling, toxicity testing, field analysis (i.e., pH, conductance, alkalinity, etc), as well as water-collection methods are recent additions to NEMI. Keeping methods already in the database current is an ongoing process the NEMI developers hold as a high priority.

The addition of “greenness profiles” to many of the methods in NEMI is designed to aid laboratories in choosing the best method to meet both analytical and waste-management goals. Some methods actually contribute to environmental pollution; for example, methods that use mercury for preservation, use large amounts of chlorinated solvents for sample preparation, or that produce significant amounts of hazardous laboratory wastes. Greenness profiles are based on four criteria reviewed by a committee of environmental experts.

Drinking water and wastewater systems face a growing number of serious contamination threats as a result of natural disasters or intentional contamination. A new, restricted-access extension to NEMI, the National Environmental Methods Index for Chemical, Biological & Radiological methods (NEMI-CBR), will soon be available to enhance the industry’s ability to quickly and effectively respond to emergencies. A companion expert knowledge system, the CBR Advisor, provides information and advice for threat assessment, initial site evaluation, immediate actions, safe sampling, and selection of the best methods for identification and analysis.

### KEYWORDS

Monitoring, methods, chemical, water quality, database, environment, analytical methods