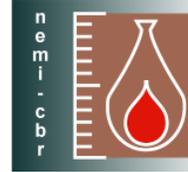


National Environmental Methods Index for Chemical, Biological, and Radiological Methods

NEMI-CBR



Drinking water and wastewater systems face a growing number of serious contamination threats as a result of natural disasters, and accidental or intentional contamination. In cases of actual or suspected contamination, identification and confirmation of the analytical method for a contaminant is important to effectively respond to an emergency. U.S. Environmental Protection Agency's (EPA's) Office of Ground Water and Drinking Water has overseen the development of two new tools to enhance the water sector's ability to quickly and effectively identify and analyze contaminants in public water and wastewater systems: the National Environmental Methods Index for Chemical, Biological, and Radiological Methods (NEMI-CBR) and a companion expert system, CBR Advisor.

NEMI-CBR – A Compendium of Methods for the Water Sector

NEMI-CBR is an extension of the National Environmental Methods Index (NEMI), a free, searchable clearinghouse of methods and procedures (located at <http://www.nemi.gov>) for both regulatory and non-regulatory monitoring purposes for water, sediments, air, and tissues. NEMI-CBR is a powerful tool that supports the contamination response capabilities of the water sector. Located at <http://www.epa.gov/nemicbr>, NEMI-CBR is a Web-based compendium that:



- Contains analytical methods for chemical, biological, and radiological contaminants that could pose a threat to public water or wastewater systems
- Enables users to search, summarize, compare costs and other features, and download (or link to) full analytical methods for:
 1. emergency response to an accidental or intentional contamination incident at a water or wastewater system
 2. regular monitoring to confirm target analytes and pathogens
- Includes all the information fields in NEMI, plus three additional fields needed to address emergency response: validation flags, rapidity ratings, and specificity ratings

Key Emergency Response Fields in NEMI-CBR

- **Validation Flags**
 - **Green Flag:** Indicates the method is included in EPA's Standardized Analytical Methods (SAM) compendium and has been validated
 - **Yellow Flag:** Indicates the method has been verified but has not been independently validated
 - **Green/Yellow Combination Flag:** Indicates the method is included in the SAM compendium but has not been validated for the specific analyte
 - **No Flag:** Indicates the method has been independently validated but is not in the SAM compendium

- **Rapidity Ratings:** Estimated time to perform an analysis and obtain data for interpretation after the sample has been received at the lab. Ratings range from rapid (<1 hour) to very slow (>8 hours).
- **Specificity Ratings:** A method is rated on its usefulness as a screening method (a screening method provides qualitative and/or quantitative results in 3 hours or less) or as a confirmatory method (a confirmatory method provides quantitative results with low false positive/negative rates with respect to the presence of the analyte).

CBR Advisor – A Companion to NEMI-CBR

The CBR Advisor is an expert system companion to NEMI-CBR that enables users to obtain advice in response to an incident and to access detailed information for planning and training purposes. The system quickly provides information on the analytical method to select for a particular contaminant.

Key Features of the CBR Advisor

- Contains modules from EPA’s Response Protocol Toolbox designed to help the water sector effectively and appropriately respond to a contamination incident or threat. The Advisor also has direct links to forms, such as chain of custody forms, which are useful for responding to an incident.
- Provides easy access to the following information via multiple entry points:
 - How to classify threat warnings
 - Initial threat evaluation and immediate response operations
 - Initial site characterization, evaluation, and entry
 - When and why screening methods might be used
 - How to collect, package, and ship samples of potentially hazardous materials
- Includes tabular reports that provide advice on recommended analytical methods for a particular contaminant (i.e., response versus confirmation/monitoring needs). From the reports page, there are links to analytical method summaries and copies of the full analytical methods.
- Uses dual-screen format – the left screen contains Questions and Answers (Q&A), while the right screen provides additional information, definitions, and links associated with each question.



Access to NEMI-CBR and CBR Advisor

Access to these password-protected tools will be granted to personnel from drinking water and wastewater utilities, State Primacy (primary enforcement) Agencies, Federal officials (including government laboratory personnel), and public health agencies. EPA is granting access to these individuals because they represent the primary organizations that will be involved in water contamination prevention and response. In addition, these groups have the necessary expertise to accurately interpret the data in the database. EPA may grant access to other types of users in the future, depending on the need.

To apply for access to NEMI-CBR, visit: <https://cdx.epa.gov/>. If you have already been granted access to NEMI-CBR, log in at: <https://cdx.epa.gov/SSL/cdx/login.asp>.

For More Information

For more information, please send an email to nemi@usgs.gov.