

Water Laboratory Alliance

A Drinking Water Utility Perspective

Overview The EPA Water Laboratory Alliance (WLA) provides the Water Sector, including drinking water utilities, with an integrated, nationwide network of laboratories. The WLA provides the capability to analyze water samples in the event of water supply contamination involving chemical, biological, or radiochemical (CBR) contaminants. The WLA focuses solely on water and is an integral part of the EPA's Environmental Response Laboratory Network (ERLN).



The WLA is composed of public health, environmental, and select commercial laboratories.

Benefits to Water Utilities

Water utilities that become members of the WLA will be provided with critical analytical support before, during, and after a potential contamination incident. The WLA affords many benefits to water utilities, such as:

- Improved preparedness for emergency response
- Improved communications with support laboratories to help address emerging analytical and logistical challenges

In addition, WLA members have priority access to:

- Emergency response exercises
- Water security-related training opportunities
- Laboratory support for contaminant analyses exceeding in-house capabilities or capacity
- Access to validated analytical methods for unregulated contaminants of concern to Water Sector utilities

WLA Launch & Membership

WLA launched the first phase of membership solicitation in Fall 2009. The WLA launch coincides with the second phase roll-out of the ERLN. During this phase, laboratories that are accepted as ERLN members and also are certified to analyze water samples will be considered for membership in the WLA. For more information on becoming an ERLN/WLA member please see <http://www.epa.gov/oamsrpod/ersc/ERLN2/index.htm>.

EPA Laboratory-Related Tools, Resources, & Projects

- **EPA Compendium of Environmental Testing Laboratories (CETL or Laboratory Compendium)**

The Laboratory Compendium (<http://epa.gov/compendium>) is a secure, Web-based tool that provides users, with real-time data related to laboratory contact, capability, and capacity information.

- **National Environmental Methods Index for Chemical, Biological & Radiological Methods (NEMI-CBR)**

NEMI-CBR (<http://cfpub.epa.gov/safewater/watersecurity/nemi-cbr.cfm>) is a secure Web-based tool that displays, summarizes, and allows easy comparison of methods for contaminants of concern. NEMI-CBR is an excellent resource for drinking water utilities, emergency responders, and laboratories and can be used for training, as well as facilitating the immediate rapid and comprehensive response required during a water contamination event.

WLA Response Plan (WLA-RP), Exercises, and Training

The WLA-Response Plan (WLA-RP) establishes a comprehensive, national laboratory response approach to water contamination events that covers a spectrum of activities including utility and laboratory preparedness, response, remediation, and recovery. In an effort to support Water Sector preparedness, the WLA and its partners conduct full-scale exercises (FSEs) that test emergency response procedures and provide opportunities to practice multi-regional coordination during large-scale incidents involving drinking water utilities.

FSEs generally include participants from:

- Drinking water utilities
- EPA Regions
- Centers for Disease Control and Prevention (CDC)
- Federal Bureau of Investigation (FBI)
- State public health and environmental laboratories
- First responders
- Law enforcement

These multi-regional FSEs allow participants to practice procedures to support incidents including initial response, communication and coordination, sampling and analysis strategies, actual sample analyses and data reporting.

In addition, EPA provides training to support utility and laboratory preparedness on an ongoing basis (e.g., Laboratory Chain of Custody and Evidence Preservation).

CONTACT US:

For additional information on the Water Laboratory Alliance, please contact **WLA@epa.gov** or see **<http://cfpub.epa.gov/safewater/watersecurity/wla.cfm>**.

• Water Contamination Information Tool (WCIT)

WCIT (<http://www.epa.gov/wcit>) is a password-protected online database with information on 93 CBR contaminants of concern that may pose serious threats if introduced into drinking water and wastewater systems. WCIT provides drinking water-specific data compiled in a single location that can be accessed and used by the Water Sector to plan for and respond to drinking water contamination incidents.

• Sampling Guidance for Unknown Contaminants in Drinking Water

The EPA Sampling Guidance document (<http://cfpub.epa.gov/safewater/watersecurity/wla.cfm>) provides utilities with comprehensive guidance that integrates sample collection, preservation, and transport procedures to support multiple analytical approaches for the detection and identification of potential contaminants in drinking water.

• Large Volume Sample Concentration for Select Biological Agent and Toxin Analyses

The WLA currently relies on CDC's Laboratory Response Network (LRN) for concentration and analysis of select agents and toxins from large volumes (10-100 liters) of drinking water using an LRN ultrafiltration protocol, which requires transport of large-volume samples from the utility to the laboratory. EPA and CDC are developing Quality Control (QC) criteria for the ultrafiltration portion of this LRN protocol. These criteria will enhance capacity for select agent and toxin analyses in water and help ensure the Water Sector's ability to respond to potential drinking water contamination events.

In addition, EPA's National Homeland Security Research Center (NHSRC) and CDC are evaluating a field-portable ultrafiltration device to assist utilities in on-site sample concentration, which will permit transport of small volume retentates (1 liter or less) for laboratory analyses.