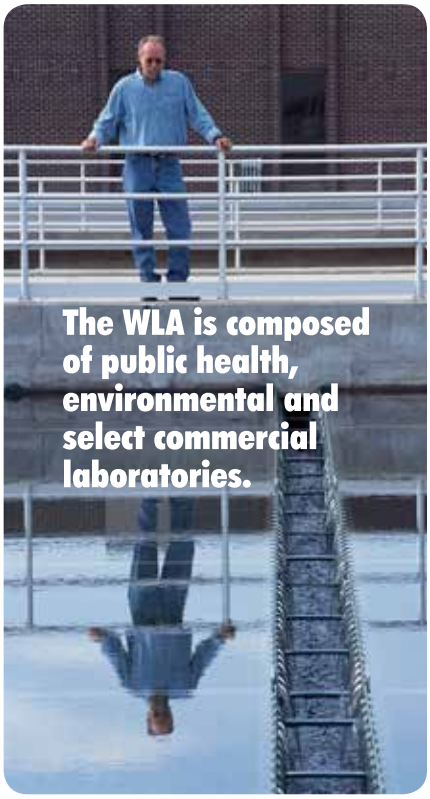
United States Environmental Protection Agency

Water Laboratory Alliance

A Utility Perspective

Overview

U.S. Environmental Protection Agency (EPA) launched the Water Laboratory Alliance (WLA) in 2009. The WLA provides the Water Sector, including drinking water and wastewater utilities, with an integrated nationwide network of laboratories. The WLA is comprised of public health, environmental and commercial laboratories that can respond to natural, intentional or unintentional water contamination incidents. These laboratories have the capability and capacity to analyze water samples involving chemical, biological or radiochemical contaminants. The WLA is an integral part of EPA's Environmental Response Laboratory Network (ERLN). As part of the ERLN, the WLA serves as the water component of this "all hazards" network that covers all environmental matrices of concern. In addition, EPA's WLA Team provides tools, resources and best practices that help facilitate successful and timely incident response.



Benefits to Water Utilities

Water utilities that take advantage of WLA resources gain valuable avenues to enhance preparedness. These resources increase knowledge on how to identify laboratories that can provide analytical support before, during and after water contamination incidents. In addition, the WLA provides many benefits to water utilities:

- Enhanced preparedness for emergency response.
- Improved communications with laboratories, state and municipal agencies and reporting authorities.
- Opportunity to participate in emergency response exercises.
- Water security-related training opportunities with a focus on Water Sector best practices and lessons learned.
- Access to water-security related tools and resources that will help facilitate response to water contamination incidents.

Water Laboratory Alliance Response Plan (WLA-RP)

The WLA-RP establishes a comprehensive, national response approach to water contamination incidents requiring analytical support. The plan includes information on preparedness, response, remediation and recovery. Specifically, the WLA-RP addresses incidents that, due to their suspected cause or size, may require more analytical support than a single laboratory can provide. The WLA-RP shares best practices with utilities and laboratories for a systematic, coordinated response to a water contamination incident. The best practices contained in the WLA-RP can be used

EPA Water Security-Related Tools and Resources

EPA Compendium of Environmental Testing Laboratories (Laboratory Compendium)

EPA's Laboratory Compendium is a secure, Web-based tool that helps utilities and other users identify laboratory support. The Laboratory Compendium provides real-time data related to laboratory contact, capability and capacity information. This resource is intended to assist EPA; state, local and federal emergency response; and water utility personnel in responding to contamination threats. A brief application must be completed in order to access this tool. **https://cfext.epa.gov/cetl**

Water Contamination Information Tool (WCIT)

WCIT is a secure online database with methods for more than 800 analytes. The database includes detailed profiles for over 100 chemical, biological and radiochemical

in conjunction with existing Incident Command System (ICS) structures. In addition, key principles of the WLA-RP can be applied to responses that only involve a single laboratory. The WLA-RP can be accessed at **http://www2.epa.gov/waterlabnetwork/water-laboratory-alliance-response-plan**.

Analytical Preparedness Full-Scale Exercises (AP-FSEs)

In an effort to support Water Sector preparedness, EPA's WLA Team conducts utility-led AP-FSEs on an ongoing basis. These exercises enable utilities and other participants to practice coordinated response to a major environmental and public health incident. AP-FSEs have involved a wide spectrum of participants including:

- EPA regional, state environmental and public health, municipal, utility and commercial laboratories.
- Emergency response personnel.
- Partnering federal, state and municipal agencies.

The goal of these exercises is to establish a learning environment in which participants:

- Gain experience with response best practices from the WLA-RP.
- Improve both internal and external communications.
- Interact with others to address a mock water contamination incident.

These exercises allow the coordinating utility to:

- Identify and coordinate analytical support.
- Work with state and municipal agencies and reporting authorities (e.g., department of environmental quality, state drinking water authority, public health department).
- Establish relationships and a framework that can be used during a real incident.

WLA Training Center

The WLA Training Center was developed to familiarize WLA Member laboratories, utilities, and other stakeholders with Water Sector best practices. Courses cover topics such as emergency response, analytical methods, sample handling and data reporting. The WLA Training Center helps ensure that stakeholders can take advantage of WLA benefits, and operate effectively during a response. The curriculum utilizes enhanced computer-based training, including webcasts and online modules when in-person training is not an option. Many courses are self-administered and can be accessed at any time via the WLA Training Center website at **http://www2.epa.gov/waterlabnetwork/water-laboratory-alliance-training-center**.

EPA Water Security-Related Tools and Resources *continued from page 1*

contaminants of concern for the Water Sector. WCIT allows users to compare and contrast the performance, speed and relative cost of analytical methods for response to incidents. This tool compiles drinking water- and wastewater-specific data in a single location. As such, WCIT helps utilities and laboratories plan for and respond to water contamination incidents. WCIT functionality and data were shaped and validated by water utility professionals, scientists and public health experts. For more information and to sign-up for WCIT, visit **http://www2.epa.gov/waterdata/water-contaminant-information-tool-wcit**.

Sampling Guidance for Unknown Contaminants in Drinking Water

This document provides comprehensive guidance that integrates recommendations for biological, chemical and radiochemical sample collection, preservation and transport procedures. This guidance enables utilities to collect samples that will support multiple analytical approaches for the detection and identification of contaminants in drinking water. **http://www2.epa.gov/waterlabnetwork/sampling-guidance-unknown-contaminants-drinking-water**

Containment and Disposal of Large Amounts of Water: A Support Guide for Water Utilities **(Disposal Guide)**

The Disposal Guide serves as a reference to assist utility actions related to containment, treatment or disposal of large amounts of water from a contamination incident. It contains decision-making flowcharts, as well as information on nearly 70 contaminants of concern to the Water Sector. To view the guide, visit **http://www2.epa.gov/waterutilityresponse/containment-and-disposal-large-amounts-contaminated-water**.

For additional information on the WLA, contact the WLA Helpline at 703-461-2400 or **WLA@epa.gov**, or visit the WLA homepage at **http://www2.epa.gov/waterlabnetwork**.