

Strengthening Collaboration and Coordination for Effective Water Contamination Incident Support

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Environmental Measurement Symposium



Water Infrastructure &
Cyber Resilience Division

Water Infrastructure & Cyber Resilience Division (WICRD)

- **Risk Management Agency For Water Sector**





Creation of Water Laboratory Alliance

Homeland Security Presidential Directive 9 (HSPD-9), directs the EPA to:

"...develop nationwide laboratory networks for . . . water quality that integrate existing Federal and State laboratory resources, are interconnected, and utilize standardized diagnostic protocols and procedures."



WLA's Connection to ICLN

Integrated Consortium of Laboratory Networks (ICLN)

NAHLN

National
Animal
Health
Laboratory
Network

DLN

DoD
Laboratory
Network

LRN

Laboratory
Response
Network

ERLN

Environmental
Response
Laboratory
Network

Vet-LIRN

Veterinary
Laboratory
Investigation
& Response
Network

NPDN

National
Plant
Diagnostic
Network

FERN

Food
Emergency
Response
Network

**Water
Laboratory
Alliance**



WLA Benefits

WLA is a program that helps the Water Sector figure out what's in their water and how to be ready to deal with it. Efforts include:



WLA Training Center

WLA Security Summits



Sampling Guidance



Laboratory Compendium



Analytical Preparedness Full-Scale Exercise (AP-FSE) Toolkit



Water Contaminant Information Tool (WCIT)

Analytical Preparedness Self-Assessment (APS)



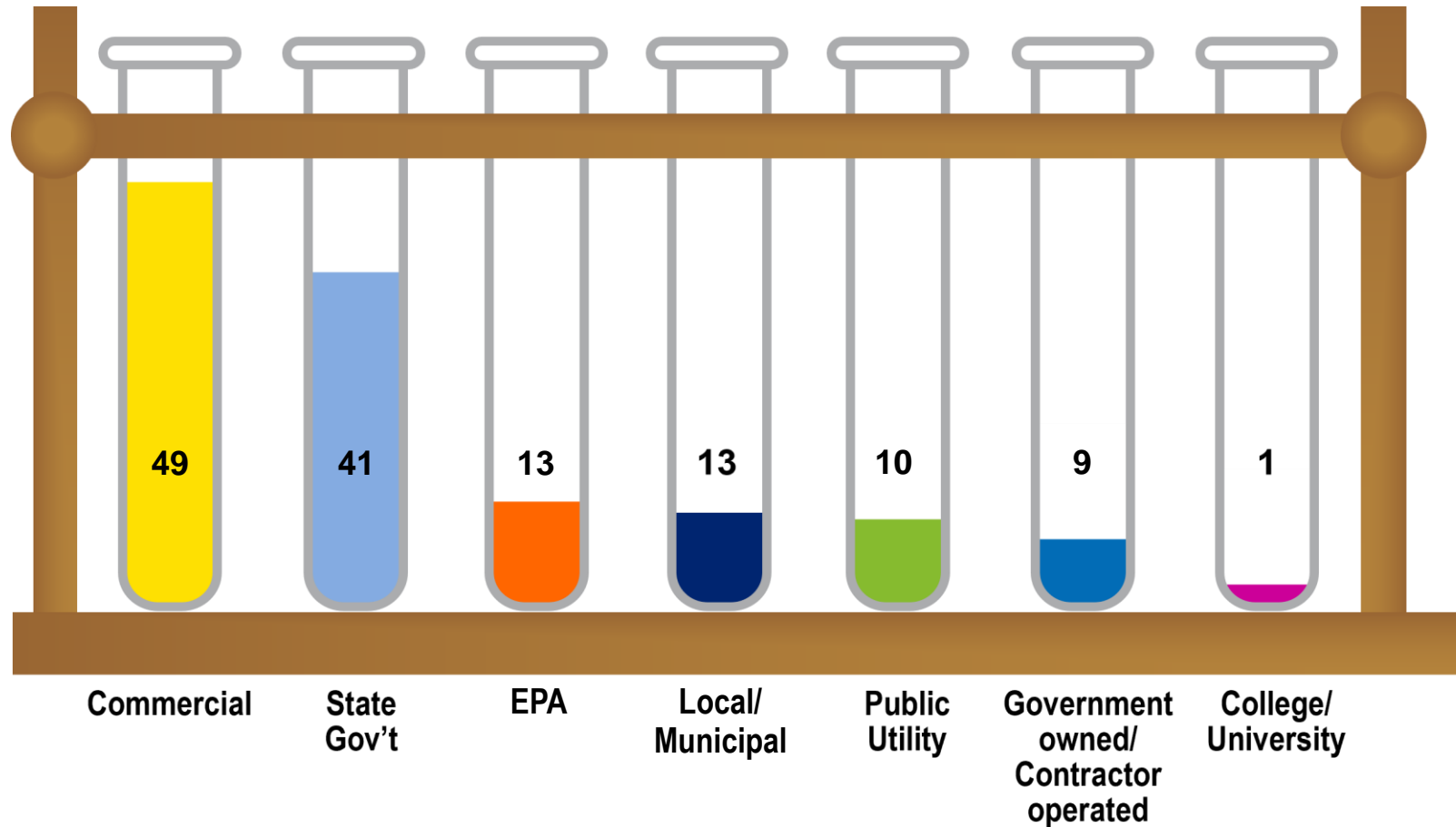
Association of Public Health Laboratories (APHL) Partnership



Accessing Laboratory Support



WLA Laboratory Members

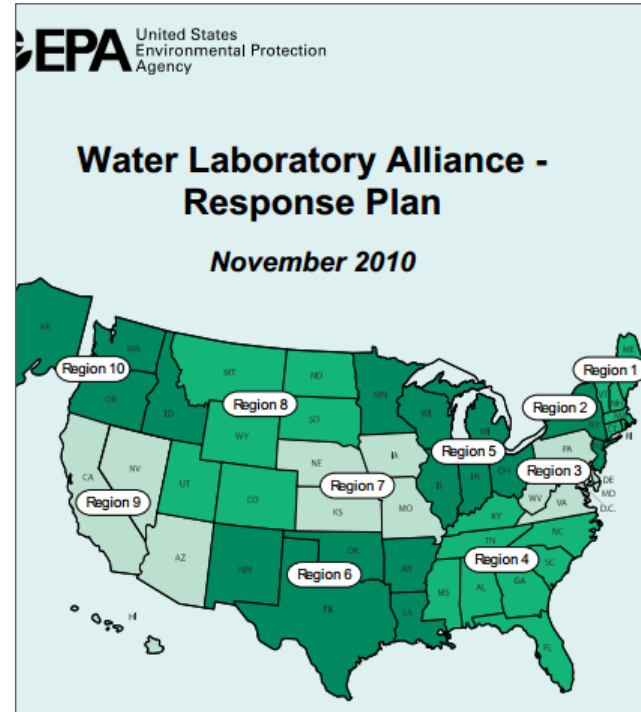


Total Members: 137



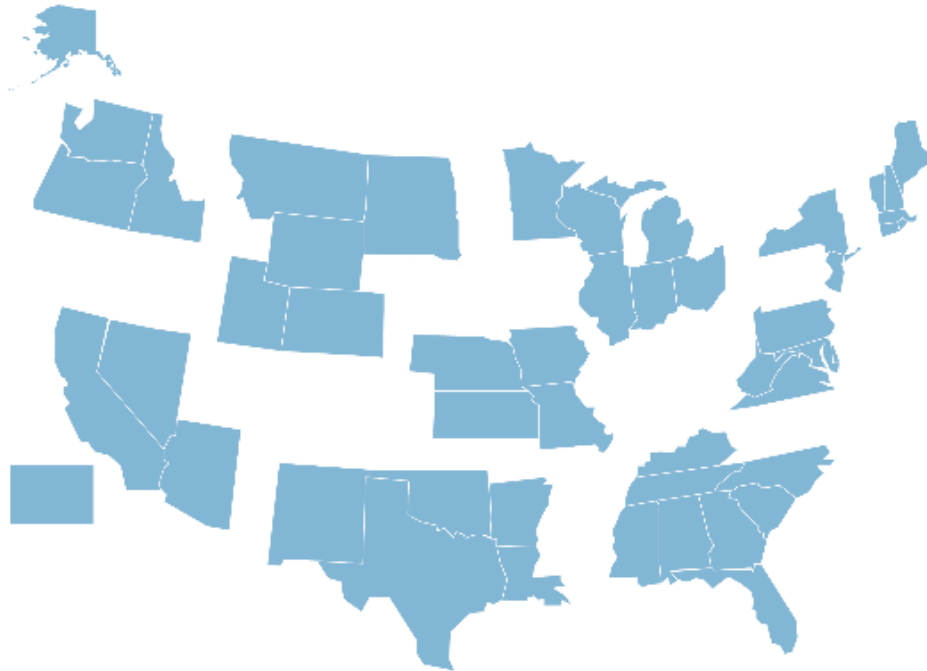
WLA Resource Areas

- Emergency Preparedness Activities
- Laboratory Support
- Contaminant Sampling & Analysis

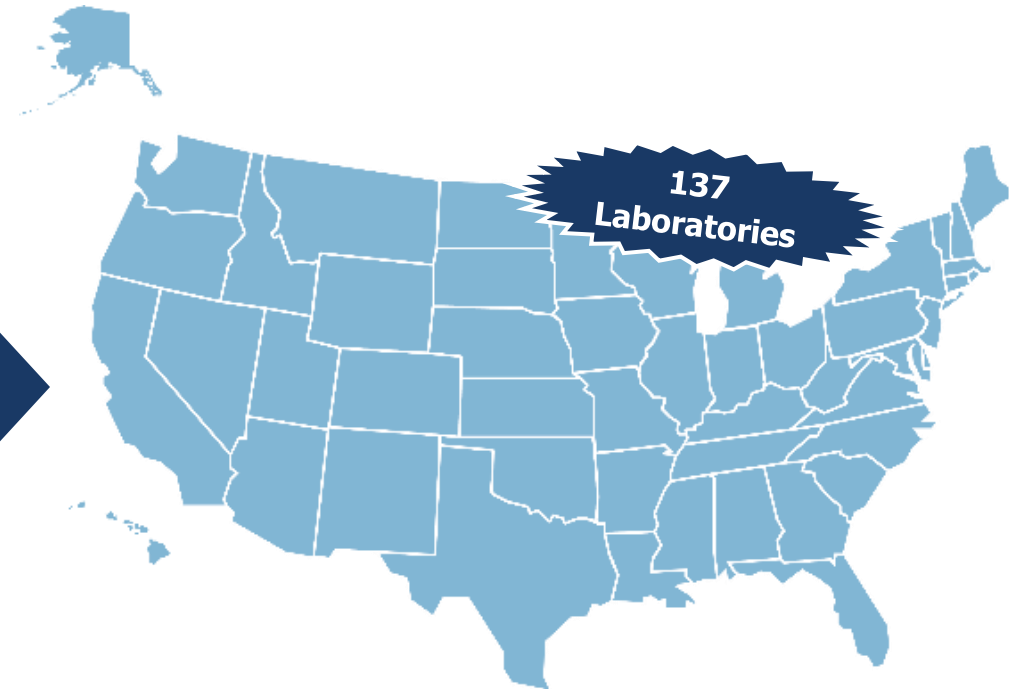




WLA Response Plan (WLA-RP)



11 Regional Plans
(A plan for each EPA region,
and a Hawaii-specific plan)




National WLA Response Plan
(WLA-RP)



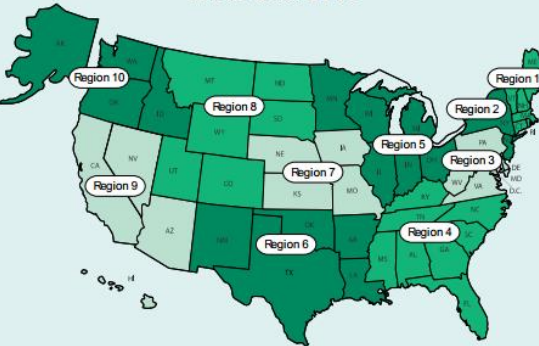
WLA Response Plan (WLA-RP)

- Establishes a comprehensive, **national approach to laboratory response** to intentional or unintentional water contamination incidents
- Can be used to coordinate laboratory response for multi-regional and smaller scale incidents
- Provides guidance on communication, sample analyses and data reporting issues

 United States Environmental Protection Agency

Water Laboratory Alliance - Response Plan

November 2010



Analytical Support during an

Analytical Services Requester (ASR) and the Analytical or the Primary Responding Laboratory. The Laboratory should use this help information should be recorded in a logbook or notebook as that follow.

Information

Information

Service Requesters

Chain of Custody Requirements

Sample Shipments

Data Reporting and Records Retention

Data validation (preliminary or full validation)
 Turn around time
Review/Confirm sample volume, container and preservation requirements with requester.

CHAIN OF CUSTODY REQUIREMENTS

Determine requirements for chain of custody:

Routine chain of custody or law enforcement sensitive?
 Internal chain of custody required (if law enforcement sensitive)?
 Other special conditions or instructions

SAMPLE SHIPMENTS

Inform the requestor of the laboratory's shipping address and record the following:

Transport method
 Tracking numbers (if applicable)
 Arrival date/time at laboratory
 Other special conditions/instructions

DATA REPORTING AND RECORDS RETENTION

Collaborative Contamination Incident Planning & Response

How can you enhance your emergency response procedures?



Water Infrastructure &
Cyber Resilience Division



Analytical Preparedness Full-Scale Exercise Toolkit

- Comprehensive guide that stakeholders can use to develop and lead their own tabletop or full-scale exercises
- Includes complete documentation for two sample scenarios (chemical, biological threat)
- Includes customizable forms, checklists, etc.
- Flexible and scalable





Analytical Preparedness Full-Scale Exercises

- Two separate AP FSEs, taking place this month
- Utilities, laboratories, and response partners collaborating in a week-long exercise
- Partnering organizations will:
 - Identify gaps in their emergency response plans
 - Incorporate EPA tools in their plans and operating procedures
 - Build relationships within their organization & between utilities, labs, and response partners





Water Contamination Incident Remediation Plan (WaterCIRP)

- EPA developed the WaterCIRP to advise remedial action
- Intended audience is water utilities and other emergency response personnel
- Developed in collaboration with water sector stakeholders
 - Functional exercise to test value and applicability
- Gives examples, possible considerations, and resources to learn more



Water Contamination Incident Remediation Plan (WaterCIRP)

Guide and Template for Drinking Water and Wastewater Utilities

[Department/Agency Name]

[Department/Agency Address (Street, City, State, Zip Code)]

Office of Water (4608T) EPA 810-F-23-025 October 2023

Accessing Laboratory Support

When analytical needs exceed the norm, finding support from additional sources is key for effective incident response





Identifying Analytical Support: An Interactive Guide

Office of Water (4608-T) EPA 810-B-17-002 | June 2017

ACCESSING LABORATORY SUPPORT

A WLA INTERACTIVE TRAINING RESOURCE

U. S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
ENVIRONMENTAL RESPONSE LABORATORY NETWORK (ERLN)
WATER LABORATORY ALLIANCE (WLA) |

BEGIN

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
ENVIRONMENTAL RESPONSE LABORATORY NETWORK (ERLN)
WATER LABORATORY ALLIANCE (WLA) |

WLA Resource for Accessing Laboratory Support

This WLA resource can be used to identify analytical support through five routes.

The **Water Laboratory Alliance (WLA)** provides the analytical capability and capacity to respond to incidents involving chemical, biological or radiochemical contaminants.

Scenarios requiring analytical support could include when a laboratory does not have the capability to analyze an unregulated contaminant, a laboratory does not have the capacity to analyze a large number of samples, or an analyst or instrument is unavailable.

Key Resources

[WLA Web Page & WLA Training Center](#)
[WLA Response Plan \(WLA-RP\)](#)

When negotiating terms for analytical support, or providing situational updates during a response, use Appendix C in the Appendix forms (Word file) found at the [WLA-RP Web Page](#).

Local Laboratories	Check with local laboratories The Analytical Services Requester and laboratories can negotiate terms including payment, number of samples and data reporting.	
State Resources	Check with state agency, laboratory or your state Water/Wastewater Agency Response Network (WARN) WARN: What is WARN? Find your WARN State Laboratories: Points of Contact	
Laboratory Compendium	Search the Laboratory Compendium Register for and access the Compendium .	
EPA Regional Laboratory	Contact your EPA Regional Laboratory EPA Regional Laboratories maintain relationships with laboratories throughout their respective states. EPA Regional Contact Information	
EPA Headquarters	Contact EPA Headquarters WLA@epa.gov or ERLNHelpdesk@csra.com ERLN/WLA Helpline (703) 461-2400 Available Monday-Friday from 8:30 AM-5:00 PM ET (except federal holidays) Outside of business hours: Emergency Operations Center (EOC) (202) 564-3850	

Office of Water (4608-T) EPA 810-F-15-004 June 2016



Accessing Laboratory Support Steps

Local Laboratories	Check with local laboratories The Analytical Services Requester and laboratories can negotiate terms including payment, number of samples and data reporting.	
State Resources	Check with state agency, laboratory or your state Water/Wastewater Agency Response Network (WARN) WARN: What is WARN? State Laboratories: Points of Contact	
Laboratory Compendium	Search the Laboratory Compendium Register for and access the Compendium .	
EPA Regional Laboratory	Contact your EPA Regional Laboratory EPA Regional Laboratories maintain relationships with laboratories throughout their respective states. EPA Regional Contact Information	
EPA Headquarters	Contact EPA Headquarters WLA@epa.gov or ERLNHelpdesk@csra.com ERLN/WLA Helpline (703) 461-2400 Available Monday-Friday from 8:30 AM-5:00 PM ET (except federal holidays) Outside of business hours: Emergency Operations Center (EOC) (202) 564-3850	




Identifying Analytical Support: Laboratory Compendium

EPALABCOMPENDIUM logout | help

[home](#) | [search by location](#) | [search](#) | [manage](#) | [glossary](#)

[EPA Home](#) > [EPA's Compendium of Environmental Testing Laboratories](#) > [Home](#)



EPA's Compendium of Environmental Testing Laboratories

Welcome to the EPA's Compendium of Testing Laboratories (Laboratory Compendium). The Laboratory Compendium is a secure web-based network which identifies laboratories with the capability and capacity to analyze chemical, biological, and radiochemical agents. This network has been established to provide emergency responders with an efficient mechanism to obtain essential laboratory capability and capacity information during emergency situations, such as response to acts of terrorism.

Laboratory Compendium network includes the following features:

- Provides the most relevant and up-to-date information available to Laboratory Compendium users.
- Users can perform customized searches for laboratories based on various criteria, including type of laboratory, state, region, matrix, analytical capabilities, support services and special sample handling capabilities. Customizable searches provide the user with access to complete laboratory profiles.
- Full access to the Laboratory Compendium is available to EPA, state/local and federal emergency response and laboratory personnel. Limited access is available to water utilities.

The Laboratory Compendium provides the necessary laboratory support for emergency response efforts.

[top ▲](#)

[Standardized Analytical Methods for Environmental Restoration following Homeland Security Events](#)

[EPA's Water Infrastructure Security Web Page](#)

[Response Protocol Toolbox: Planning for and Responding to Contamination Threats to Drinking Water Systems](#)

[National Environmental Method Index for Chemical, Biological, and Radiological Methods](#)



Identifying Analytical Support: Laboratory Compendium

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home | search by location | search | manage | glossary

EPA Home > EPA's Compendium of Environmental Testing Laboratories > Home

EPA's Compendium of

Welcome to the EPA's Compendium of Environmental Testing Laboratories. The Compendium is a secure web-based system that provides a central location for laboratory information to analyze chemical, biological, and radiological hazards. It is designed for use by emergency responders with information during emergency response.

Laboratory Compendium provides:

- Provides the most relevant laboratory information
- Users can perform complex searches by laboratory, state, region, and handling capabilities. Profiles are available for each laboratory.
- Full access to the Laboratory Compendium for emergency response and laboratory information.

The Laboratory Compendium is a secure web-based system that provides a central location for laboratory information to analyze chemical, biological, and radiological hazards. It is designed for use by emergency responders with information during emergency response.

Standardized Analytical Methods for Environmental Restoration following Homeland Security Events

EPA's Water Infrastructure Security Web Page

Response Protocol Toolbox: Planning for and Responding to Contamination Threats to Drinking Water Systems

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

EPALABCOMPENDIUM

NEW RELEASE: Version 2.2.2 is now available! For information on modifications and new features please [click here](#).

User Name

Password

Login Register

Forgot Password?

Please enter your User Name and Password and click Login to enter the system. Click Register to request access to the Lab Compendium. Please note that EPA must verify your information and assign you access rights before the search module will be available.

WARNING:

It is a criminal offense to:

- Obtain access to data without authority
- Damage, delete, alter or insert data without authority

You are not authorized to access this system unless you have registered and signed our Terms of Use Agreement. If you have not signed our Terms of Use Agreement your access is unauthorized and you must exit this system immediately.

New Users: Access Lab Compendium's [Getting Started Guide](#) for information on how to register. For assistance, please contact the help desk at (703) 461-2400 or ERLNLHelpDesk@csra.com. To contact EPA directly, please call Ahmed Hafez at [(202) 564-1944] or hafez.ahmed@epa.gov or Lawrence Kaelin [(732) 321-6625] or kaelin.lawrence@epa.gov.



Identifying Analytical Support: Laboratory Compendium

EPALABCOMPENDIUM logout | help

home | search by location | search | manage | glossary

EPA Home > EPA's Compendium of Environmental Testing Laboratories > Search > Search Results


Search Results (General Information)

Searched the EPA Lab Compendium for:

- Region: Region 1
- ERLN Member: Y
- WLA Member: Y
- Matrix: Drinking Water
- Analytical Capabilities: Semivolatile Organic Compounds

Results 1 - 5 of 5 are displayed below. [REFINE SEARCH](#)

This page provides you with a list of laboratories and some of their general information, based on the parameters you provided in your search. On this screen you may:

- Click on a laboratory's name for full details about that laboratory (clicking on the  icon will open the details report in a new window);
- You may print your results using the print button below;
- Run reports on selected laboratories (see the box to the right); and
- Sort information by clicking on column headers.

You may also view contact information for these laboratories your search returned by clicking on the "Contact Information" tab below.


Reports

Select the Laboratories you wish to include in your report by clicking the checkbox to the left of the Laboratory name from the table below. Once you have selected all desired labs, click the report you wish to access from below.

[Laboratory Details](#) - View detailed reports for selected laboratories.

[Selected Details](#) - Choose which details you wish to view for the selected laboratories.

[Compare Agent Capabilities](#) - View a list of agent capabilities for the selected laboratories.

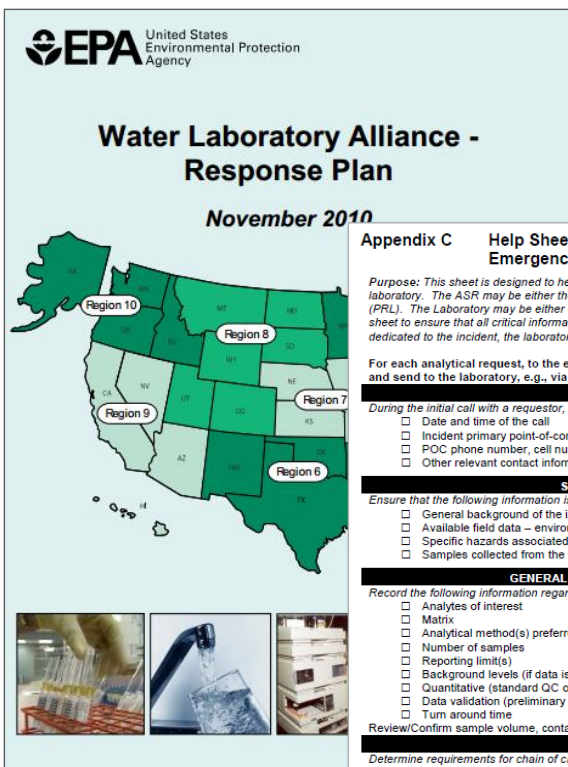
General Information | **Contact Information**  [Print](#)

◀ ◀ Displaying 1 - 5 of 5 records ▶ ▶

Select	Laboratory Name	City	State	MobileLab	ERLNMember
<input type="checkbox"/>	Connecticut Department of Energy and Environmental Protection, Mobile Analytical Laboratory	Windsor	CT	Y	Y
<input type="checkbox"/>	Connecticut Department of Public Health Laboratory	Rocky Hill	CT		Y
<input type="checkbox"/>	Rhode Island State Health Laboratories	Providence	RI		Y



Other Laboratory Support Resources



Appendix C Help Sheet for Requesting Analytical Support during Emergency Response

Purpose: This sheet is designed to help discussions between the Analytical Services Requester and the laboratory. The ASR may be either the Incident Commander/representative or the Primary Responder (PRL). The Laboratory may be either the PRL or a Mutual Support Laboratory. The Laboratory sheet to ensure that all critical information is exchanged. The information should be recorded in a dedicated to the incident, the laboratory's standard forms, or the forms that follow.

For each analytical request, to the extent practical, the ASR should record any information and send to the laboratory, e.g., via fax, e-mail, etc.

COMMUNICATION INFORMATION

During the initial call with a requestor, record the following information:

- Date and time of the call
- Incident primary point-of-contact (POC)
- POC phone number, cell number, fax number, and email address
- Other relevant contact information

SITE CHARACTERIZATION INFORMATION

Ensure that the following information is documented with the sample paperwork shipped to the laboratory:

- General background of the incident
- Available field data – environmental and clinical
- Specific hazards associated with the site
- Samples collected from the site

GENERAL INFORMATION FOR LAB SERVICE REQUESTERS

Record the following information regarding the analytical request:

- Analytes of interest
- Matrix
- Analytical method(s) preferred
- Number of samples
- Reporting limit(s)
- Background levels (if data is available)
- Quantitative (standard QC or reduced QC) or semi-quantitative/screening (estimated)
- Data validation (preliminary or full validation)
- Turn around time

Review/Confirm sample volume, container and preservation requirements with requestor.

CHAIN OF CUSTODY REQUIREMENTS

Determine requirements for chain of custody:

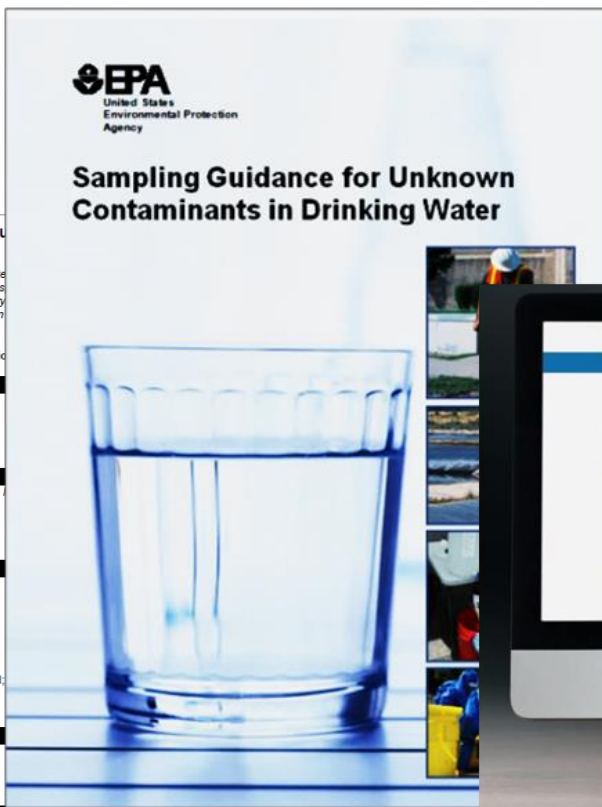
- Routine chain of custody or law enforcement sensitive?
- Internal chain of custody required (if law enforcement sensitive)?
- Other special conditions or instructions

SAMPLE SHIPMENTS

Inform the requestor of the laboratory's shipping address and record the following:

- Transport method
- Tracking numbers (if applicable)
- Arrival date/time at laboratory
- Other special conditions/instructions

DATA REPORTING AND RECORDS RETENTION



Collecting Contaminant Information

How can you proactively research water contaminants?



Water Infrastructure &
Cyber Resilience Division



Water Contaminant Information Tool (WCIT)

WCIT is EPA's secure, online database containing information on contaminants of concern to drinking water and wastewater systems

- Initially developed from the perspective of intentional incidents
- Updated to take on an all-hazards approach (intentional, unintentional, and natural events)
- Developed in collaboration with utilities, labs, academia, and more





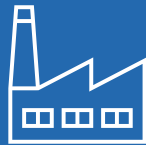
WCIT Content

Contains information on nearly 800 contaminants of concern to the Water Sector

Types of Contaminants



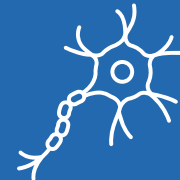
Pathogens



**Toxic industrial
chemicals**



**Chemical
warfare agents**



Toxins

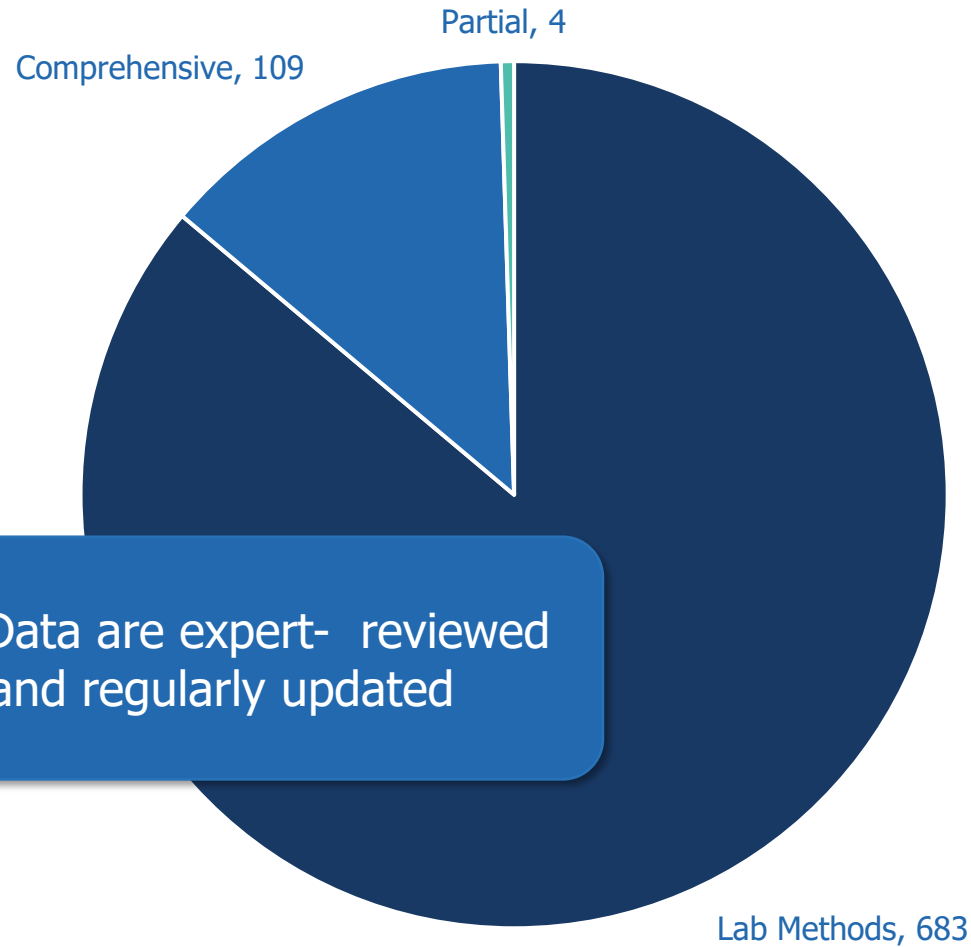


Pesticides



**Radio-
chemicals**

Contaminant Profiles



Data are expert-reviewed and regularly updated

Profile Topics

- General Information
- Contaminant Summary
- Other Names/Forms
- Physical Properties
- Availability
- Fate and Transport
- Medical Information
- Toxicity Information
- Laboratory Methods and Field Tests
- Drinking Water Treatment
- Water Quality Indications
- Environmental Indicators
- Wastewater Treatment
- Infrastructure Decontamination



How can the Water Sector use WCIT?

Remediation

- Emergency drills
- Tabletop exercises
- Full-scale exercises



Preparedness

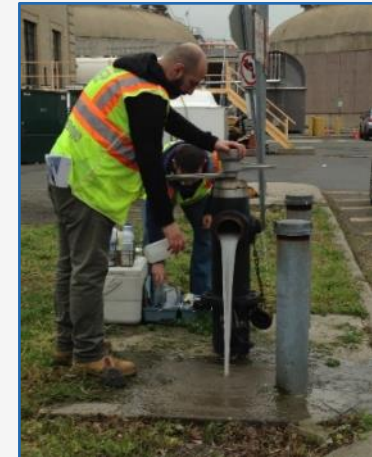
- Characterize contaminant
- Extent of contamination
- Field and Laboratory Methods
- Public Information
- Clearance Goals

Characterization

- Drinking Water Treatment
- Wastewater Treatment
- Infrastructure Decontamination

Clean Up

- Monitoring



Recovery

Takeaways

- EPA's WLA is built on a foundation of collaboration and strong partnerships
- Our resources and tools improve collaboration and promote communication and preparedness
- Emergency preparedness is a constant process
- Next Analytical Preparedness Tabletop Exercise will be September 5, 2024 at 1:00 PM Eastern / 10:00 AM Pacific

ACTION ITEMS:

Complete the Analytical Preparedness-Self Assessment

Consider participating in a future Tabletop Exercise or AP FSE



Our Resources



Contact Information

For more information on the WLA, please contact:



General Email: WLA@epa.gov

Latisha Mapp

WLA Team Leader
Office of Ground Water and Drinking Water
Phone: (202) 564-1930
Email: mapp.latisha@epa.gov

Peter Roumeliotis

ORISE Fellow
Office of Ground Water and Drinking Water
Phone: (202) 564-1991
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