



Water Laboratory Alliance (WLA): Enhancing Water Sector Preparedness

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U.S. EPA Water Security Division

April 30, 2019

Agenda

- Emergency Response Laboratory Network (ERLN)
- WLA Background & Implementation
- WLA: Enhancing Water Sector Preparedness
- WLA Response Plan (WLA-RP)
- WLA Plans for 2019
- How can WLA Benefit Monterey County?





Environmental Response Laboratory Network (ERLN)

Ahmed Hafez, Ph.D.

Field Operations Branch

CBRN Consequence Management Advisory Division

What is the Environmental Response Laboratory Network (ERLN)?



- A comprehensive, all-hazard/all environmental media laboratory network for chemical (including CWA), biological, and radiological contaminants supporting the needs of the response community
- Allows for day-to-day use supporting incidents of any scale during preparedness, response and remediation
- Provides a network of laboratories with known quality



Why Laboratory Networks?



- Laboratory networks increase consistency, provide diverse capability and expand analytical capacity
- Through planning, networks can provide laboratory surge capacity support and help define key process steps for information exchange and data sharing during an incident
- ERLN's National Role
 - Environmental
 - Drinking Water



Laboratory Support to Response Phases

	Monitoring/ Surveillance	Incident Response	Remediation	Forensics
Human Clinical	HHS	HHS	HHS	FBI
Environmental	EPA	EPA	EPA	FBI
Food	USDA/ HHS	USDA/ HHS	USDA/ HHS	FBI
Animal	USDA	USDA	USDA	FBI
Plant	USDA	USDA	USDA	FBI
Drinking Water	EPA	EPA	EPA	FBI

ERLN Plans for FY19-FY20



- Summarize and report FY19-FY20 ERLN requests and utilize this report-out to member laboratories as a reminder to update Lab Compendium information
- Identify member laboratories that are interested in participating in an exercise of our new web-based data assessment and management tool EXES (Electronic Data Exchange & Evaluation System)
 - EPA will assist volunteer laboratories in producing compliant staged electronic data deliverables (SEDD) files
 - Laboratories without the capability of generating SEDD files can use the SEDDSpread tool and manually create a SEDD file from existing data

ERLN Questions/Comments?



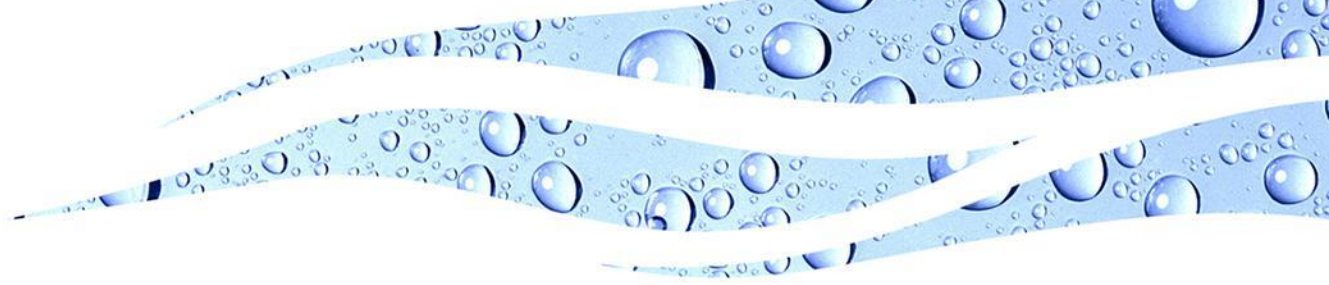
To find out more about the ERLN/WLA application process, go to:
<https://www.epa.gov/emergency-response/who-should-join-environmental-response-laboratory-network>

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WLA Background & Implementation

Authority

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”
 - EPA Response:
Water Laboratory Alliance



Integrated Consortium of Laboratory Networks

Integrated Consortium

Networks (ICLN)

NAHLN

National
Animal
Health
Laboratory
Network

DLN

DoD
Laboratory
Network

LRN

Laboratory
Response
Network

**Water
Laboratory
Alliance**

IRN

Primary
Laboratory
Investigation
Response
Network

NPDN

National
Plant
Diagnostic
Network

FERN

Food
Emergency
Response
Network

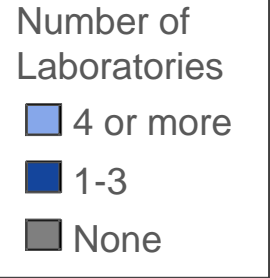
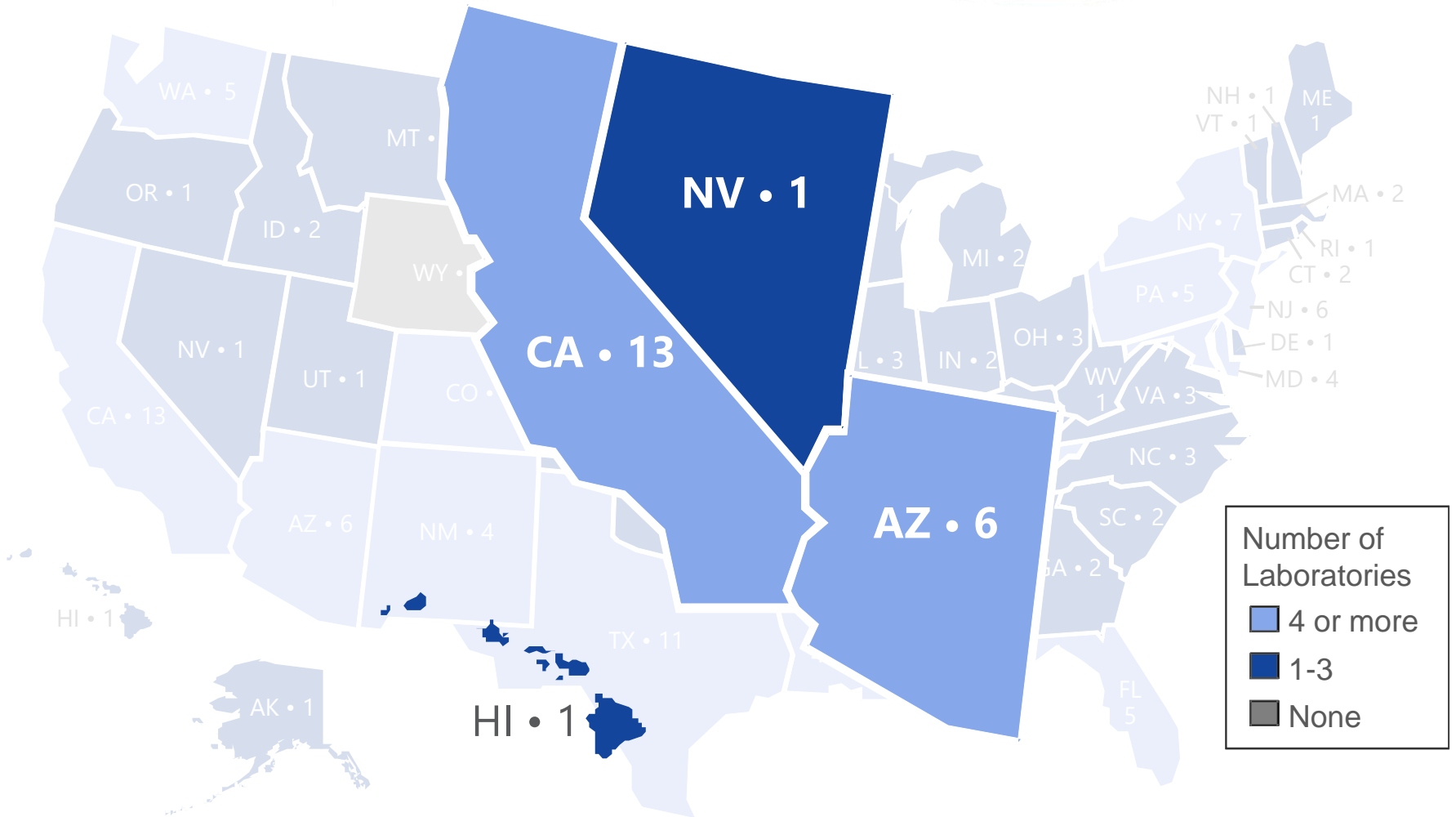
WLA Current Status

WLA Member laboratories fall into a number of categories:



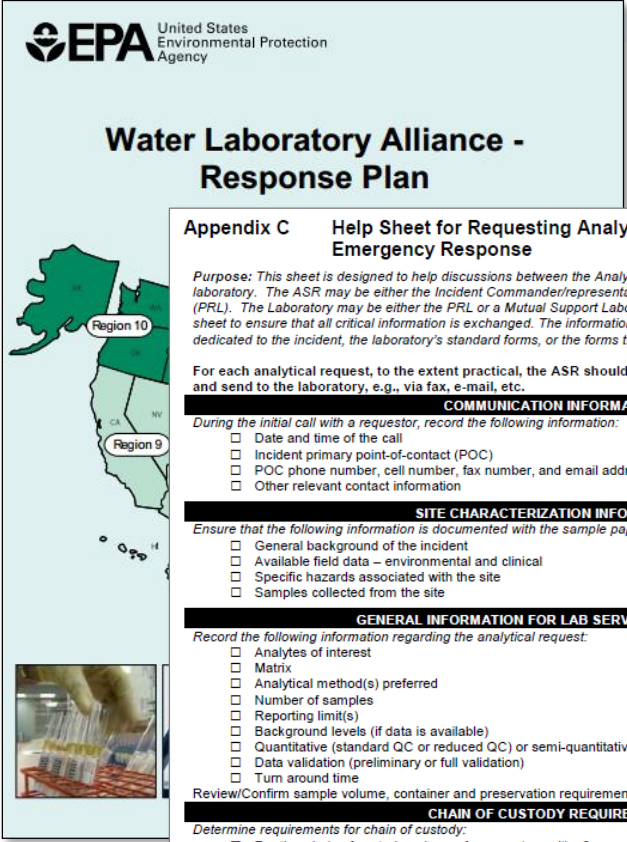
- Commercial
- EPA
- State Government
- Local/Municipal
- Utility
- Government Owned Contractor Operated (GOCO)
- Other Federal Laboratories
- College/University

WLA Membership: 140 Laboratories



Water Laboratory Alliance 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



EPA United States Environmental Protection Agency

Water Laboratory Alliance - Response Plan

Appendix C Help Sheet for Requesting Analytical Support during an Emergency Response

Purpose: This sheet is designed to help discussions between the Analytical Services Requester (ASR) and the laboratory. The ASR may be either the Incident Commander/representative or the Primary Responding Laboratory (PRL). The Laboratory may be either the PRL or a Mutual Support Laboratory. The Laboratory should use this help sheet to ensure that all critical information is exchanged. The information should be recorded in a logbook or notebook 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 provided in writing 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; presence/absence)
- 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

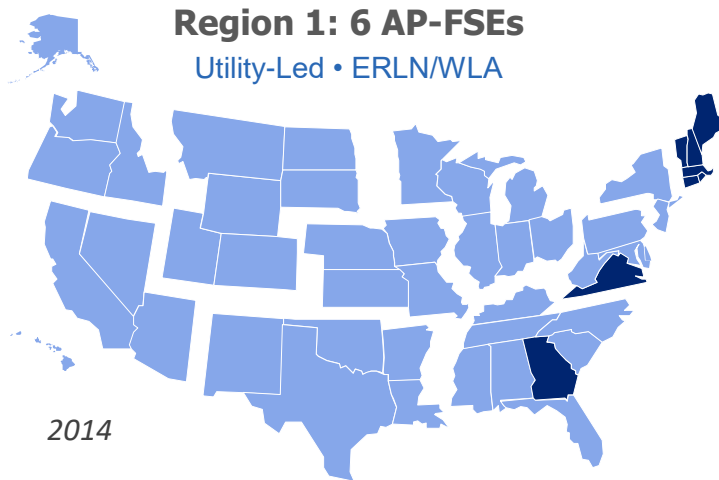
DATA REPORTING AND RECORDS RETENTION



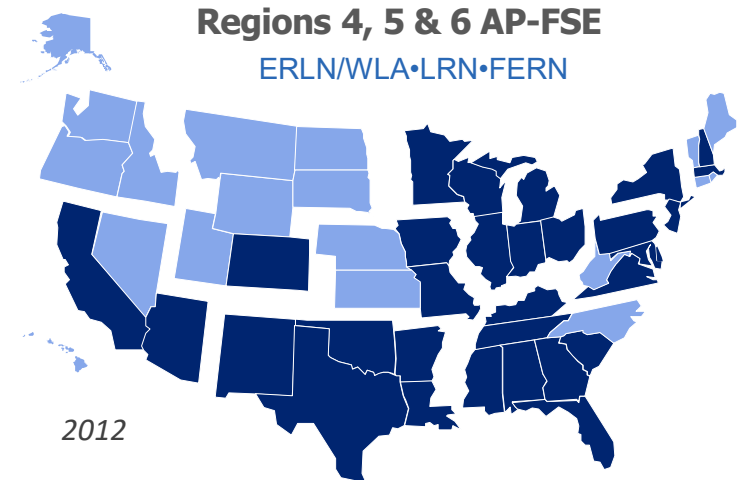
<https://www.epa.gov/waterlabnetwork/water-laboratory-alliance-response-plan>

Examples of WLA Analytical Preparedness Full-Scale Exercises (AP-FSEs)

EPA conducts AP-FSEs in multi-regional and utility-led formats to increase use of WLA-RP best practices and enhance communication in the Water Sector.



- 6** Simultaneous Utility-Led Exercises
- 8** States
- 7** State Laboratories
- 7** Commercial Laboratories
- 1** Wastewater Laboratory
- 2** Concurrent Scenarios: Chemical Pesticide and *Salmonella* (Biological)
- ~170** Water samples analyzed for chemical or biological contaminants



- 30** States **5** Federal Agencies: CDC, EPA, FDA, NOAA and USDA
- 40** State Laboratories **5** Federal Laboratories
- 2** Commercial Laboratories **2** Mobile Laboratories
- 2** Non-profit and Academic Laboratories
- 4** Concurrent scenarios: Chemical Pesticides, CWA, CWA Degradation Products, Select Agent (Biological), Non-select Agent (Biological)
- >7,000** Multi-media samples analyzed for chemical or biological contaminants

Incidents that Required Analytical Support



Boston, Massachusetts Water Main Break, 2010

New England Regional Laboratory requested in-kind support of laboratory supplies for analysis

Fukushima, Japan Daiichi Nuclear Power Plant, 2011

ERLN/WLA laboratory analyzed drinking water samples for Cesium 134 and 137 by gamma spectroscopy



Incidents, continued



Eden, North Carolina - Coal Ash Spill, 2014

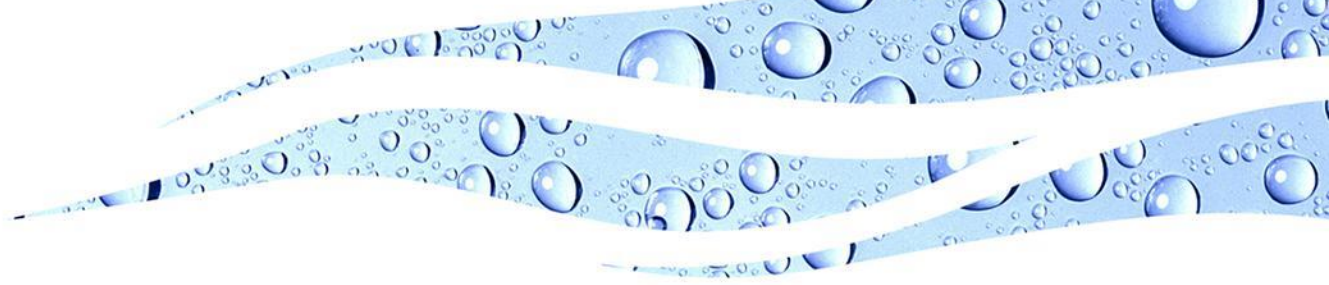
ERLN/WLA laboratory provided particle size distribution (PSD) analysis of water samples

Toledo, Ohio - Microcystin Contamination, 2014 (no WLA involvement)

Communication between all organizations involved



ASSOCIATED PRESS



WLA: Enhancing the Nation's Laboratory Preparedness

Have you or your organization been involved in a response to a water contamination incident?

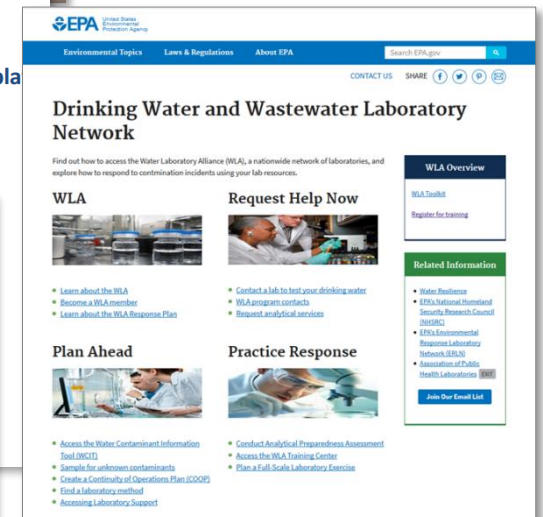
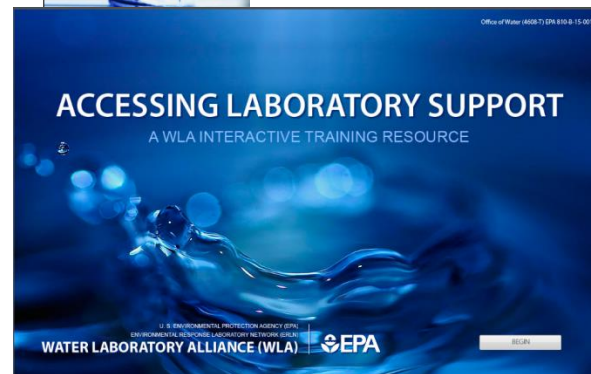
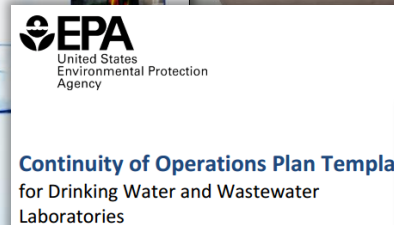
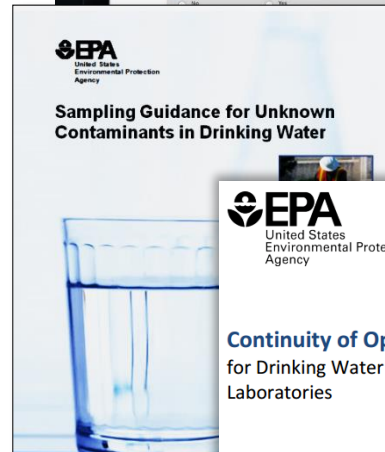
- What went well?
- What could have been improved?
- Did you have access to the resources that you needed?

***The WLA
is here to help!***

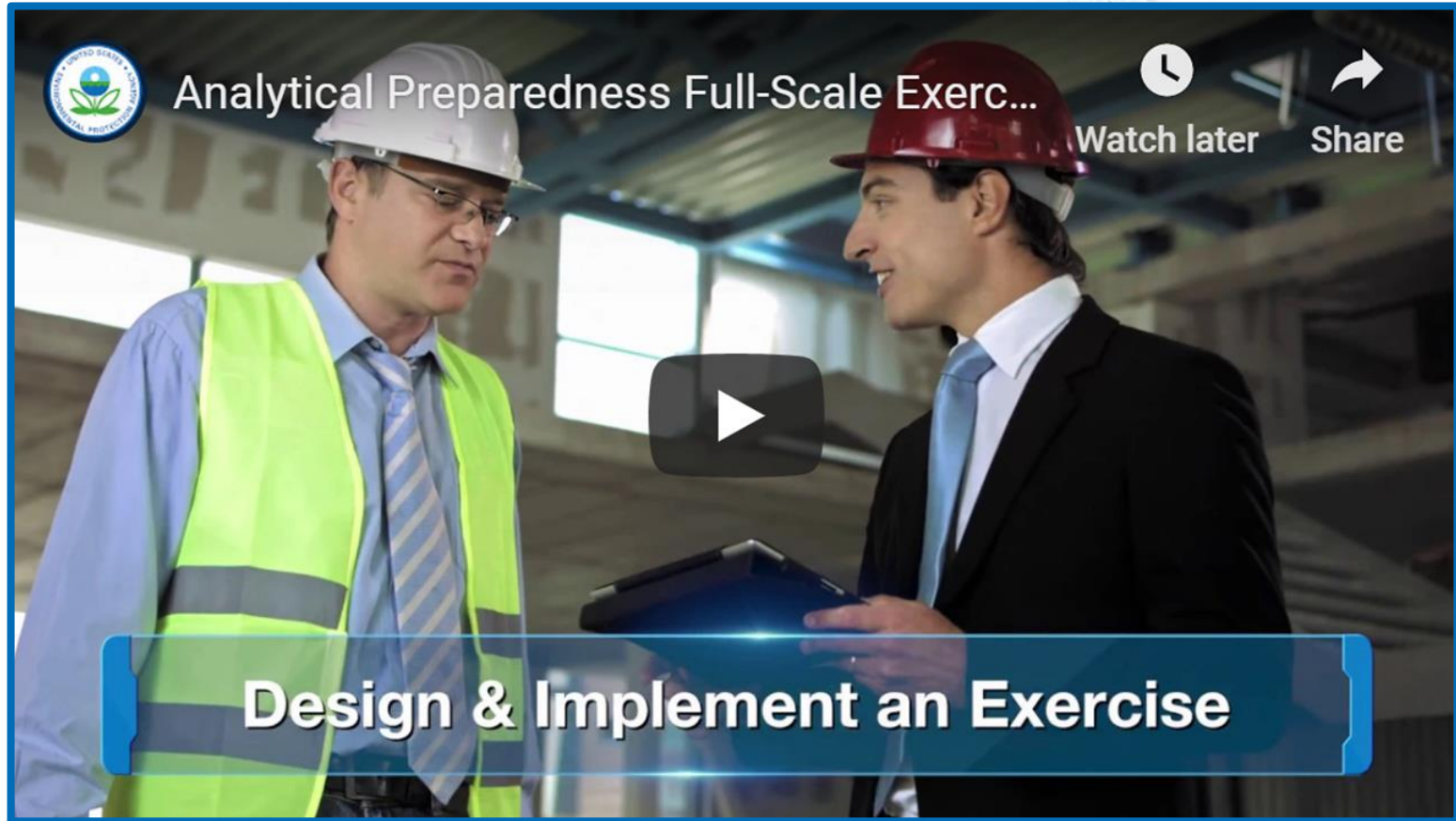


The WLA has developed tools and resources to aid in an analytical response

- WLA Analytical Preparedness Full-Scale Exercise (AP-FSE) Toolkit
- Analytical Preparedness Self-Assessment (APS)
- *Sampling Guidance for Unknown Contaminants*
- Water Contaminant Information Tool (WCIT)
- Laboratory Compendium
- Continuity of Operations Plan (COOP) Template
- Accessing Laboratory Support



Plan a Laboratory Full-Scale Exercise



<https://www.youtube.com/watch?v=y4U3HPj2wgQ&feature=youtu.be>

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



WATER LABORATORY ALLIANCE (WLA)

Office of Water (4608-T) EPA 810-B-20-001 | August 2018

Home

Welcome & Overview

Introduction

Step 1: Initiate

Step 2: Participants

Step 3: Objectives

Step 4: Scenario

Step 5: Schedule

Step 6: Documentation

Step 7: Training

Step 8: Exercise

Step 9: Hot Wash

Step 10: Follow-Up

Resources

Glossary

Analytical Preparedness

FULL-SCALE

Exercise Toolkit

CLICK HERE TO CONTINUE TO
WELCOME and OVERVIEW

The Analytical Preparedness Full-Scale Exercise (AP-FSE) Toolkit provides the necessary guidance and examples for organizations to plan and conduct their own exercise.



https://www.epa.gov/sites/production/files/2018-09/documents/ap_fse_toolkit_0.pdf

AP-FSE Toolkit: 4 Utility-Led Pilot Exercises

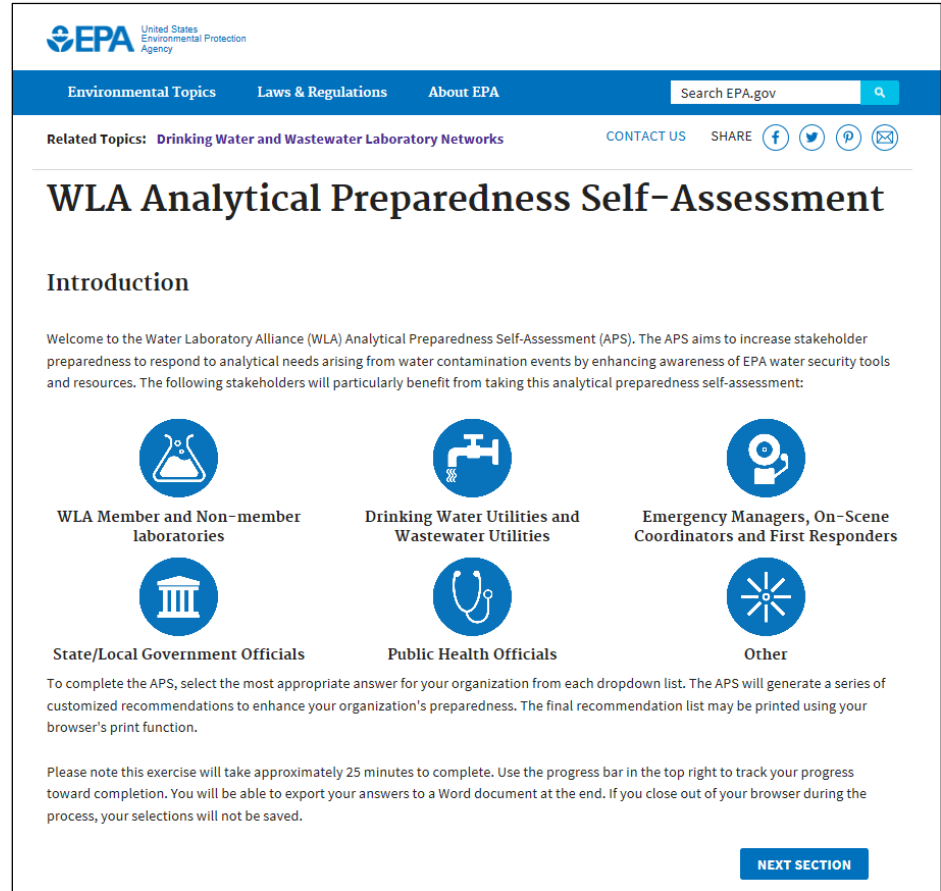
- **Utilities leveraged resources within the toolkit to design an exercise to meet their specific objectives**
 - Master scenario events lists (MSELs)
 - Exercise evaluation guides (EEGs)
 - PowerPoint training templates
- **Using the same toolkit materials, the utilities developed three very different exercises**
- **The toolkit allowed utilities to develop and conduct their exercise in 3 – 6 months**
 - Significantly reduced the timeframe for developing an HSEEP consistent exercise
 - Significantly reduced amount of time for utility staff to prepare and conduct their exercise
- **Pilot Exercise Feedback**
 - “This is one of the best tools we have used recently”
 - “Very worthwhile to participate in the exercise”



WLA Analytical Preparedness Self-Assessment (APS)

Purpose: Increase stakeholder preparedness to respond to analytical needs arising from water contamination events by enhancing awareness of EPA water security tools and resources

- Easy-to-use starting place to assess preparedness for water contamination incidents
- APS is a Toolbox that:
 - Provides a customized checklist of recommendations to improve preparedness
 - Identifies and guides users to existing analytical preparedness tools and resources



The screenshot shows the EPA website interface for the WLA Analytical Preparedness Self-Assessment (APS). The page features the EPA logo and navigation links for Environmental Topics, Laws & Regulations, and About EPA. A search bar is present in the top right. Below the navigation, there are social media sharing options and a 'CONTACT US' link. The main heading is 'WLA Analytical Preparedness Self-Assessment'. The 'Introduction' section welcomes users and explains the purpose of the APS. It lists six stakeholder groups represented by icons: WLA Member and Non-member laboratories, Drinking Water Utilities and Wastewater Utilities, Emergency Managers, On-Scene Coordinators and First Responders, State/Local Government Officials, Public Health Officials, and Other. A paragraph explains that users select answers from dropdown lists to generate a customized recommendation list. A note at the bottom states that the exercise takes approximately 25 minutes and that progress is tracked via a progress bar. A 'NEXT SECTION' button is located at the bottom right.

<https://www.epa.gov/waterlabnetwork/wla-analytical-preparedness-self-assessment>

Sampling Guidance for Unknown Contaminants in Drinking Water

- Integrates sample collection, preservation and transport procedures
- Provides an example of what is required for a comprehensive sampling program
- Supplements emergency response plans
- Includes helpful resources, including approaches to collaborate with other agencies

Table 7-2: Chemical and Toxin Collection Guidelines

Contaminant Class/Type	Container Volume and Type	No. of Containers	Disinfection Reducing Agent	Preservative	Holding Time	Analytical Technique
Toxin	100 mL - 1 L; refer to analytical method and/or SCID for toxin-specific requirements	Method-specific	None	Transport on ice or at (-) 20°C (on dry ice); refer to SCID for toxin specific requirements	Minimize transport and storage time. If feasible, analyze or extract immediately upon receipt at the laboratory.	Varies
Volatiles (Methods 502.2, 8021B, 524.3, 8260B)	40 mL, Glass w/ PTFE-lined septa	5	Ascorbic acid (0.25–0.5 g)	1:1 HCl to pH \leq 2 Store at $<4^{\circ}\text{C}$	14 days	P&T - GC/MS P&T - GC/PID/ELCD
Carbamate Pesticides (Methods 531.1, 531.2)	40 mL, Glass w/ PTFE-lined septa	4	Sodium thiosulfate (12.5 mg)	Potassium dihydrogen citrate; adjust sample pH to \sim 3.8 Store at $\leq 4^{\circ}\text{C}$	28 days	HPLC-fluorescence
Unknown organics (volatile)	40 mL, Glass w/ PTFE-lined septa	5	None	None - mark samples not preserved Store at $<4^{\circ}\text{C}$	7 days	P&T - GC/MS
Metals/ Elements (Methods 200.7, 200.8, 200.9)	500 mL, Plastic (i.e., HDPE)	2	None	Trace metal grade nitric acid to pH \leq 2	6 months	ICP-MS ICP-AES AA
Organometallic compounds	125 mL, Plastic (i.e., HDPE)	2	None	Nitric acid to pH \leq 2	30 days	AA - cold vapor manual AA - cold vapor automated
Toxicity	125 mL, Glass	2	Consult manufacturer's instructions	Consult manufacturer's instructions	Consult manufacturer's instructions	Rapid toxicity assay (several vendors)

<https://www.epa.gov/waterlabnetwork/sampling-guidance-unknown-contaminants-drinking-water>

Water Contaminant Information Tool (WCIT)

- Released in 2005
- Describes 811 contaminants that pose a serious threat if accidentally or intentionally introduced into water systems
- Data are reviewed by experts and regularly updated
- Data are specific to the needs of drinking water and wastewater systems



<https://www.epa.gov/waterlabnetwork/access-water-contaminant-information-tool>

ERLN Laboratory Compendium



EPA's Compendium of Environmental Testing Laboratories (Laboratory Compendium)

- Environmental Response Laboratory Network (ERLN) tool housed on a secure web-based server
- An online database of nationwide environmental laboratories available to:
 - EPA, Federal, State and local emergency responders
 - Laboratory personnel
 - Water utilities
- Contains records of laboratories with the capability and capacity to analyze a variety of agents:
 - Chemical, biological and radiochemical



<https://cfext.epa.gov/cet/>

ERLN Laboratory Compendium (cont'd)

- Searchable EPA Laboratory Compendium for rapid identification of quality laboratory resources
 - Capabilities
 - Capacities
 - Certifications
 - Instrumentation
 - Personnel
- The Compendium search is done for the customer and capabilities of the member laboratories are verified
- The Compendium is much more than just homeland security related analyses

EPALABCOMPENDIUM logout | help

home | search by location | search | manage | glossary

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

EPA's Compendium Search

BASIC SEARCH PARAMETERS

Specifying parameters define the search based on selected capabilities. [Example: To search for laboratories in Alabama with the capability to analyze Aroclors, you would select Alabama (Location) AND Aroclors (Analytical Capabilities), then click "Submit".]

To expand search capabilities, select or include any of the selected values in the search. [Example: To search for laboratories in Alabama or a laboratory with the capability to analyze water samples, Aroclors, or accept samples 24 hours a day/7 days a week, you would select Alabama (Location), and select the OR option for each of the following: water (Matrix), Aroclors (Analytical Capabilities), or accepts samples 24 hours a day/7 days a week (Special Sample Handling), then click "Submit".]

Lab Name:	<input type="text"/>
Lab Type:	--All-- College/University Laboratories Commercial Laboratories Commercial Laboratories (did not meet EPA's criteria) Environmental Protection Agency
Region:	--All-- Region 1 Region 2 Region 3 Region 4
Location (State): (select one or more)	--All-- Alabama Alaska American Samoa Arizona
ERLN Member:	Or <input type="checkbox"/> Yes
WLA Member:	Or <input type="checkbox"/> Yes
Mobile:	Or <input type="checkbox"/> Yes
Matrix: (select one or more)	--All-- Air Building Material/Debris Clinical (Human) Drinking Water
Analytical Capabilities: (select one or more)	--All-- 2,3,7,8 TCDD Acute Toxicity Bioassay Anions Aroclors
Support Services: (select one or more)	--All-- Exchange data using a broadband network Perform data review and assessment Pickup samples Provide electronic data deliverables
Special Sampling Handling: (select one or more)	--All-- Handle samples containing an unknown contaminant Perform biological tests in an environment that is compliant with a CDC-specified biosafety level Perform either presumptive or confirmatory analysis for bioterrorism agents (Add'l info req'd see comments) Perform either presumptive or confirmatory analysis for chemical warfare agents (Add'l info req'd see comments) Receive, store and contain hazardous waste samples (Add'l info req'd see comments)

EPA's Compendium Search by Location

Click on a state to find laboratories in that state.
See also: [Washington DC](#), [Puerto Rico](#), [American Samoa](#), [Guam](#), [Virgin Islands](#)

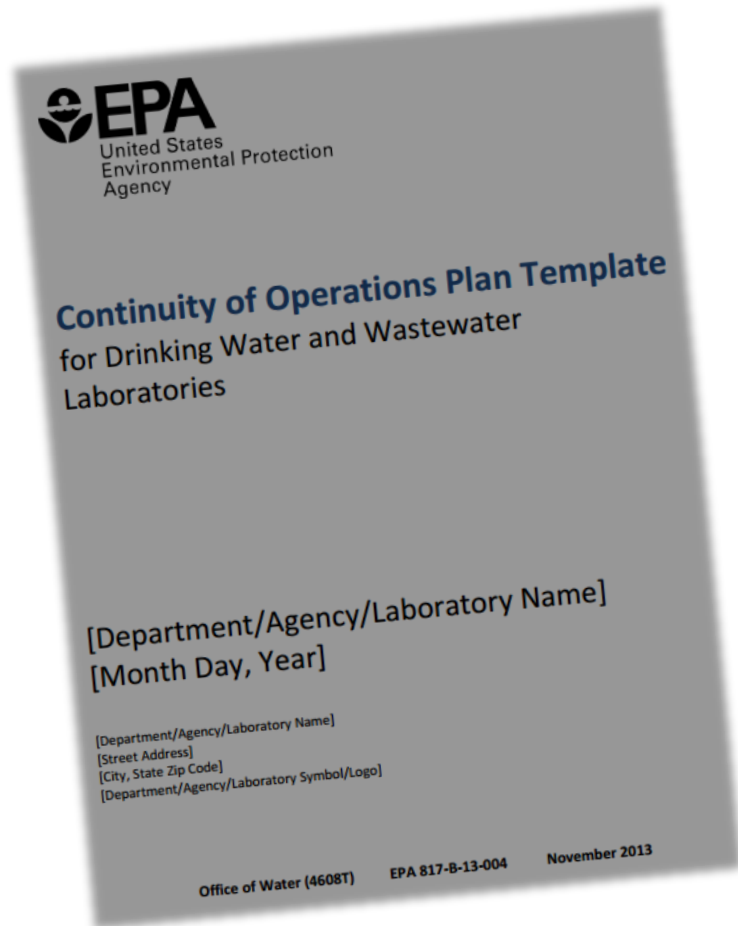
Additional Search Options

Search by Region: --All--

Search by Zip Code: -OR-

Select Radius (miles):

COOP: Value to Laboratories



Continuity of Operations Plan (COOP)

- Establishes policies and procedures to ensure a laboratory **can perform critical and essential functions** during a wide range of emergencies
- The COOP Template
 - Allows laboratories to develop a COOP specific to their laboratory in a stepwise fashion
 - Provides the framework and guidance to prepare a comprehensive COOP
 - Makes it easy to update the COOP
 - Includes supplemental resources such as the *COOP Instructions* and fact sheet

Accessing Laboratory Support Interactive Training: Summary Resource

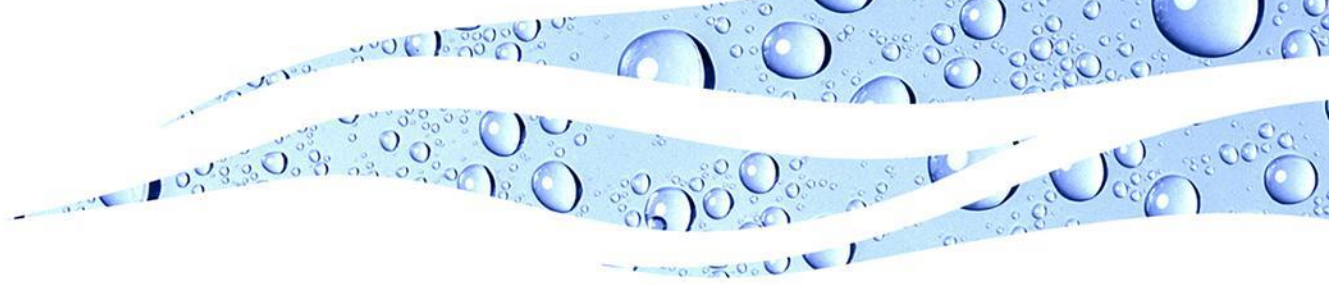
Would you know where to find analytical support if:

- Your laboratory was expecting a large number of samples and a key staff member had an emergency?
- Your supply of a critical reagent was on backorder and you received unexpected samples?
- After a major flood, a huge surge of *Cryptosporidium* samples were received?

<https://www.epa.gov/waterlabnetwork/accessing-laboratory-support>

The screenshot shows the 'Accessing Laboratory Support' interactive training resource. At the top, it features the EPA logo and the text 'U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) ENVIRONMENTAL RESPONSE LABORATORY NETWORK (ERLN) WATER LABORATORY ALLIANCE (WLA)'. The main heading is 'WLA Resource for Accessing Laboratory Support'. Below this, there is a brief introduction: '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.' A 'Key Resources' section lists 'WLA Web Page & WLA Training Center' and 'WLA Response Plan (WLA-RP)', with a note: '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.' Three main navigation options are presented: 'Local Laboratories' (Check with local laboratories, 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), with links for 'What is WARN?' and 'Find your WARN', and 'State Laboratories: Points of Contact'), and 'Laboratory Compendium' (Search the Laboratory Compendium, Register for and access the Compendium). The interface also includes a map of the United States and a photo of a woman.

The cover of the 'Accessing Laboratory Support' interactive training resource features a blue background with a water splash. The title 'ACCESSING LABORATORY SUPPORT' is prominently displayed in white, with the subtitle 'A WLA INTERACTIVE TRAINING RESOURCE' below it. At the bottom, it includes the EPA logo and the text 'U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) ENVIRONMENTAL RESPONSE LABORATORY NETWORK (ERLN) WATER LABORATORY ALLIANCE (WLA)'. A 'BEGIN' button is located in the bottom right corner. The text 'Office of Water (4608-T) EPA 810-B-17-002 | June 2017' is visible in the top right corner.



Water Laboratory Alliance Response Plan (WLA-RP)

Laboratory Black Box

Often during emergency response, laboratories are treated as a “black box” for data generation:

Samples go in and data comes out.



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

WLA-RP Roles and Responsibilities

Analytical Service Requester (ASR)

- Primary point of contact who requests analytical assistance
- Primary decision maker regarding analyses needed, data turnaround times, etc.

Primary Responding Laboratory (PRL)

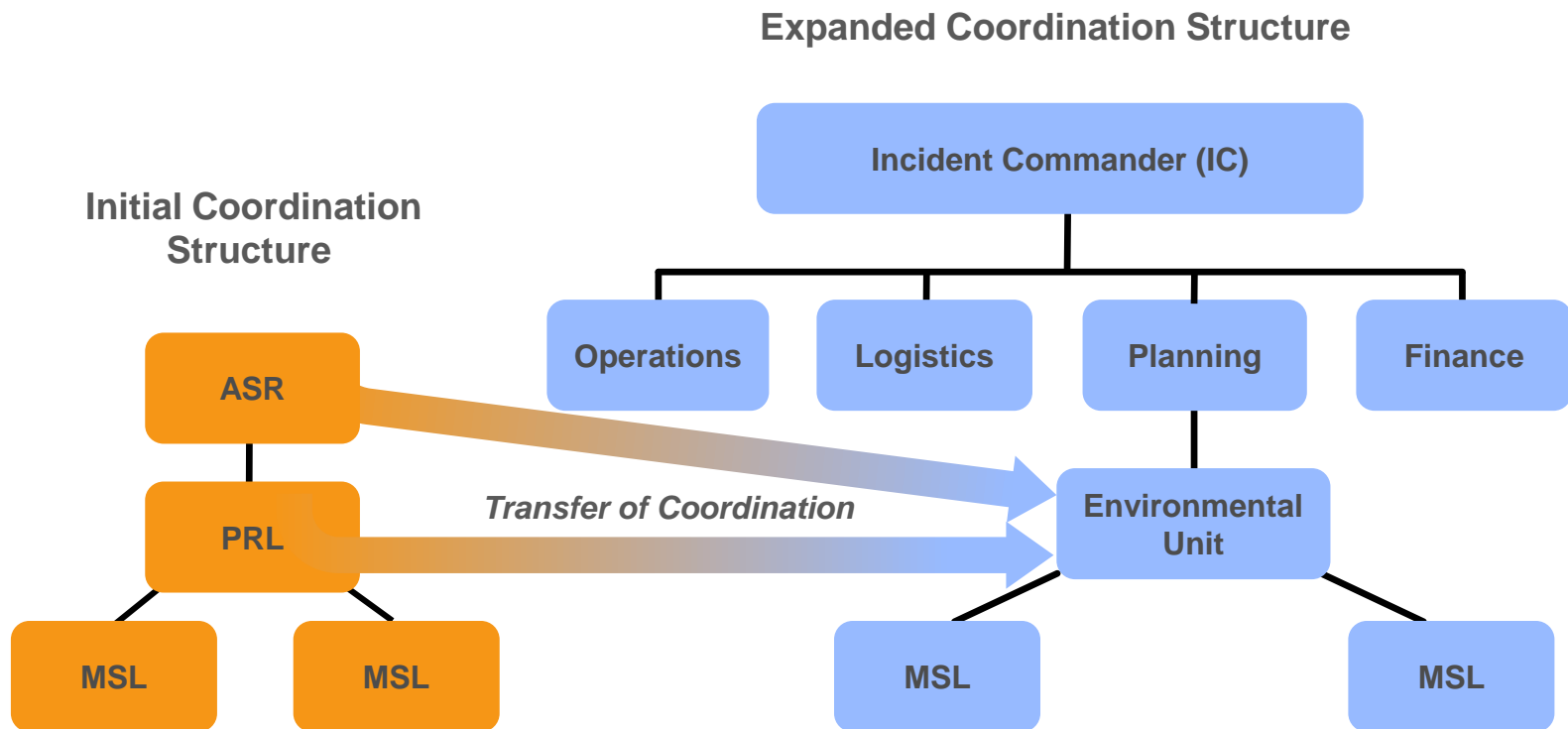
- Initial laboratory contacted by the ASR
- Help coordinate activities of other support laboratories

Mutual Support Laboratory (MSL)

- Additional laboratory engaged by ASR or PRL to provide resources to meet the analytical needs of an incident

Laboratory Coordination

Laboratory coordination within the Incident Command System (ICS)



Sample Shipping and Tracking

- Have staff trained in shipping and receipt of hazardous materials and dangerous goods
- Agree on chain-of-custody (COC) requirements



- If sample is compromised during shipping (e.g., holding time or sample temperature exceeded), laboratories should consult with the ASR

<https://www.epa.gov/waterlabnetwork/water-laboratory-alliance-training-center>

Analytical Methods and Quality Control (QC)

Analytical Methods

- Provides guidance on basic field/safety screening, rapid analysis, confirmatory methods
- Suggests selection of methods is based on monitoring needs, including data turnaround times
- Provides preferred sources for confirmatory methods

Quality Control (QC)

- Emphasizes setting quality assurance (QA)/QC requirements based on monitoring needs
- Establishes a minimum set of QC that should be performed for all analyses

Appendix C: Help Sheet for Requesting Analytical Support

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- 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

Appendix C, continued

Appendix C Form Part 1: Requesting Analytical Support during Water Emergency Response (ASR ↔ PRL)

Purpose: This sheet is designed to help discussions between the Analytical Services Requester (ASR) and the Primary Responding Laboratory (PRL). Potential PRLs should use this help sheet to ensure that all critical information is exchanged. The PRL can recruit Mutual Support Laboratories to perform the work which they cannot do, so the PRL needs to record all of the required analytical work regardless of whether the PRL can perform the work in house.

COMMUNICATION INFORMATION

Date of initial call: _____

Time of initial call: _____

Who is in charge of the incident (Analytical Services Requester (ASR) or Incident Commander(IC))? _____

ASR/IC name: _____

ASR/IC phone number: _____

ASR/IC cell number: _____

ASR/IC fax number: _____

ASR/IC email address: _____

Other contacts (utilities, labs, public health, law enforcement, etc.): _____

EPA/Public Information Officer (PIO) contact: _____

SITE CHARACTERIZATION INFORMATION

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

Nature of threat: _____

How was the threat determined (who, what, when): _____

Threat investigation status, circle one: a) possible b) credible c) confirmed d) other - list here: _____

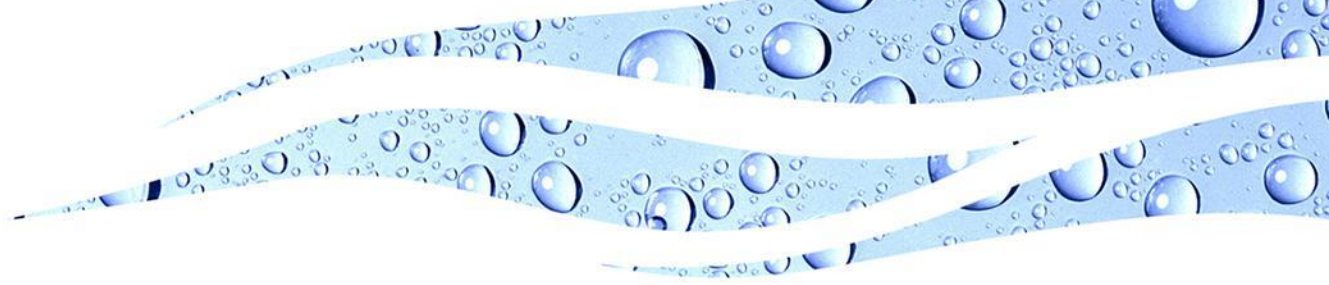
Incident information:

Has distribution system been shut down? a) yes b) no c) don't know

Is this incident law enforcement sensitive? a) yes b) no c) don't know

Who has been contacted? _____

Any known exposure risks: a) contact b) inhalation c) ingestion d) other - specify: _____



WLA Activities for 2019

2019 Utility-led AP-FSEs

- Up to 2 utilities will plan and conduct their own AP-FSE using the toolkit
- New scenario and supporting documentation for *Yersinia pestis*
- Collecting multi-laboratory method performance data on EPA NHSRC's *Protocol for Detection of Yersinia pestis in Environmental Samples During the Remediation Phase of a Plague Incident*

EPA U.S. Environmental Protection Agency (EPA)
WATER LABORATORY ALLIANCE (WLA)
Office of Water (4608-T) EPA 810-B-20-001 | August 2018

Home | Welcome & Overview | Introduction | Step 1: Initiate | Step 2: Participants | Step 3: Objectives | Step 4: Scenario | Step 5: Schedule | Step 6: Documentation | Step 7: Training | Step 8: Exercise | Step 9: Hot Wash | Step 10: Follow-Up | Resources | Glossary

Analytical Preparedness
FULL-SCALE
Exercise Toolkit

CLICK HERE TO CONTINUE TO
WELCOME and OVERVIEW

The Analytical Preparedness Full-Scale Exercise (AP-FSE) Toolkit provides the necessary guidance and examples for organizations to plan and conduct their own exercise.

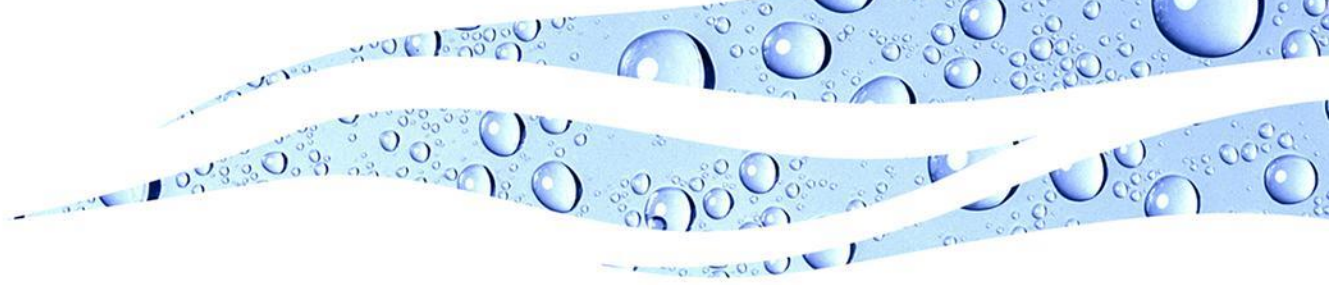




November 13-14, 2019 U.S. EPA Region 4 (R4)

- The WLA Security Summit is a great way to network with potential Response Partners—prior to a water contamination emergency. Learn more about EPA Water Security products during a hands-on exercise.
- Tech Town will feature live demonstrations of various EPA tools, including the Water Contaminant Information Tool (WCIT) and *Sampling Guidance for Unknown Contaminants in Drinking Water*.

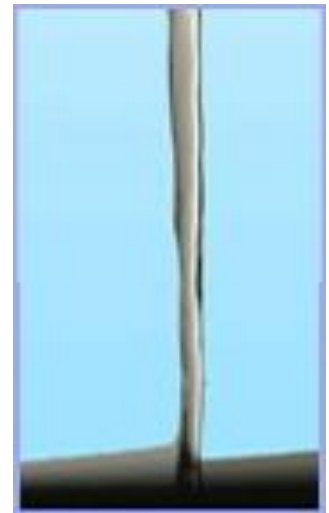




How can WLA benefit your organization?

How does the WLA benefit you?

- Networking opportunities to enhance relationships and improve communication (e.g., Summits, exercises)
- Improved Water Sector preparedness for response to water contamination incidents
- Access to laboratory support when contaminant analyses exceed in-house capabilities or capacity
- Tools, resources and training



WLA Training Opportunities: Live Events



**WLA Response
Plan Tabletop
Exercise (TTX)**



**Continuity of
Operations (COOP)
Template**



**Analytical
Preparedness
Full-Scale
Exercise Toolkit**



**Sampling
Guidance for
Unknown
Contaminants**



**Water Contaminant
Information Tool
(WCIT)**



**Decontamination
Strategies**

To learn more these training opportunities and how to register, please visit
<https://www.eventbrite.com/o/epa-office-of-water-water-security-division-water-laboratory-alliance-8453004715>
or email the WLA Team at WLA@epa.gov

WLA Training Opportunities: On-Demand

The screenshot shows the EPA website page for the Drinking Water and Wastewater Laboratory Network. The page features a blue header with the EPA logo and navigation links for Environmental Topics, Laws & Regulations, and About EPA. A search bar is located in the top right. The main content area is titled "Drinking Water and Wastewater Laboratory Network" and includes a sub-header "Find out how to access the Water Laboratory Alliance (WLA), a nationwide network of laboratories, and explore how to respond to contamination incidents using your lab resources." The page is organized into several sections: "WLA" with an image of lab equipment and a list of links; "Request Help Now" with an image of scientists and a list of links; "Plan Ahead" with an image of scientists and a list of links; "Practice Response" with an image of a scientist and a list of links; "WLA Overview" with links to the WLA Toolkit and training registration; and "Related Information" with a list of external links and a "Join Our Email List" button.

EPA United States Environmental Protection Agency

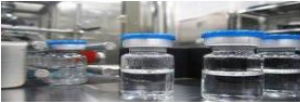
Environmental Topics Laws & Regulations About EPA Search EPA.gov

CONTACT US SHARE

Drinking Water and Wastewater Laboratory Network


Find out how to access the Water Laboratory Alliance (WLA), a nationwide network of laboratories, and explore how to respond to contamination incidents using your lab resources.

WLA




- Learn about the WLA
- Become a WLA member
- Learn about the WLA Response Plan

Request Help Now




- Contact a lab to test your drinking water
- WLA program contacts
- Request analytical services

Plan Ahead



- Access the Water Contaminant Information Tool (WCIT)
- Sample for unknown contaminants
- Create a Continuity of Operations Plan (COOP)
- Find a laboratory method
- Accessing Laboratory Support

Practice Response



- Conduct Analytical Preparedness Assessment
- Access the WLA Training Center
- Plan a Full-Scale Laboratory Exercise

WLA Overview

- [WLA Toolkit](#)
- [Register for training](#)

Related Information

- [Water Resilience](#)
- [EPA's National Homeland Security Research Council \(NHSRC\)](#)
- [EPA's Environmental Response Laboratory Network \(ERLN\)](#)
- [Association of Public Health Laboratories](#) EXIT

[Join Our Email List](#)

- **WLA Response Plan (WLA-RP) Training Module**
- Handling Criminal Investigation Samples: Maintaining Chain of Custody (Parts 1&2)
- Automated Ultrafiltration (UF) Device Videos
- Becoming a Water Laboratory Alliance Member
- Water Laboratory Alliance Overview for Members

WLA Liaisons are an Important Part of Water Sector Security and Preparedness



**WLA Liaisons
play a central role.**

WLA Liaisons include staff from:

- Drinking water utilities
- Wastewater utilities
- Emergency management agencies
- State public health laboratories
- State environmental laboratories
- Drinking water programs
- Water Sector associations

WLA Liaisons have direct access to:

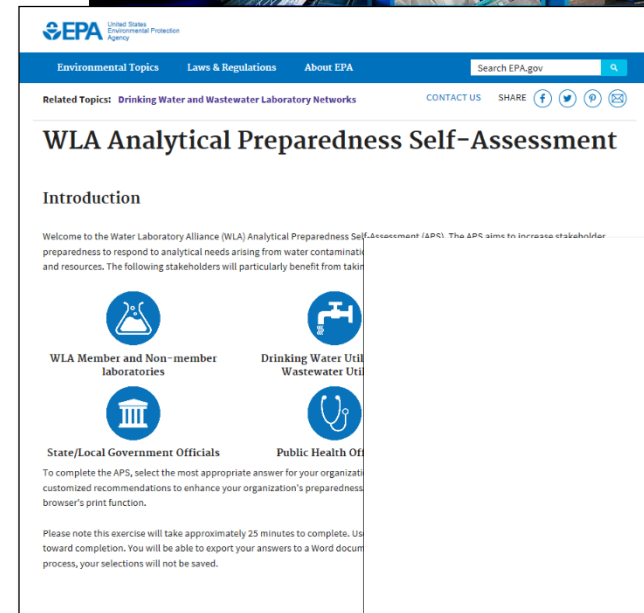
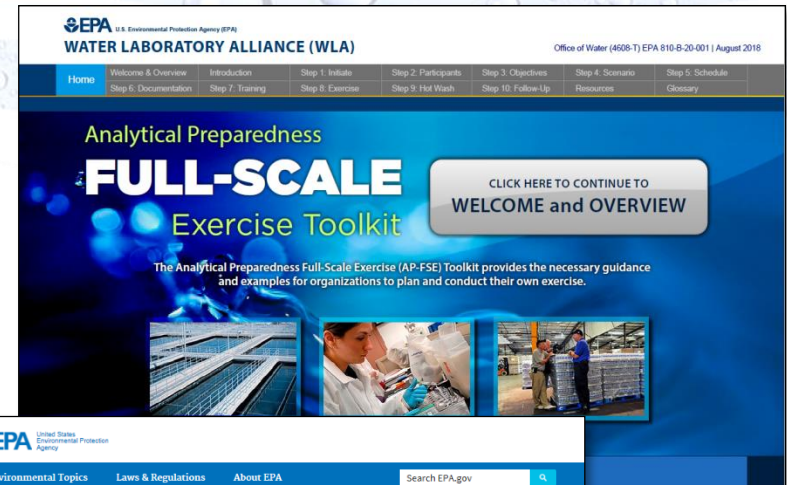
- Networking across sectors
- Reviewing and commenting on tools and resources that are under development
- Participating in tabletop and full-scale exercises
- Providing ideas and feedback for further collaboration and growth

Interested in becoming a WLA Liaison, or nominating a colleague?

Please contact us by email at WLA@epa.gov.

Action Items

- Participate in an AP-FSE
- Complete the Analytical Preparedness Self Assessment for your organization
- Become a WLA Liaison
- Prepare sampling kits for unknowns in advance
- Participate in a webcast or take advantage of online training
- Share information on EPA tools and resources with your colleagues
- Have multiple staff sign up for WCIT
- Update your Laboratory Compendium profile



Utility and Laboratory: Potential Response Partners

- State drinking water agencies
- State Water/Wastewater Agency Response Network (WARN)
- Local and state elected officials
- Local and state emergency management agencies
- Local and state emergency operations centers (EOCs)
- Local and state health departments
- Drinking water associations (e.g., rural water associations)
- Federal government agencies (e.g., EPA, Centers for Disease Control and Prevention [CDC])
- First responders/emergency managers
- Hospitals, including emergency rooms
- Law enforcement (including the Federal Bureau of Investigation [FBI])
- Media
- Other water utilities
- Phone companies
- Poison Control Centers
- Power companies

We are Here to Help!

For information on joining ERLN/WLA visit:

<https://www.epa.gov/emergency-response/who-should-join-environmental-response-laboratory-network>



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<https://www.epa.gov/waterlabnetwork>

Email: WLA@EPA.gov