



# The Integrated Consortium of Laboratory Networks Newsletter

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*The Integrated Consortium of Laboratory Networks (ICLN) is a system of interconnected federal laboratory networks that can quickly respond to high-consequence incidents and give decision makers timely, credible, and interpretable data.*

ICLN  
Office of Health Security  
(OHS)

Department of  
Homeland Security



## ICLN Mixed Agent Tabletop Exercise

The ICLN conducted a tabletop exercise (TTX) in June 2022, using a scenario which incorporated the simultaneous release of a radiological and a biological agent over a wide area. Players represented DHS, EPA (ERLN, NAREL, Water Laboratory Alliance), CDC Rad Lab, FERN (FDA and USDA), NAHLN, Vet-LIRN, DoD DLN, DOE, and FBI.

TTX scenario play afforded participants the opportunity to exercise the ICLN Standard Operating Procedure for joint responses as well as functional communications through the ICLN Portal. Such communications include the issuance of preparedness alerts, establishment of a formal incident, situation reports, emails, and conduct of virtual coordination meetings. Overall, participants found significant value in participating in scenario play, in addition to highlighting a few challenges with portal operations that will be repaired in the near-term. Scenario play was accomplished in one eight-hour day. Players across the spectrum felt that, in future TTXs, extending the duration of the exercise to occur over a full work week with one or two injects per day would be both more realistic and more accommodating to provide effective consideration to responses.

A particularly challenging aspect of this mixed agent scenario is outlining a protocol for handling and analyzing samples potentially containing both radiological contamination and a biological agent, which are typically handled in different laboratories under different safety regimes. Phase 2 of this exercise, titled the BioRad2 exercise,

**During the TTX planning process, participants from multiple agencies and networks had completed a number of objectives.**

These objectives included:

1. Identification of networks and labs which can analyze for the agents of concern and their capacities;
2. Outlining sample matrices that can be analyzed;
3. Outline the process of screening/analyzing potentially mixed-agent samples. Develop and document a protocol for screening and allocation of samples to appropriate labs for analysis; and
4. Understanding regulations and protocols that apply to the transport of potentially hazardous samples.



will help to develop the appropriate protocol. The BioRad2 exercise is targeted to occur during the last quarter of 2022. BioRad2 involves sending samples of minimally hazardous surrogates for the TTX scenario agents to full-service state laboratory members of ICLN networks for analysis. Upload of data from these analyses through the Portal Data Exchange Utility will complete the TTX objectives.

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## ERLN Laboratory Support for the Red Hill Drinking Water Emergency

In late November, 2021, hundreds of families living on Joint Base Pearl Harbor-Hickam (JBPHH) and the Army's Aliamanu Military Reservation and Red Hill Housing Area on the island of O'ahu in Hawaii reported petroleum odors coming from residential tap water supplied by the U.S. Navy water system. There were also reports of health issues arising from the contaminated drinking water. Approximately 93,000 U.S. Navy water system users were impacted, many of whom remain in temporary housing due to the drinking water crisis.

The source of the petroleum was the nearby Red Hill Bulk Fuel Storage Facility, which contaminated the Red Hill Well, the Navy's primary source for its water system.

EPA partnered with the Navy, Army, and the Hawaii Department of Health (HDOH) in an Interagency Drinking Water System Team (IDWST) with the objective of restoring safe drinking water to the affected residents and workers. The team, which launched operations in December, 2021, was one component of a broader multiagency effort addressing multiple aspects of this crisis.

The Department of Navy entered into an Interagency Agreement with EPA Region 9 Superfund and Emergency Management Division (SEMD) to provide response services for the incident. As part of those services, EPA's Environmental Response Laboratory Network (ERLN) was activated to identify sufficient laboratory capacity for the large volume of drinking water samples being collected. The ERLN identified potential laboratories to support the effort and EPA's Office of Land and Emergency Management (OLEM), Office of Emergency Management (OEM), Chemical, Biological, Radiological, and Nuclear Consequence Management Advisory Division (CBRN CMAD) deployed three Portable High-Throughput Integrated Laboratory Identification System (PHILIS) mobile laboratory assets and contractor support staff to the Naval Weapons Station at Seal Beach, CA (NWS-SB) on December 29, 2021 to support the analysis of drinking water samples from the JBPHH drinking water system. The NELAP-accredited PHILIS labs analyzed approximately 50 drinking water samples per day for both volatile organic compounds (VOCs) by EPA Method 524.2 and for Total Organic Carbon (TOC) by Hach Screening Method 10267, an EPA-approved alternative to EPA Method 415.3. Daily military flights from Hawaii provided the samples to the PHILIS laboratories.

PHILIS provided preliminary sample data, consisting of an electronic data deliverable (EDD) and a Level-2 data report, within 24 hours of sample receipt and a Level-4 data package within 7 days of sample receipt to the Region. The PHILIS labs received the final samples on February 9, 2022 and demobilized shortly thereafter. Over the course of the deployment, the PHILIS labs analyzed 1,100 drinking water samples for VOCs and 945 drinking water samples for TOC and provided 96 data packages to the IWTSD.

Additional information about the situation at the JBPHH Base can be found at <https://www.navy.mil/jointbasewater>.



*Water samples being prepared for analysis.*



*PHILIS mobile laboratory asset deployed at Seal Beach, CA.*

## Water Contaminant Information Tool (WCIT): A tool for water contamination incident preparedness and response

EPA's Water Laboratory Alliance ([WLA](#)) oversees the drinking water component of the Environmental Response Laboratory Network ([ERLN](#)). WLA empowers the Water Sector to respond in a timely manner to CBR contamination incidents by



offering tools, resources, best practice guidance, and training (including exercise opportunities). Created by WLA in 2005, the [Water Contaminant Information Tool \(WCIT\)](#) has recently been modernized to enhance its capabilities.

**What is WCIT?** WCIT is an online database with restricted access, containing information from peer-reviewed sources and research on chemical, biological and radiochemical contaminants of concern. WCIT is designed to assist in planning for and responding to water utility contamination threats and incidents.

WCIT was initially developed with a focus on contaminants believed to be of greatest concern regarding intentional contamination incidents.

Over time, the database has been expanded to include contaminants that may occur from unintentional incidents (e.g., accidental spills, natural disasters). There are more than 800 contaminants listed in WCIT. Of these, 113 contain comprehensive profiles that include data on contaminant names (including CAS numbers and synonyms), contaminant usage and sources, fate and transport, health effects and toxicity, medical information, early warning indicators, drinking water treatment, sampling and analysis, helpful response advice for utilities, and several other categories of valuable information, such as infrastructure decontamination. There are more than 700 profiled analytical methods for WCIT contaminants that provide summaries for field and laboratory analytical methods and, where available, links to download the full method.

**Who can access WCIT?** Some of the tools in WCIT are considered sensitive; thus, EPA limits access to those with an identified 'need to know' regarding the information being accessed. It is available to federal agencies, drinking water and wastewater utilities, laboratories (state and federal), state primacy agencies (and their regional and local agencies), public health officials, emergency responders, and drinking water and wastewater associations partnering with EPA. Eligible stakeholders can register via EPA's [Central Data Exchange](#) site.

**How to learn more about WCIT?** WLA often conducts live webinar training events. Training sessions on WCIT include hands-on exercises to understand better how to use the database. Visit the [WLA Learning Center](#) site to register for upcoming events. If you have questions about the database, please, contact us via [WCIT@epa.gov](mailto:WCIT@epa.gov).

The screenshot shows the WCIT landing page on the EPA website. At the top, there is a navigation bar with links for Home/Search, Tools, Resources, Help, and Data Module. Below this is a search bar with the text 'SEARCH FOR CONTAMINANTS' and a search input field. The main heading is 'WCIT Water Contaminant Information Tool' with the subtitle 'A one-stop reference tool on contaminants of concern for the Water Sector'. There are two main content areas: 'About WCIT' and 'What's New?'. The 'About WCIT' section describes the tool as a secure database of information on priority contaminants for drinking water and wastewater security. The 'What's New?' section lists recent updates, including a newsletter, a new full profile, and training sessions.

Screenshot of WCIT's landing page