



Drinking Water Laboratory Response Preparedness Project

The Water Security Division (WSD), in the EPA Office of Water, is sponsoring an effort to improve drinking water laboratory preparedness at the regional, state, and local levels. This effort, the Drinking Water Laboratory Response Preparedness Project, is designed to assist the EPA Regions with improving intra-regional laboratory preparedness for response to actual or suspected water contamination incidents. The project, which is being developed in partnership with the EPA Regions, major drinking water utilities, and state laboratories, responds to Homeland Security Presidential Directive 9 which directs EPA to develop a comprehensive, nationwide surveillance program for drinking water and a laboratory network to support such a program.

What is the Overall Goal of the Drinking Water Laboratory Response Preparedness Project?

The overall goal of the Drinking Water Laboratory Response Preparedness Project is to develop and implement Regional Laboratory Response Plans (RLRPs) for each of EPA's 10 regions, for use in response to actual or suspected water contamination incidents. The plans will provide each region with a structure for a joint response by laboratories within the region and will provide specific direction to meet the analytical needs of an event, particularly in regards to sample brokerage and tracking, communication, coordination of analyses, and analyte-specific methods. Ultimately, these plans will be used in tests of regional preparedness and should serve to inform the development of EPA's Water Laboratory Alliance (WLA) and the environmental Laboratory Response Network (eLRN).

What Activities are Anticipated and Who Will Participate?

The project will proceed in four phases:

1. Development of a generic RLRP template. A generic RLRP template has been developed under the direction of EPA's WSD with support from EPA's regional laboratory directors and other offices within EPA. The Association of Public Health Laboratories (APHL) Environmental Laboratory Subcommittee and other experts within each of the regions contributed to the development of the template through review and comment on the draft template prior to release in final form.
2. Development of region-specific laboratory response plans. The EPA, state, and major utility laboratories in each of EPA's 10 regions worked together to customize the generic template and developed region-specific laboratory response plans. Each region held meetings with experts in their region from major drinking water utilities, state public health laboratories, and state environmental laboratories between October 2006 and March 2007 and prepared a customized RLRP. EPA collaborated with its other partners in the drinking water sector (e.g., emergency responders, public health officials, law enforcement, other federal agencies, and technical experts, among others) to finalize the region-specific laboratory response plans. Each Region currently has one or more RLRP developed.
3. Table top exercises. Table top exercises will be conducted to evaluate each of the regional laboratory response plans. Participants are likely to include EPA, drinking water utilities, and state and local public health and environmental laboratories. Table top exercises are being held throughout 2007 for all 10 EPA Regions. The regional laboratory response plans will be revised based on the lessons learned during the table top exercises.



4. Functional Exercises. Functional exercises will be conducted at EPA regional, drinking water utility, public health, and environmental laboratories. Scheduling of and resources for functional exercises are currently under evaluation by WSD. The region-specific laboratory response plans will be updated based on the results of the functional exercise analyses, as necessary.

What are the Benefits to the Water Sector?

- The region-specific laboratory response plans will provide an immediate mechanism to coordinate local, state, and federal efforts to meet drinking water analytical needs that may result from actual or suspected water contamination incidents related to terrorism or a widespread natural disaster. With this tool at their disposal, laboratories will be able to more quickly and efficiently respond to an incident and identify any possible contaminants. The RLRPs will also provide a tool for meeting potentially overwhelming analytical demands during the remediation phase of an event.
- The table top exercises will strengthen coordination between laboratories, provide experience in responding to a drinking water contamination event, and identify areas for improving the region-specific laboratory response plans.
- The functional exercise will help assess region-specific laboratory capability and performance.
- The drinking water laboratory response preparedness project will also serve to inform development of the WLA and the eLRN by providing a testing ground for addressing relevant issues such as sample brokerage, analytical method selection, secure data transfer, and legal authorities. The lessons learned may also be applied to EPA projects in other areas of emergency preparedness and laboratory response.

How the RLRP Project Maps to WSD's 4 Pillars and Helps the Water Sector

Prevention → **Detection** → **Response** → **Recovery**

Phase 1: Development of Generic RLRP Template – Complete
Phase 2: Development of RLRPs – Complete
Phase 3: Table Top Exercises – Began May 2007
Phase 4: Functional Exercises – Scheduling TBD

Where Do I Obtain More Information?

Laboratories should contact their EPA regional laboratories for more information regarding when their RLRP will be available for use. For more information on the Drinking Water Laboratory Preparedness Project, please contact Anand Mudambi, EPA WSD (Mudambi.Anand@epa.gov) or Rob Maxfield, EPA Region 1 (Maxfield.Robert@epa.gov). In addition, interested parties should frequently visit EPA's Water Security Web site, which is continually updated to reflect new information on training, tools, and the latest scientific advances to protect drinking water and wastewater utilities. The Web site is: www.epa.gov/watersecurity.