

ANALYTICAL PREPAREDNESS FULL-SCALE EXERCISE (AP-FSE) TOOLKIT



Are you prepared for a water contamination incident?

WHAT IS A WLA AP-FSE?

An Analytical Preparedness Full Scale Exercise is an operational exercise in which live actions, including analysis of prepared water samples, are taken in response to a fictional water contamination scenario. It gives utilities, laboratories and other partners an opportunity to practice their emergency response plans and operating procedures. The Water Laboratory Alliance's AP-FSE Toolkit is an interactive ten-step guide that provides the information and tools needed to plan and execute an AP-FSE.



WHO PARTICIPATES IN AN AP-FSE?

At a minimum, each exercise should include one water utility and one laboratory. The exercise may also involve other water sector response partners, including federal, state and local regulatory and emergency management stakeholders and others. Participants may take on the roles of exercise planners, controllers, evaluators, and players. The Toolkit provides a summary of exercise participant roles and responsibilities.

WHY PARTICIPATE IN AN AP-FSE?

Preparedness is key in the effective coordination of laboratory support during a water contamination incident. Participation in an AP-FSE ensures that all organizations involved will understand their roles and responsibilities in the event of a water contamination emergency.

DID YOU KNOW?

The AP-FSE has helped past participants:

- Build and strengthen relationships among utilities, laboratories and other response partners—relationships necessary for effective emergency response during an incident.
- Identify critical resource gaps to be addressed prior to an actual contamination event.
- Increase familiarity with EPA's Water Laboratory Alliance Response Plan (WLA-RP).
- Practice implementing plans and procedures for responding to contamination events.
- Build laboratory capacity by providing an opportunity to use a wide variety of analytical methods.

QUOTE FROM PAST PARTICIPANT:

"This was an advantageous study in which to participate. We got the chance to build some relationships and network with other local laboratories and utilities in our region. We were able to build our intra-laboratory communication skills...and improve upon our laboratory quality control."

– AP-FSE Laboratory Participant

EXERCISE ACTIVITIES

Activities are designed to meet participating organizations' objectives. Activities in a WLA AP-FSE may include:

- Communication and coordination.
- Sample collection, sample shipping, receipt and analyses.
- Data review, validation, and reporting.
- Data communication and developing public notices.

THE STEPS:

The Toolkit presents the process of planning and executing an AP-FSE in ten steps:

1. Initiate the Exercise Planning Process
2. Identify and Recruit Potential Participants
3. Identify Objectives
4. Develop the Scenario and Expected Actions
5. Schedule the Exercise
6. Prepare Exercise Documents
7. Conduct Pre-Exercise Training Sessions
8. Conduct the Exercise
9. Conduct the "Hot Wash" (Immediate Debrief)
10. Perform Exercise Follow up Activities

ACCESSING THE AP-FSE:

The AP-FSE is freely available to download from EPA's website: <https://www.epa.gov/waterlabnet-work/plan-laboratory-full-scale-exercise>.



FAQ: HOW MUCH TIME IS NEEDED TO PLAN AND CONDUCT A FULL- SCALE EXERCISE?

In general, 6-12 months should be allowed to plan a 3-5 day exercise. The AP-FSE toolkit provides an example planning schedule to meet your needs.



QUOTE FROM PAST PARTICIPANT:

"This exercise is an awesome way to educate, enhance and test our training! We learned so much and would be very much interested in participating again with future exercises."

- AP-FSE Laboratory Participant

TOOLKIT RESOURCES

The AP-FSE Toolkit includes everything users need to conduct exercises based on two "off the shelf" scenarios: one involving a biological agent and one involving a chemical contaminant. The Toolkit also features templates and other easy-to-adapt forms and handouts so participants can easily use the included scenarios or develop their own. Resources that users can download from the Toolkit include, among others:

- Two complete sets of customizable scenario documents, including master scenario event lists and exercise evaluation guides, plus templates for creating new scenarios.
- Example exercise planning schedule.
- Training slideshows for controllers and evaluators.
- Customizable exercise evaluation and feedback forms
- After-Action Report template.



Questions or interested in learning more?

Contact WLA@epa.gov or visit <https://www.epa.gov/waterresilience-training/register-water-utility-resilience-training-now> to register for training on the AP-FSE Toolkit and the WLA-RP.



EPA 817-S-19-002