

Water Contaminant Information Tool's (WCIT) Latest Growth Spurt: Contaminant Database Adds 11 Substances

U.S. EPA's Office of Ground Water and Drinking Water (OGWDW) has announced an expansion of WCIT, adding 11 contaminants to the online tool. Most are chemicals regularly used in drinking water and wastewater treatment processes, although two substances (dioxins and furans) were added due to their toxicity and use or occurrence. Through accidents, natural disasters or intentional acts, these 11 substances have the potential to enter water systems or contaminate source water. The 11 new WCIT contaminants are:

- aluminum sulfate
- ammonium hydroxide
- chlorine dioxide
- dioxins
- furans
- hydrogen peroxide
- ozone
- sodium hydroxide
- sodium hypochlorite
- sodium sulfite
- sodium thiosulfate

This addition brings the total to 113 contaminants listed in WCIT that include full profiles – with medical information, early warning indicators, drinking water treatment and several other categories of valuable information. For more than 700 additional substances, there are details about methods – including both field and laboratory methods – with method descriptions, uses and, when available, links to the full methods. EPA will continue to add additional substances to WCIT (biotoxins, chemicals, pathogens, radioisotopes, etc.) to ensure that the tool remains a valuable source of information for the water sector.

WCIT Online Training

FREE!

Never tried WCIT? Or haven't used it in a while? Or maybe you would like a refresher on how to use it. Then you should take advantage of the free online training available for WCIT.

During the upcoming fiscal year, EPA will be offering hands-on WCIT training. This special training lasts about one hour. It provides an introduction to WCIT content and guidance on how to use the tool. By the end of the one-hour training session, you will be able to identify contaminant and method data in WCIT, and use most of the tool's features – such as the search, contaminant comparison and risk assessment functions. Both Internet and telephone access are needed for this free training.

If you are interested in the training, send an email to WCIT@epa.gov. You will be contacted with the new fall training schedule.

INSIDE THE TOOLBOX

WCIT Incorporates Contamination Response 'Expert System' Tool

As part of continued enhancements of the WCIT, EPA has incorporated a powerful resource to assist water utilities and other WCIT users in planning or executing their response to a drinking water or wastewater contamination incident. Chemical biological and radiological (CBR) Advisor, a tool within WCIT, is an interactive, expert system that supports real-time responses to contamination incidents, as well as serving as an individual or group training tool.

CBR Advisor is based on the Response Protocol Toolbox (RPTB), a comprehensive guide for responding to drinking water contamination threats and incidents that was developed by EPA's OGWDW.

The modules of the RPTB cover key contamination response priorities, including:

- Contamination threat management
- Site characterization and sampling
- Public health response
- Remediation and recovery

Specific RPTB topics covered include:

- Classifying threat warnings
- Conducting initial threat evaluations
- Collecting, packaging and shipping hazardous samples

In WCIT, CBR Advisor operates in a split-screen format. The left-hand side follows an intuitive Q & A approach. This enables users to get quick answers to emergency response questions, and link to documents and forms that will assist in an emergency response or a training exercise. The right-hand side operates in tandem, allowing users to drill down more deeply on topics on the left side.

To access CBR Advisor, after logging in to WCIT, click on the "Tools" tab at the top of the page. Then click the link for CBR Advisor once you reach the "Tools" Web page.

Haven't Logged In Lately, or Forgot Your Password? No Problem!

Haven't logged into WCIT lately because you forgot your password or user name?

If you haven't visited recently, it's possible that your password has expired. If it has, or if you have forgotten it, it's easy to create a new password – and takes only a minute or two.

First, go to: <https://cdx.epa.gov/SSL/cdx/login.asp>.

Then, type in your user name and click the "Forgot Password" link. You'll come to a Password Reset page. Type in your email address (the one you used when you originally signed up for WCIT), and then your user name and click "Submit." This will bring up the secret question, which you created when you signed up for WCIT. Answer the secret question and you will get a confirmation that you have been granted permission to change your password, and that an email with instructions has been sent to you. Open the email from the CDX Password Reset Manager; click the link provided in the email and follow the instructions on the Change System Password page. After you enter your new password, click the "Submit" button.

You're done! This takes you to the MyCDX page where you can click on the WCIT link at the bottom of the page.

(Note: If you have forgotten your user name, call the CDX help number at the bottom of the login page [888-890-1995] and a technical support specialist will help you retrieve it.)

WCIT Challenge

Read the scenario below and use WCIT to answer the questions. Send your answers to WCIT@epa.gov. The first several responders with the correct answers will be acknowledged in the next WCIT Update.

SCENARIO: The Ohio River Valley is impacted by high winds, heavy rain and several tornadoes resulting from a fast-moving storm system. During the nighttime, an unmanned river barge on the Ohio River loaded with aldicarb escaped from its mooring and rams into a bridge just above the water intake for a medium-sized city. The collision results in a large gash in the barge below the water line. Hours pass before anyone realizes the extent of the damage, allowing much of the barge contents to spill into the river.

QUESTIONS: What is the chlorine to aldicarb ratio needed for complete removal? Less than optimal chlorination results in chlorinated aldicarb sulfone and chlorinated aldicarb sulfoxide. How does this affect the toxicity? What is the hydrolysis half life of aldicarb in raw water?

To take the challenge, log into WCIT at <https://cdx.epa.gov/>. Good luck!

WCIT Becomes Everyday Companion for Lab Manager



Melissa A. Billman

Fairfax Water, outside of our nation's capital, is one of the largest water utilities in the nation, providing drinking water to nearly 1.7 million people in Northern Virginia. For Melissa A. Billman, Manager/Water Quality Laboratory & Regulatory Compliance, WCIT has become a valuable tool

for operational activity as well as for emergency response training and exercises at the utility. "WCIT is an easy-to-use, robust tool – very logical and well laid out," she says. "It provides technical expertise, and the information is authoritative and understandable, which provides a level of confidence when making decisions."

For Fairfax Water, Ms. Billman has used WCIT to research impacts of pesticide use within the utility's service area watershed, to shape response to petroleum-related spills in the Potomac River (one of the utility's sources of raw water), and as a tool to support emergency response exercises. In 2013, Fairfax Water was one of the two water utilities participating in an EPA Office of Water (OW) Full-Scale Exercise to test laboratory response capabilities for a hypothetical drinking water contamination incident; Ms. Billman used WCIT to research contaminants planned for the scenario.

Ms. Billman has been a WCIT user for about four years. She was introduced to the tool at EPA OW's Water Laboratory Alliance (WLA) Security Summit in 2009. She and her staff subsequently took advantage of WCIT's free online training (see article on page 1). "That's when we realized how many tools WCIT provides and, overall, how useful it is for a water utility," she says. Ms. Billman especially values WCIT's drinking water focus, such as how it provides details on parameters that would be affected by a contaminant and the analytical methods and online water quality testing needed to detect the contaminant. In addition, she likes the ability in each contaminant profile to switch between information categories (such as fate and transport, drinking water treatment) with just one click. "The Public Information Officer page for each contaminant also is very helpful," she says.

Send Us Your Feedback. Do you have a question, comment, or suggestion for the WCIT Administrator regarding WCIT? Please send an email to WCIT@epa.gov.