

Water Contaminant Information Tool (WCIT)



Office of Ground Water
and Drinking Water

AGENDA

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What is WCIT?

EPA's secure online database that contains information about contaminants of concern to the Water Sector.

- The database has been live since 2005.
- Originally, contaminants for WCIT were selected from the perspective of intentional contamination acts.
- However, the tool has since adopted an “all hazards” approach, to include unintentional and natural incidents.

An official website of the United States government. [Here's how you know.](#)

EPA United States Environmental Protection Agency

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CONTACT WCIT | CONTACT CDX

SEARCH FOR CONTAMINANTS

Enter keyword, contaminant name or CAS number

#|A|B|C|D|E|F|G|H|I|J|K|L|M|N|O|P|Q|R|S|T|U|V|W|X|Y|Z

WCIT

Water Contaminant Information Tool

A one-stop reference tool on contaminants of concern for the Water Sector

About WCIT

EPA's Water Contaminant Information Tool (WCIT) is a secure database of information on priority contaminants for drinking water and wastewater security. It contains data that will assist in planning for and responding to drinking water contamination threats and incidents. As a planning tool, WCIT is meant to support vulnerability assessments, emergency response plans, and site-specific response guidelines. As a response tool, WCIT is designed to provide real-time information on water contaminants to inform response decisions.

WCIT may help some users narrow the potential candidates for a specific contaminant that has been identified or is suspected, but is not designed to be a reliable, definitive means of identifying an unknown substance.

WCIT is intended for use by water utilities, EPA Program Offices and Regions, other Federal organizations, State drinking water programs, public health officials, environmental laboratories, emergency first responders, and technical assistance providers. Data are for official use only. Please do not cite, quote or distribute.

What's New?

- The Summer 2022 WCIT newsletter has been posted on the EPA website: <https://www.epa.gov/water/abnetwork/water-contaminant-information-tool-wcit>.
- A new full profile has been added to the WCIT database, for fentanyl.
- State and Local emergency response agencies are now eligible for access to WCIT!
- Check out the updated list of external resources (under Tools in the main menu).
- EPA periodically offers WCIT training sessions. Visit <https://www.epa.gov/waterresiliencetraining/register-water-utility-resilience-workshops-and-webinars-now>

Disclaimer

The Water Contaminant Information Tool (WCIT) is a secure database with information about contaminants of concern for the Water Sector. The information can be used to preparefor, respond to, or recover from a contamination incident. The selection of contaminants for inclusion in WCIT is independent of other Agency efforts to prioritize contaminants of concern. EPA does not assume responsibility for errors, misinterpretation of technical information, injury, or illness as a result of use or misuse of this database. Technical content may change without prior notice. Mention of trade names, manufacturers or products does not imply an endorsement by the United States Government or the U.S. Environmental Protection Agency. EPA and its employees do not endorse any commercial products, services, or enterprises. Links to websites outside the EPA website are provided for the convenience of the user. Inclusion of information about a website, organization, a product, or a service does not represent EPA opinion, policy, or guidance unless specifically indicated. EPA does not exercise any editorial control over the information that may be found at any non-EPA website.



Information provided in WCIT

- WCIT contains information on more than 800 contaminants, all of which are of highest concern if introduced into water systems.
- Types of contaminants included are:
 - pathogens
 - biological toxins
 - industrial chemicals
 - pesticides
 - radiochemicals
 - chemical warfare agents
- Contaminant information is presented in the format of profile (like a fact sheet).

Home/Search WCIT Resources Other Resources Help Data Module

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Contaminants

Profile Type Comprehensive Lab Method Partial

Contaminant Name Topic Enter keyword, contaminant name or CAS number

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z

822 results found for: All Contaminants

1 2 3 4 5 ... 28 Next Last

Compare Contaminants

Reset Filters

Contaminant	Category	Profile Type
<input type="checkbox"/> (E)-Crotonaldehyde	Inorganic	Lab Method
<input type="checkbox"/> 1-Acetyl-2-thiourea		Lab Method
<input type="checkbox"/> 1-Chloro-2,4-dinitrobenzene	Organic	Comprehensive
<input type="checkbox"/> 1-Chloronaphthalene		Lab Method
<input type="checkbox"/> 1-Methyl-9H-fluorene		Lab Method
<input type="checkbox"/> 1-Methylphenanthrene		Lab Method
<input type="checkbox"/> 1-Naphthol		Lab Method
<input type="checkbox"/> 1-Phenylnaphthalene		Lab Method
<input type="checkbox"/> 1,1-Dichloroacetone		Lab Method
<input type="checkbox"/> 1,1-Dichloroethane		Lab Method



Information provided in WCIT (cont.)

➤ **Comprehensive Profiles** – provides contaminant information in the following categories:

- contaminant names (including CAS numbers and synonyms)
- physical properties
- contaminant usage and sources
- fate and transport
- health effects and toxicity
- medical information
- early warning indicators
- drinking water treatment
- wastewater treatment
- sampling and analysis
- helpful response considerations for utilities
- infrastructure decontamination.

➤ **Partial profiles** - profiles that include only a subset of the 13 categories. It will depend on available information for the contaminant.

➤ **Lab Method Profiles** – provide summary information for only field and laboratory analytical methods.



Data are expert- reviewed and regularly updated



How can the Water Sector Use WCIT?

WCIT includes valuable information that can support preparedness and each phase of an incident response whether it be intentional or unintentional.

Remediation

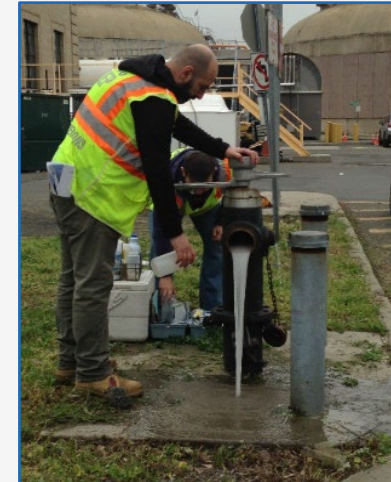
- Emergency drills
- Tabletop exercises
- Full-scale exercises



- Characterize contaminant
- Extent of contamination
- Field and Laboratory Methods
- Public Information
- Clearance Goals

- Drinking Water Treatment
- Wastewater Treatment
- Infrastructure Decontamination

- Monitoring





Become a WCIT Expert



Office of Ground Water
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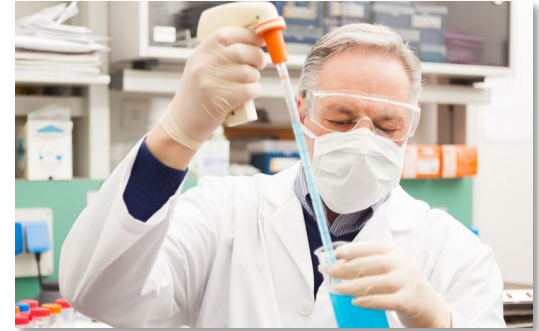


How to Access WCIT

WCIT, due to the compilation of all the data within it, is considered sensitive.

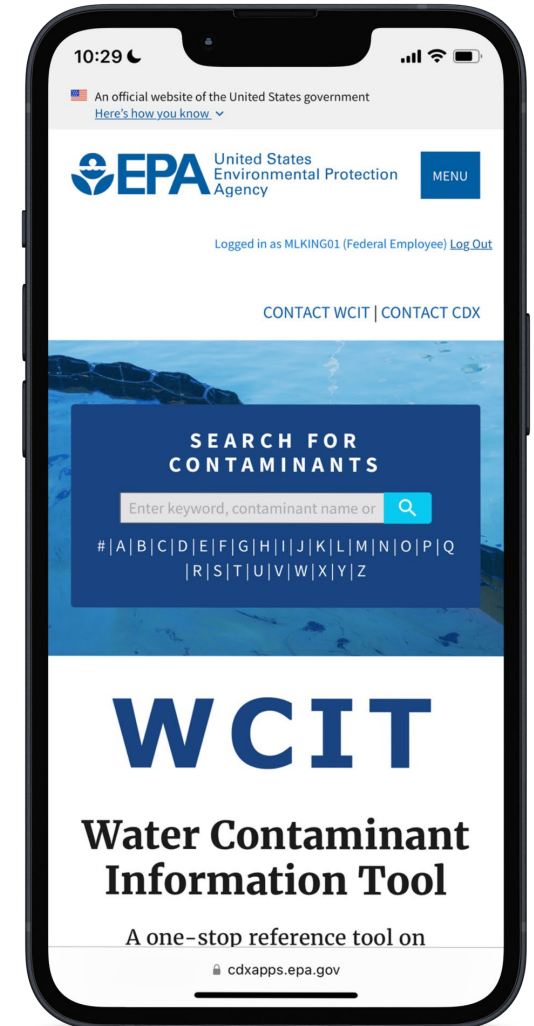
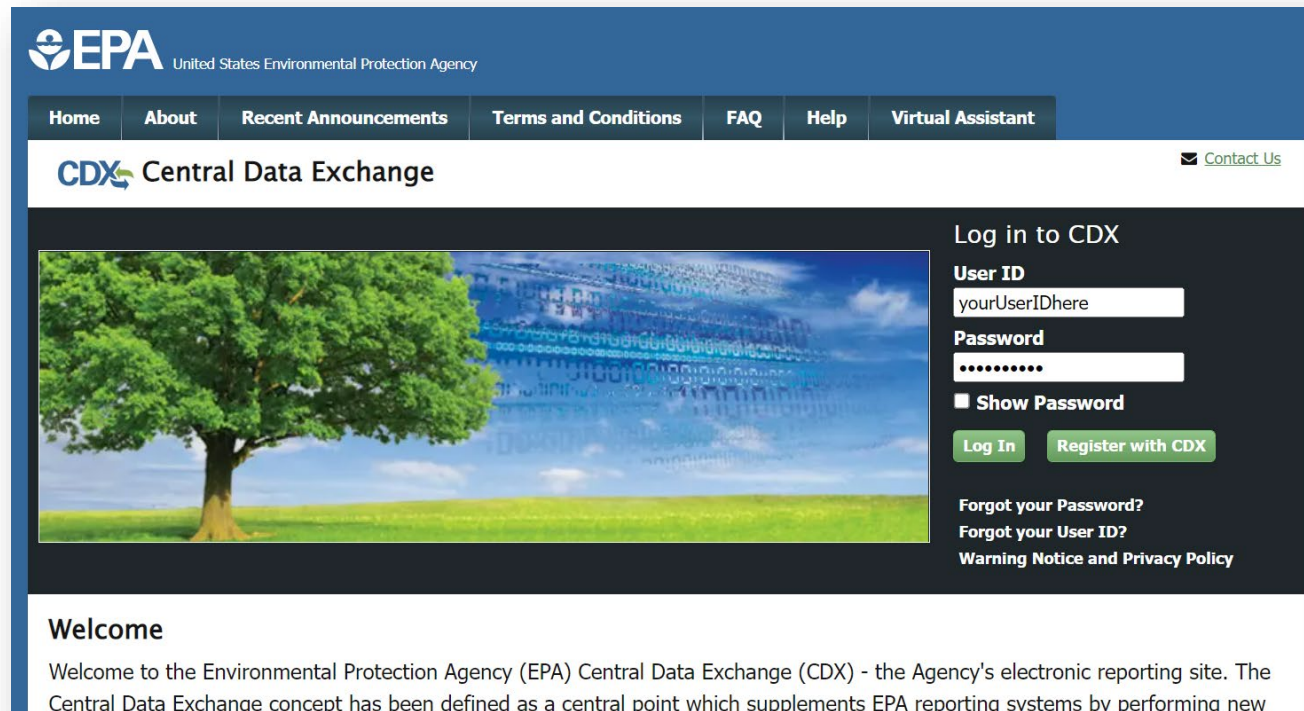
Access is limited to:

- Drinking water and wastewater utilities
- State primacy agencies and their subsidiaries
- Laboratories
- Public health officials
- State and federal emergency responders
- Water associations



Logistics – Obtaining Access to WCIT

- ❑ Go to [WCIT Webpage](#) – Get Data/Tool
- ❑ Register at cdx.epa.gov
- ❑ For detail instructions go [here](#)





Instructions for WCIT Exercises

1. Gain access to WCIT
2. There isn't always one correct answer
3. Apply your own knowledge and experiences
4. Search for information in the database

Submit your answers using the Contact WCIT link in the database or email them to WCIT@epa.gov!



Source: [Raconteur](#)



Exercise #1

A tanker truck capsizes near the lake that supplies your drinking water system. You learn that it was transporting No. 2 fuel oil.

Using WCIT, create a briefing for system managers that summarizes:

- ✓ Risks posed to the water treatment plant and to customers.
- ✓ Options for monitoring and treating the contamination.
- ✓ Options for decontamination.



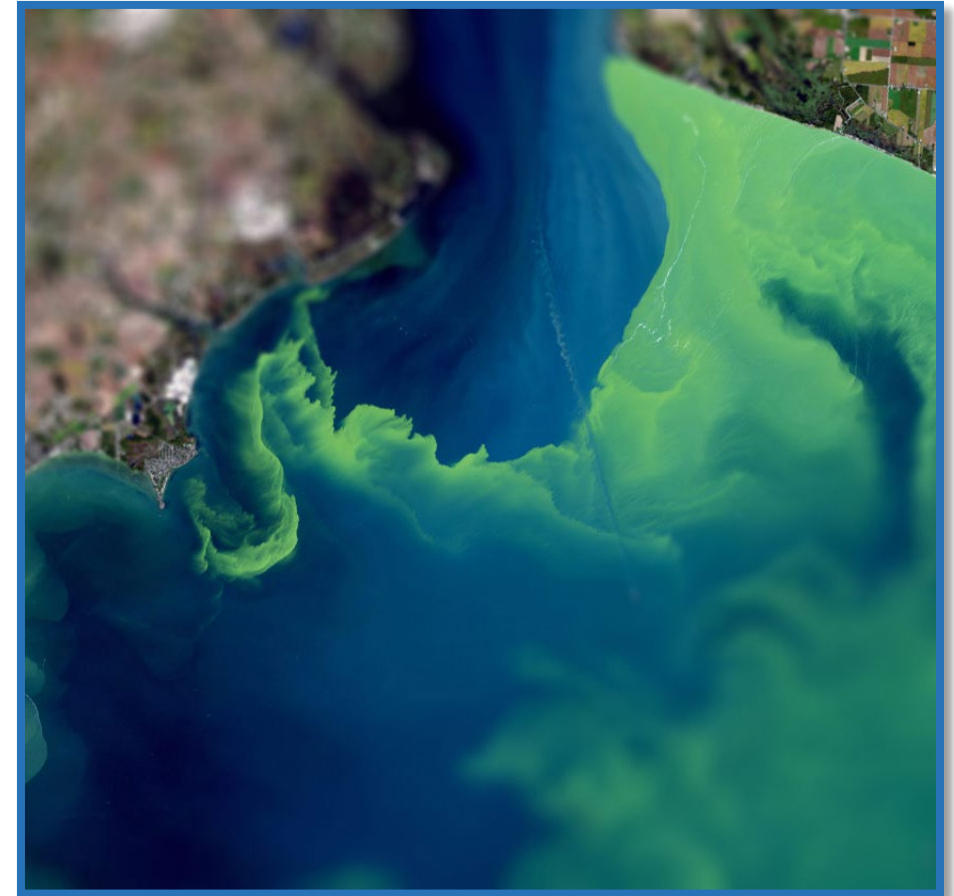
Source: [The Oregonian](#)



Exercise #2

As the manager of a PWS that relies on a lake as the source of your water, you learn that a potentially Harmful Algal Bloom (HAB) has been observed in the lake. You are concerned about the possible presence of the biotoxin cylindrospermopsin.

1. What USEPA-developed analytical methods are available for the analysis of cylindrospermopsin?
2. Are these methods applicable to source water, finished drinking water, or both?
3. Can a laboratory obtain results within a day of initiating the analysis using these methods?



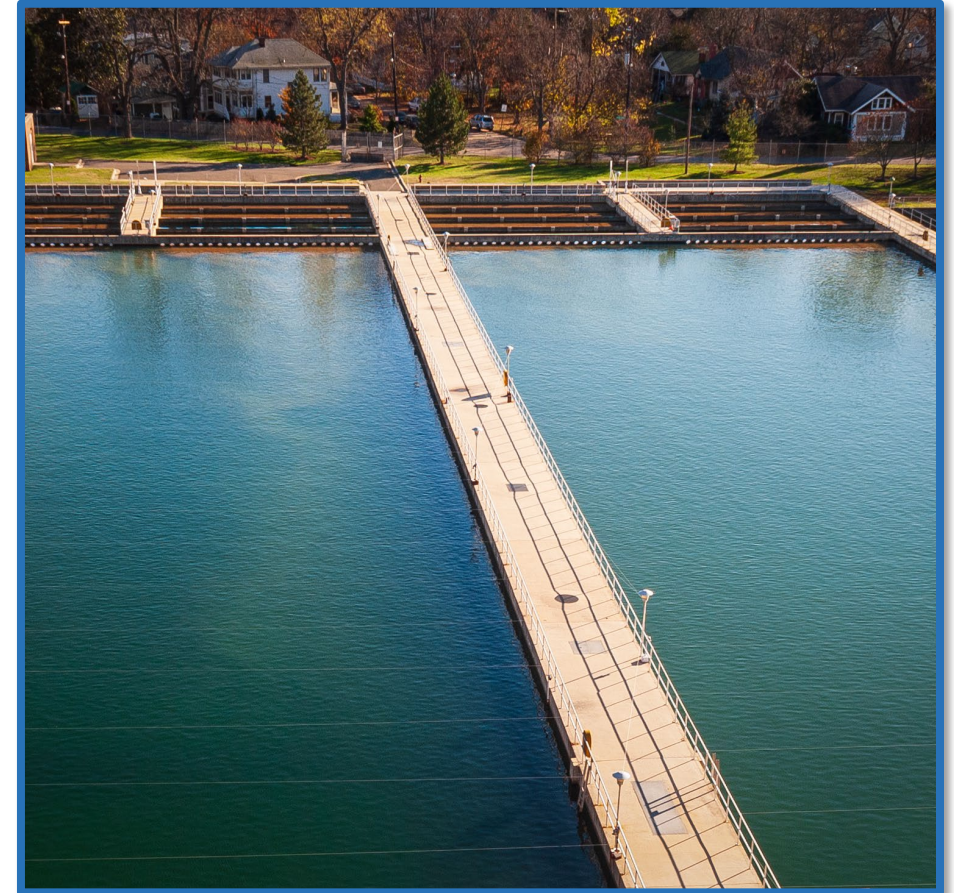
Source: [NOAA](#)



Exercise #3

You find out that a 2-gallon container of Dicroto-Pest, an insecticide, has accidentally spilled into a reservoir holding 800,000 gallons of drinking water. There are 5 lbs of the active ingredient, dicrotophos, in every gallon of Dicroto-Pest.

Will dilution in the reservoir bring the concentration of dicrotophos to safe levels?



Source: US EPA



Exercise #4

Your team has collected water samples throughout your water system to identify the extent of dicotophos contamination. However, you do not have the lab capacity to test these samples.

Using WCIT, where can you identify a lab that can process your samples?



Source: [Cumming Utilities](#)



Main Takeaways

WCIT includes valuable information that can support each phase of an incident response.

- Initial response and site characterization
 - Gather information about the contaminant and identify analytical methods for screening and confirmatory analysis.
- Cleanup
 - Identify options for water treatment and infrastructure decontamination

Action Items

- Obtain access to WCIT
- Familiarize yourself with the database
- Attend an Advanced User webinar event
- Integrate WCIT as a tool in your emergency planning and response
- Keep up to date with the WCIT community by reading the biannual newsletter

Thanks for your time!

Live training opportunities:



[Training Center Website](#)

Contact Us:



WCIT@epa.gov