TECHNOLOGY CAFÉ: SESSION A

1 Water Contaminant Information Tool (WCIT): A Tool for Water Contamination Incident Preparedness and Response

Veronica Aponte-Morales | *U.S. Environmental Protection Agency*

Drinking water and wastewater systems face major challenges when confronting intentional, unintentional, or natural water contamination incidents. An effective and fast response is necessary to limit the impact on public health and water systems in general. Water utilities and responders require tools that can be adapted to specific incidents as appropriate. To address the needs of the Water Sector, the Environmental Protection Agency's Office of Water, Water Security Division has and continues to develop tools and resources to aid the Water Sector in their emergency response and preparedness activities. An example of such a resource is the Water Contaminant Information Tool (WCIT). WCIT is a secure online database that contains comprehensive information on chemical, biological, and radiochemical contaminants of concern for the water sector. It was designed to help support vulnerability assessments, and assist in planning for, and responding to, water contamination threats and incidents.

There are more than 800 contaminants listed in WCIT with valuable information. Of these, 113 contaminants are "comprehensive" profiles. This type of profile 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 considerations for utilities, and several other categories of information, such as infrastructure decontamination. The predominant (more than 700 contaminants) profile type is a "lab methods" profile that provides summaries for field and laboratory analytical methods.

WCIT's wide range of information makes it a tool applicable to a wide range of users and activities, for example:

- Laboratories – to search for analytical methods and identify any potential safety risks associated with handling samples.
- Emergency Responders – to obtain appropriate field methods and identify proper sample collection and transport.
- Medical and Public Health Officials – to assist with diagnosis and treatment of anyone who a contaminant might have exposed.
- Utilities – to learn about a contaminant's persistence, fate & transport, and other properties, and identify treatment and decontamination options.
- Public information officer – gather information that can be used for briefings and communicate with the public and media.

This presentation will include a brief overview of the tool's main features, a walkthrough demonstration of the database and examples of real experiences users have had with WCIT.