

## **Course Outline**

### **Method Update and Tools for Evaluation of PFAS, 1,4-Dioxane, and Inorganics Analytical Data** *May 12, 2022, 11am - 2:15pm - via Zoom Webinar*

#### **11:00 - 11:05                      Webinar Introductions**

**11:05 - 11:35                      Analytical Method Review: PFAS & 1,4-Dioxane – Jim Occhialini**  
There are 3 analytical methods commonly used for the analysis of low level 1,4 dioxane. Each will be reviewed with their respective advantages and disadvantages evaluated in relation to MCP project applications. An overview of the most commonly used methods for PFAS will be presented along with an update on the status of the new Method 1633.

**11:35 - 12:20                      PFAS - Elizabeth Denly and Nancy Rothman**  
Certain steps in the preparation and analysis of PFAS samples can vary among laboratories and these steps can alter the final PFAS result; examples include the volume of sample used in the extraction, at what point in the sample/analysis scheme samples are spiked with labeled surrogates, when/if samples are put through a cleanup process, and how and if a laboratory deals with particulates in aqueous samples. This section of the webinar will address how to assess PFAS data and will provide the data user with appropriate sampling and method information to communicate effectively with the laboratory to obtain PFAS data that meets their project needs.

**12:20 - 12:30                      Q & A**

**12:30 - 12:45                      BREAK**

**12:45 - 1:15                      1,4-Dioxane - Elizabeth Denly and Nancy Rothman**  
1,4-Dioxane analyses can be complicated by the nature of this chemical and potential interfering compounds. The data user must select among many different analytical options when preparing for investigations involving 1,4-dioxane. Furthermore, at sites with relatively low regulatory limits for 1,4-dioxane, the environmental data must meet strict accuracy, precision, and sensitivity data quality objectives. Understanding the analytical options and potential issues associated with each, along with the key QC issues that will impact 1,4-dioxane data quality, will allow informed decisions to be made at the front-end to choose the appropriate method for the data needs and at the back-end in the evaluation of 1,4-dioxane data quality and usability. This section of the webinar will focus on the ITRC's latest information on 1,4-dioxane analytical and data evaluation recommendations.

**1:15 - 2:00                      Inorganics - Susan Chapnick**

This portion of the webinar will provide a look at some interpretation issues associated with inorganic parameters. These issues include evaluation of matrix interferences for ICP-AES (6010) and ICP-MS (6020) methods, including potential false positives for arsenic and thallium, the interpretation of QC results when evaluating hexavalent chromium data in soils or sediment, and factors that affect the interpretation of Acid Volatile Sulfides (AVS) and Simultaneously Extractable Metals (SEM) results.

**2:00 - 2:15                      Q & A**