



## 2024 Annual Conference Agenda

at

Holiday Inn Harrisburg-Hershey, 604 Station Road Grantville, PA 17028

Wednesday, October 16

7:30 to 8:30 AM      Registration      7:45 to 9:00 AM      Breakfast Buffet  
8:25      Welcome  
8:30      Keynote Speaker:

***From Dead Streams to Recovering: Implications for Dramatic Improvement in Pennsylvania Water Quality***

**Eric Chapman, Western Pennsylvania Conservancy, Watershed Conservation Program**

Western Pennsylvania Conservancy staff and project partners including academia, county conservation districts, municipalities, state and federal agencies, as well as grassroots conservation organizations have been working tirelessly to improve water quality across the Commonwealth. Numerous restoration projects have been implemented across the state including acid mine drainage treatment systems, agricultural best management practices, aquatic organism passage projects, dirt and gravel road improvements, and streambank stabilization and aquatic habitat improvements. All these restoration efforts coupled with the important work of industry and municipal water quality monitoring laboratories and state regulatory agencies are working together to produce measurable changes in biological communities across Pennsylvania. During this presentation attendees will learn about increases in biodiversity (particularly in freshwater mussel and fish communities) seen in several watersheds of western Pennsylvania which can be attributed to water quality improvements over the last 100 years.

**9:30      Navigating PFAS Analysis: Method Selection and Sampling  
            – Rich Stump, President of Suburban Testing Labs**

This talk will delve into the critical aspects of PFAS analysis, focusing on the intricacies of method selection and sampling considerations for common PFAS methods, including EPA 1633. The session will provide an in-depth understanding of the analytical challenges associated with PFAS, offer insights into selecting the most appropriate testing methodologies, and highlight best practices for accurate sampling. Attendees will gain practical knowledge to ensure compliance with regulatory requirements while achieving reliable and defensible results in PFAS testing.

**10:30      Break (Visit the Vendors)**

**10:45      PFAS Testing What's Next - Thomas Hey, PerkinElmer**

As no surprise to anyone here PFAS are a growing problem in the US and have finally been regulated to track and remediate these forever chemicals. This talk will discuss the current regulations and where industry is heading globally including what could be further regulated such as packaging, textiles and more.

### **11:15 PFAS Methods – Pros and Cons –Mike Ulatowski and William Lipps, Shimadzu**

This talk examines the various methods for managing PFAS, highlighting their respective advantages and limitations. The range of methods includes those with high costs, complex procedures, and experimental technologies. Regulatory approaches, while essential for driving innovation, can be slow and expensive. The discussion will focus on the need to balance effectiveness, cost, and practicality, while also looking ahead to technological and policy advancements that could enhance our ability to address PFAS contamination more effectively.

### **12:00 to 1:00 Lunch**

### **1:00 Microbiology: Microbes Review, Good Laboratory Practices, and Tips – Patsy Root, Idexx**

### **1:30 Why are we here? The Creation of the Environmental Industry - Judy Morgan, Pace**

Significant environmental disasters have occurred from the 1950s to recent times, highlighting ongoing environmental issues. As a result, laws were passed and resulting Environmental regulations were established to mitigate future contamination. EPA established multiple program offices to be responsible for the different environmental statutes and associated programs. The regulations became the driver for the expansion of analytical laboratory industry and the regulatory requirements determine the selection of appropriate analytical method. This presentation will discuss the evolution of how and why the environmental industry developed while establishing environmental objectives and navigating Federal, State, and Local requirements.

### **2:30 Break**

### **2:45 Analysis of Trihalomethanes (THMs) in Drinking Water using Purge and Trap (P&T) Concentration with Separation by Gas Chromatography (GC) and Detection by Surface Acoustic Wave (SAW) Sensor – Hank Hahn and Ann Smith, Xylem**

A new solution for effective monitoring of THMs now exists that is fast, simple, and reliable. The benchtop analyzer has merged the P&T, GC, and detector into one simple analyzer. The innovative portion of this solution is the SAW (surface acoustic wave) sensor. This unique monolithic detector is coated with a nanoporous carbon layer and provides almost instant and extremely sensitive responses. Developed in conjunction with Sandia National Labs, this technology has simplified the detector portion to ensure routine and low maintenance operation.

### **3:15 ICP-OES Spectral Interpretation - Brady Frill PerkinElmer**

Inductively Coupled Plasma Optical Emission Spectroscopy is science and art. Correct interpretation of the spectra generated during an ICP-OES analysis is critical to generating accurate results. During this talk I will explore examples of how to identify and handle spectral interferences. Several techniques to resolve spectral interferences will be discussed including tips and tricks for building inter-element correction models (IECs). The spectral interference information presented will be directly applicable to EPA method 200.7 section 4.

### **3:45 Exploring the Benefits of a GC QQQ in Your Environmental Lab – Alexis Willey, Agilent Technologies**

In the environmental world of regulations, detection limits are continuing to drop for many groups of compounds, bringing forth the need for instrumentation that has the sensitivity to meet those requirements. By moving methods that are typically done by GC or GCMS single quad over to GC triple quad, labs can reach lower detection limits, and in some cases move to lower volume preparation of samples. This gives labs the ability to be more efficient with turnaround time and sample prep, GC QQQ is the future for environmental labs.

### **4:15 to 6:00 Meet and Greet**

# Thursday, October 17

**7:30 to 8:30 Registration**

**7:45 to 9:00 Breakfast Buffet**

**9:00 to 10:00 PA Regulatory Roundtable**

**PA DEP Bureau of Safe Drinking Water, Jason Minnich and Jill Anderson  
PA DEP Clean Water, Maria Schumack  
PA DEP Bureau of Laboratories/Laboratory Accreditation Program,  
Pam Higgins**

**10:00 to 10:15 Break**

**10:15 to 11:15 Manual Integration - William Lipps and Mike Ulatowski, Shimadzu**

The easy answer about doing manual integrations is – don't do it. But, is that the *practical* answer? Not always. We will explore manual integration best practices and do's and don'ts while looking at PFAS LCMS, VOC, SVOC GCMS, and IC data. We will explore real world examples of peak shaving and adding to a surrogate to 625 to make it pass and the ethics of it all.

**11:15 to 12:00 Workforce Retention, Training opportunities and credentialling  
- Stacie Crandall Nelac Institute,**

Workforce Retention, Training opportunities and credentialling are possible causes for common deficiencies returning or continuing to be seen in laboratory assessments. Possible causes and opportunities to address these causes will be presented and include employee retention, changes in requirements and training resources. How a root cause approach to preventing deficiencies that may be a result of one of these factors will be covered. In addition, information on the new credentialling program being developed by The NELAC Institute to be used as a tool for environmental laboratory professionals will be presented.

**12:00 to 12:45 Lunch**

**12:45 to 1:00 Business Meeting**

**1:00 to 2:30 How to Create an Effective Internal Auditing Program – Dorothy Love**

This presentation will provide information on how to put together a comprehensive, yet flexible, effective internal audit program. Multiple options for types of internal audits will be discussed, including how to prepare for them.

## **Can You Spot the Nonconformance?**

This is an interactive session. Audience members will work in teams in a friendly competition to identify the nonconformances seen in laboratory data and operations.

**2:30 to 2:45 Break**

**2:45 to 3:45 Discussion of PA-DEP Deficiencies & Interpretations – Aaren Alger**

This session will include discussion of what DEP has been finding during their lab assessments, how those findings have been written up, and how laboratories can use this information to prepare for their next audit. This presentation will include discussion of laboratories' real-life experiences during the DEP's laboratory assessments and interactive discussions of possible corrective action and cause analysis to improve your laboratory's compliance with the accreditation requirements.