

2023 PAAEL Conference Agenda

Tuesday, October 17, 2023

7:30 to 8:30	Registration
7:45 to 9:00	Breakfast Buffet
8:40 AM	Welcome
8:45 AM	Keynote Speaker – Jeff Jumper – PA Emergency Management

Title: A Changing Climate in our Commonwealth: What it Looks Like and How Pennsylvania is Building Toward Resilience

The impacts of a changing climate are often discussed on a global scale. Global views help us understand the overall trajectory of challenges facing our world, but can we qualify these impacts here in Pennsylvania? This presentation will review examples of weather extremes in Pennsylvania as they compare to averages. We'll look at what trends in global climate mean for the commonwealth. Detailing hazards impacting Pennsylvania, we will discuss how commonwealth agencies are attacking climate change head on to build more resilient communities.

Bio:

Jeff Jumper is the Resiliency Program Manager at the Pennsylvania Emergency Management Agency (PEMA). Previously, Jeff was the PEMA State Meteorologist from 2015 until 2022. During his PEMA tenure, Jeff has helped to better prepare the agency and its stakeholders for weather hazards through forecasts, outreach, partnerships, and training.

Prior to PEMA, Jeff worked for a decade as a broadcast meteorologist with television stations in Pennsylvania, Alabama, and Louisiana. He's earned the NWA Television Seal of Approval, AMS Certified Broadcast Meteorologist, and is an ACCO Climate Change Professional (CC-P). Jeff is a graduate of the National Emergency Management Advanced and Basic academies and has received the PEMA Professional and Associate Practitioner certifications. Jeff earned a Master of Science in Emergency Management from Millersville University in 2016, and a Bachelor of Science in Meteorology from Penn State University in 2006.

Mr. Jumper also teaches part-time for the emergency management programs at both Millersville and Jefferson Universities. For 25 years, Jeff has been an active volunteer firefighter and EMT, serving in numerous leadership roles, including a 2022 appointment by the Governor to serve on the inaugural Pennsylvania State Fire Advisory Board through 2024. Jeff, a northeast Pennsylvania native, now lives in York. His proudest accomplishment is being a husband and a father to his two kids.

Session I – Chapter 252

9:30 to 10:30 **Basic Lab Skills and Techniques – Dorothy Love**

Basic Lab Skills and Techniques: An overview of the basics that everyone performing testing in an environmental laboratory should know. The presentation will cover terminology, typical laboratory equipment and its use, and the responsibilities for every analyst/technician. This knowledge will help to ensure the accuracy of the data acquired by the laboratory.

Bio: Ms. Love has worked in the environmental testing field for more than 40 years, with 25 years in Quality Assurance. She is currently a QA Director for Eurofins Environment Testing

(USA). Ms. Love has a B.S. degree in Environmental Health from Indiana University of Pennsylvania. Prior to her current QA role overseeing the Eurofins' quality systems in the Environment Testing (USA) businesses, she has experience in analytical testing and data review for both organic and inorganic methods. Ms. Love has been with Eurofins (originally under Lancaster Laboratories) since 1989 with prior lab experience at other commercial and state laboratories. She has served for six years on TNI's Laboratory Accreditation Systems Executive Committee; served for six years on the TNI Quality Systems Expert Committee; participated in and chaired the TNI semi-annual Mentor Session for close to 10 years; and is a past chair of the NJ Environmental Laboratory Advisory Committee.

Dorothy Love
Quality Assurance Director
Eurofins Environment Testing (USA)
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10:30 to 11:00 **Break (Visit the Vendors)**

11:00 to 12:00 **Basic Documentation, Traceability, and Records – Dorothy Love**

Basic Documentation, Traceability, and Records: This presentation will cover the things that many labs get tripped up on during assessments and the components of laboratory operations that are essential to ensuring the compliance of your data... the documents and records. Explanations of what you need to document and some tips on how this can be easily accomplished will be presented.

12:00 to 1:00 **Lunch / Business Meeting**

1:00 to 2:15 **Effective Laboratory and Assessor Interactions - Dorothy Love**

This is an interactive session designed to address the challenges you may face communicating with your assessor before, during, and after an assessment. There are ways to make the assessments less stressful and more productive for both the lab and the agency. We will discuss tips for bettering your relationship with your agency and address particular scenarios and concerns from the audience.

2:15 to 2:45 **Break (Visit the Vendors)**

2:45 to 4:00 **Corrective Action Response – Aaren Alger – Interactive**

Presentation Overview: The concept of corrective action can seem complicated and overwhelming. Layer in developing and managing a corrective action process that brings value without adding unreasonable or unachievable timelines or requirements can make it something that just gets pushed off until the next DEP audit. In this session, participants will learn how preventive action, corrective action, cause analysis, and risk-based systems can be used in a simple system to ensure an effective corrective action protocol. Participants will work together through Q&A, break-out sessions, and small group assignments. This interactive

session will build on the skills and lessons learned during the previous sessions (Basic Lab Skills and Techniques; Basic Documentation, Traceability and Records; and How to Talk to Your Assessor).

Bio: Aaren Alger is the owner of Alger Consulting & Training, LLC (“ACT”) and is dedicated to the training and improvement of environmental laboratories focusing on proactive solutions that improve efficiency, productivity, and overall compliance with regulatory requirements. Aaren founded ACT in 2020 after serving the Commonwealth of PA for 20 years, first as a laboratory analyst, then as a laboratory assessor, and finally as the Chief of the PA DEP’s Laboratory Accreditation Program (“LAP”). Aaren is a USEPA-trained certification officer, a NELAP-approved assessor, and an active member in TNI. She serves on various taskforces and committees including serving as a NELAP lead evaluator and on the TNI Board of Directors. Aaren splits her time between laboratory consulting, teaching group fitness classes, leathercrafting, and spending time with her husband and two dogs.

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**4:00 to 6:00 Meet the Vendors/Happy Hour/William Lipps autograph event –
Bring your Standard Methods**

Tour the Trade Show and visit the vendors at their booths. Vendor Door Prize Drawings will be done. Drink tickets will be distributed at registration. Hors d’Oeuvres will be served.

Bring your 24th Edition of Standard Methods for the Examination of Water and Wastewater! Editor William C. Lipps, BCES, will be in attendance to sign it!

William has over 35 years’ experience as a chemist and manager of industrial and environmental laboratories, product specialist, product manager, and marketing of both laboratory services and instruments. William is the current chair of ASTM Committee D19 on water, is an Editor for Standard Methods for the Examination of Water and Wastewater, and a US delegate to ISO TC147 water chemistry. William is general manager of government and regulatory business development at Shimadzu and with a primary function of developing and publishing new or improved international standards at EPA, ISO, ASTM, and Standard Methods.

9:30 to 10:30 Sample Collection – Where Data Quality Begins - Jacob Gruzalski

Generating high-quality data is the objective of any monitoring program. Whether it is a regulatory compliance program or remediation project, the environmental data generated is being used to make important decisions and stakeholders need to have confidence in the results. The overall quality of environmental data is often viewed as a function of analytical laboratory performance; however, data quality begins with proper sample collection. This presentation will outline the key aspects of proper sample collection and will include real-world examples of improper sample collection.

Bio: Jacob graduated from the University of Tennessee, Chattanooga. He started his career as a Quality Control inspector at a Superfund site in Denver, CO before moving into the role of Construction Engineer during installation of caps and covers at the project site. He joined Environmental Standards in 2010 and has been focused on third-party Quality Assurance assessments of field sampling programs.

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10:30 to 11:00 Break (Visit the Vendors)

11:00 to 12:00 PFAS – EPA Clean Water – EPA Invited

Current CWA PFAS Analytical Method Projects

12:00 to 1:00 Lunch/ Business Meeting

1:00 to 2:15 Vendor Instrument - Technical Presentations

Analytical method range - what is it and how to maximize it? Dr. Ilkka Lähdesmäk, FIA Lab

Ilkka Lahdesmaki received his college degree in Chemical Engineering at Abo Akademi University (Turku, Finland) in 1993. He did his graduate work at the University of Washington (Seattle, WA, USA) with Prof. Jarda Ruzicka, leading to a Ph.D. degree in 1999. After holding post-doctoral positions, he joined Schering in 2002, working on chromatographic method development and validation for pharmaceutical products. Since 2010, he has been Chief Scientist at FIALab Instruments, Inc. where he is involved in the development of instrumentation and methods for environmental and agricultural analysis, mostly based on the Flow Injection technology.

Tips and tricks for successful ion chromatography analysis, Laine Compton, Metrohm USA

Plan to learn or get refreshed on the fundamentals of ion chromatography. Stack the separations deck in your favor with tips on improving your chromatography and resulting analyses for EPA 300.0, 300.1B, 218.7, 314.0, ASTM 6919 and touch on additional emerging EPA methods such as EPA 537 and draft method 1621.

Bio: Laine Compton is the regional ion chromatography sales specialist for Metrohm, celebrating nearly seven years of success with the Swiss-based manufacturing company. She holds both a B.Sc. in chemistry from Temple University and a M.Sc. focusing on analytical chemistry from George Washington University. Laine lives right outside of Philadelphia with her husband and 3yr old son.

Laine Compton
Sales Representative - Ion Chromatography
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2:15 to 2:45 Break (Visit the Vendors)

2:45 to 4:00 Vendor Instrument - Technical Presentations

Maximizing GCMS Up Time, Mike Ulatowski, Shimadzu

We know what you're thinking – Maintenance, we don't need no stinking maintenance. But you do, and there are things you can do to keep your CCV's and surrogates passing and your MDL's low when running VOC and SVOC by GCMS. And, has anyone noticed the cost of Helium? By providing practical recommendations and insights, we will help enhance your analytical efficiency and prepare for the future.

Bio: Mike graduated from Baldwin-Wallace College in Berea, OH. He started his career working in a QA lab doing product Certificates of Analysis and waste characterization. He transitioned to the Northeast Ohio Sewer District where he spent 12 years working in their environmental labs in various areas and specializing in compliance. After a short stint at a cannabis testing laboratory, Mike joined Shimadzu Scientific Instruments in 2022 as a Field Technical Support Scientist.

200.8 Equations and Method Development - Brady Frill, PerkinElmer

In 1994, the EPA released EPA Method 200.8 as the methodology for the analysis of 21 elements in ground, surface, drinking, and wastewaters by inductively coupled plasma mass spectrometry (ICP-MS). A hugely important aspect of this methodology is how it deals with isobaric and polyatomic interferences: mathematical correction equations. EPA method 200.8 lists recommended correction equations, but how were they constructed? How can you verify that they are working to remove the interference as intended? During this talk, I will describe how isobaric and polyatomic correction equations are calculated and how to determine their effectiveness.

Bio: Brady Frill is currently an Inorganic Field Applications Scientist with PerkinElmer based out of Bethlehem, Pennsylvania. Before joining PerkinElmer, he spent a decade as an analytical chemist focused primarily on atomic spectroscopy using ICP-OES and ICP-MS in contract and R&D laboratories. His experience includes trace and assay level analysis of metallurgical samples, polymers, geological samples, specialty gases, food additives and enzymes, oils and emission catalysts. Brady has a B.S. in Chemistry from Moravian College.

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Wednesday, October 18

7:30 to 8:30 **Registration**
7:45 to 9:00 **Breakfast Buffet**

There is only one Session

9:00 to 10:00 **Water Quality Data Analytics and Products: Susquehanna River Basin Commission - Tyler Shenk- Supervisor, Restoration and Protection, Susquehanna River Basin Commission**

The role of the Susquehanna River Basin Commission (SRBC) as a Federal Interstate Commission is crucial in overseeing the management and preservation of the Susquehanna River Basin's ecological health. Central to this responsibility is the reliance on accredited laboratory data, which forms the foundation for evaluating the overall health of the streams within the basin. This data-driven approach enables the SRBC to make informed decisions and develop effective strategies for maintaining the ecological integrity of the basin.

Drawing upon the wealth of accredited laboratory data collected through biological and chemical monitoring, the SRBC is able to generate user-friendly tools that serve multiple purposes. One of the key functions of these tools is to educate and communicate with the general public. Through

visualizations, interactive maps, and accessible information, the SRBC ensures that citizens are informed about the status of stream health and the efforts being undertaken to safeguard it.

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| 10:00 to 10:15 | Break |
| 10:15 to 11:30 | PADEP Roundtable - Regulatory Panel including representatives have been invited from Laboratory Accreditation, Drinking Water, Clean Water: And Solid Waste |
| 11:30 to 12:00 | PA DEP – Policy Director or Attorney from DEP history environmental legislation (topic being finalized) |
| 12:00 to 1:00 | Lunch |
| 1:00 to 2:00 | Sample Collection, Documentation and Laboratory Analysis Issues and the Effect on Data Quality and Compliance – Lester Dupes |

The presentation will detail multiple examples over a 35-year career of sample collection and documentation issues that affect sample analysis and reporting. Analysis issues, ethics, lack of training and plenty of other observations that have affected data quality for in-house and client regulatory compliance will be presented. The causes of these ethics' violations can vary, from incompetence, to lack of control to pure greed. Recommendations for detection, preventative and corrective action will be presented.

Bio: Lester Dupes is an Associate Chemist with Environmental Standards in Valley Forge Pennsylvania. He holds a BS in Chemistry from Juniata College and is a Certified Environmental Analytical Chemist. Lester has over 35 years of experience in Environmental Quality Assurance including mobile laboratory analysis by GC/MS and XRF, data validation, and sampling and analysis technical specifications manual preparation. He has audited laboratories in Hungary, Argentina, Mexico and throughout the United States (including the North Slope of Alaska). His auditing experience includes field sampling and documentation, industrial wastewater, fuel specification, chemical weapon destruction, commercial environmental and food laboratories.

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| 2:30 to 2:45 | Break |
| 2:45 to 3:45 | Lab fraud - EPA Invited |