Florida Society of Environmental Analysts

Fall Meeting and Technical Session October 25-27, 2017

Wednesday October 25, 2017 Concurrent Workshop Sessions

8:00 am Registration Opens	**Foyer**
10:00—6:30pm Exhibitor Area Open to attendees	[illegible] , Foyer
10:00 - 10:30am Break in Exhibit Area	[illegible]
2:30—3:15pm Break in Exhibit Area	[illegible]
5:00– 6:30pm Reception in Exhibit Area	[illegible]

Wednesday Morning Sessions 8:30—noon

Session 1—Field Quality Systems and Field Audit Workshop ~0.35 CEUs John Moorman, SFWMD (reser e C)

Strengthening Quality Assurance in the field to assure data integrity and limit risk to the organization is critical. This workshop stresses the importance of establishing and strengthening your Field Quality System to better meet FDEP field SOP requirements AND meet the expectations for data quality by management and the public. The workshop will also take a more detailed look at establishing and/or improving your field audit program so it meets your needs and adds value, improves processes and decreases risk for your organization. In addition to the audit process and how to develop your checklist, we will focus on what to do AFTER your audit to identify root causes, verify the corrective actions have been made and prevent them from reoccurring.

Session 2—The 2016 TNI Standards, Vol. 1, Mod. 4: Quality Systems for Chemical Testing—Are you Prepared? ~0.35 CEUs

Valerie Slaven, Teklab Inc. and TNI Chemistry Committee chair and Dr. Colin Wright, FDEP (Preserve B)

The Florida Department of Health has published a Notice of Rule Development in which there is a requirement for environmental testing laboratories seeking certification to comply with Module 4, "Chemical Testing" of the 2016 TNI standard (EL-V1M4-2016). There are significant differences between the Chemistry Modules of the 2016 TNI Standard and that of the 2009 Standard. In particular, both the calibration and the detection and quantitation sections have been substantially revised. This workshop will cover the changes to each section as well as some of the chemistry committee's rational behind the changes. It will also include practical approaches to the day to day implementation of Module 4 of the 2016 standard.

12:00– 1:00pm LUNCH ON YOUR OWN or sign up for the vendor Lunch and Learn Session

Wednesday Afternoon Sessions 1:00– 5:00pm

Session 3—Conducting an In-depth Data Review - When is enough enough? ~0.40 CEUs **Silky Labie, ELCAT** (Preserve B)

Many sampling organizations are considering accreditation through the NEFAP Standards (FSMO V1-ISO 2008), but are hesitant to do so because of the perception that the Standards have more requirements than the DEP SOPs. This course will review the similarities between the two sets of requirements, and highlight the differences, so that organizations will be better prepared to make a decision on whether or not to seek NEFAP accreditation.

Session 4—Lessons in Field Sampling ~0.40 CEUs eoff Rosenaw osh ra lin, Collier Co, Vance Reiman, JEA (Preserve C)

[illegible]

5:00—6:30pm Reception in Exhibit Area with Hors d'oeuvres and Door Prizes

Thursday October 26, 2017 Technical Sessions in the Sand Key Ballroom 0.75 CEUs

8:00 am Registration Opens	Ballroom Foyer
8:00 am –8:30am Continental Breakfast	Siesta Key, Longboat Key, Foyer
8:00—5:00pm Exhibitor Area Open to attendees	Siesta Key, Longboat Key, Foyer
5:05pm Door Prize drawings	Sand Key Ballroom

8:30—8:45am **Opening Remarks—John Moorman, FSEA President**

8:45—9:30 am **The Devil is in the Details: Little Known Details about Selected Methods - Michael Shepherd, Mei Beth Shepherd, Michael Hintz - Shepherd Technical Services**

While most labs are very knowledgeable and proficient at most methods, there are some methods that have some tricky details associated with them. Many laboratories may be overlooking these details and exposing themselves to potential findings during an assessment. This presentation intends to address specific requirements in some commonly used methods that are frequently overlooked by laboratories. Further, the presentation will present some findings that may provide some lively discussion.

9:30—10:15am **Analysis of Difficult Samples by Ion Chromatography – Michael L. Booth, Inorganic Ventures**

The use of Ion Chromatography (IC) can present multiple challenges during method development and data analysis. The choice of columns, eluents, suppressors, and flow rates can be overwhelming. What instrument parameters are right for your samples? We will review the different parts of an IC system and the roles they play during an analysis. Samples containing ions that are difficult to separate, such as Fluoride with low molecular weight organic acids, may require some modification to your normal instrument settings. Simply changing the flow rate or eluent concentration could be the solution to great resolution, but extremely challenging samples may require the use of gradient elution. We will discuss how the use of isocratic elution versus gradient programed elution could increase sample throughput and/or precision. Finally, we will review common troubleshooting and maintenance techniques to help reduce costly instrument downtime.

10:15-11:00am **BREAK in Exhibit Area—Siesta Key, Longboat Key and Ballroom Foyer**

11:00—11:45am **Why Crypto Counts - Bonnie Mull, Biological Consulting Services of North Florida, Inc.**

Emerging and re-emerging pathogens have become a great concern for public health officials and water systems around the country. Cryptosporidium, or "Crypto" for short, is a small protozoan parasite that infects the small intestines of mammals and causes watery diarrhea. Crypto oocyst(s) are incredibly durable, chlorine-resistant and can survive for long periods of time in water, food, soil, or on surfaces. Infection occurs by ingestion of the oocysts that have been shed in the stool of an infected individual or animal. There can be up to one million oocysts in one gram of feces and infection can last for up to two weeks. Outbreaks have most commonly been associated with person-to person and waterborne (drinking and recreational water) modes of spread. In the United States, an estimated 748,000 cases of cryptosporidiosis occur each year. 14,000 drinking water treatment plants serving approximately 180 million people use surface water as their source water. Billions of gallons of wastewater are produced in Florida every day; the improper treatment and disposal into the environment could greatly impact public health. Federal and state regulatory agencies have created regulation to improve control of microbial pathogens leaving wastewater plants and to prevent them from entering drinking water plants. The multiple barrier approach is key to stopping pathogens at every step. Drinking water and wastewater regulations exist because safe water and public health have an alliance that cannot be divided.

11:45am—noon **FSEA Business Meeting**

12:00—1:15pm **LUNCH located in the Watercolour Grillhouse (provided)**

1:15—2:00pm **UCMR 4 - 2018-2020 – What will be its challenges and costs? - Paul Jackson, Pace Analytical**

UCMR 4 brings significantly more complicated scheduling and field sampling requirements than previous rounds of UCMR. Also, the cost impact to PWSs with Surface Water (SW) and Groundwater Under the Direct Influence (GWUDI) of surface water source waters can potentially be much higher than in the past. During this session you will learn about: UCMR 4 schedules; UCMR 4 required parameters; the field sampling requirements for PWSs with Surface Water (SW) and Groundwater Under the Direct Influence (GWUDI) of surface water source water systems.

Thursday October 26, 2017 Technical Sessions in the Sand Key Ballroom 0.75 CEUs

8:00 am Registration Opens	Ballroom Foyer
8:00 am –8:30am Continental Breakfast	Siesta Key, Longboat Key, Foyer
8:00—5:00pm Exhibitor Area Open to attendees	Siesta Key, Longboat Key, Foyer
5:05pm Door Prize drawings	Sand Key Ballroom

2:00—2:45pm **Lessons from the Laboratory: Our Journey to a New LIMS—Laura Cintron, Hillsborough County and Ken Ochi, ATL**

Hillsborough County (FL) Public Utilities Department provides 1.35 million residents with safe, reliable delivery of drinking water, wastewater and reclaimed water. The Environmental Laboratory employs 21 full-time scientists, field samplers and managers that analyze and report 150 certified analytes for potable water, non-potable water and sludge. The lab supports four water plants, eight wastewater treatment plants and one biosolids management facility. The laboratory is NELAC-certified, performs 80,000 tests annually and its top priority is to provide reporting on drinking water, wastewater, groundwater, industrial pretreatment, spills and PBWNs. This reporting must be NELAC-certified and comply with federal and state regulations. Over the past year, the lab has been involved in a project to select and implement a new Laboratory Information Management System (LIMS) to help manage labora tory operations. The objective of this presentation is to educate attendees on things to keep in mind when selecting and implementing a new LIMS. Topics will include: LIMS selection at Hillsborough County – A summary of our evaluation process and things we learned along the way; Implementing a LIMS at Hillsborough County – Lessons learned and benefits realized thus far; Why a LIMS is critical to our future success at Hillsborough County.

2:45-3:15pm **BREAK in Exhibit Area—Siesta Key, Longboat Key and Ballroom Foyer**

3:15—4:00pm **Ammonia Colorimetric Testing by Gas Diffusion on Segmented Flow Analyzers—Sarah Leibenguth, SEAL Analytical**

The use of gas diffusion for ammonia colorimetric testing has become more popular over the last several years as an alternative to distillation. We will discuss the principle behind gas diffusion and how gas diffusion compares to distillation. We will also discuss EPA acceptance for the ammonia by gas diffusion method, maintenance and care for the system, what types of samples the method is suitable for, as well as the ammonia colorimetric testing following gas diffusion.

4:00—4:20pm **Regional Meet and Greet - break out into small groups by Region to meet your Regional Director and other region members, offer suggestions for topics you would like to see in your region**

4:20—5:05pm **Environmental Testing Is a Risky Business—Dr. Carl Kircher, FDOH**

Major revisions are being made to the international standard for competence of calibration and testing laboratories, upon which the NELAC Standards are based. The major changes are ensuring confidentiality and impartiality, as well as competency in laboratory testing activities. The primary tool for meeting these requirements will be risk assessment, so it is incumbent upon laboratories in the future (if not already) to include risk assessment in its inter nal audits, management reviews, and other conformity assessment activities. How does one assess risk, and how does one ascertain what risk(s) or what risk level(s) is acceptable? The presentation will illustrate various facets of risk assessment as could be applicable to environmental testing, thus encouraging ideas for accredited laboratories to use in complying with the NELAC Standards.

5:05pm **Door Prize Drawings**

Friday May 12, 2017 Regulatory Sessions in the Sand Key Ballroom ~0.45 CEUs

8:00 am Registration Opens	Ballroom Foyer
8:00 am –8:30am Continental Breakfast	Siesta Key, Longboat Key, Foyer

8:30—9:15 am **Red Flag Findings and Ways to Address them before your assessment - Michelle Wade, Wade Consulting**

Every year or two there is a presentation on the most common findings from assessments. While a useful tool - over the course of time these findings haven't really changed and will continue to be the "go to" findings for assessors. This presentation will address the red flag findings that will send your assessor into overdrive looking (hopefully fruitlessly) for much bigger problems in the laboratory as well as ways for the laboratories to address these red herrings to prevent the laboratories from unnecessarily giving their assessor a heart attack. Examples include but are not limited to: the lab is going paperless, common misprints and examples of what may indicate fraudulent activities. This presentation at the heart addresses commonly overlooked systematic quality systems errors and how the laboratory can avoid them. Wade Consulting will pull from their own experiences as well as those of other assessors**.**

9:15—10:15 am **Updates to Chapter 62-160—Michael Blizzard, FDEP**

10:15-10:45 am **BREAK in Ballroom Foyer**

10:45—11:45am **Method Update Rule —Jerry Parr, Catalyst Information Resouces, TNI**

Information on the MUR

11:45—1:00pm **Regulatory Forum**

This session will allow attendees to submit questions in advance for a select panel of representatives from FDOH, FDEP and TNI to answer. Typical questions include those related to laboratory accreditation, standards, regulatory interpretations and data issues. Please e-mail your questions to secretary@fsea.net by May 5, 2017. If time allows questions may be asked from the floor.

Save the Date for our Fall Meeting and Technical Session October 25-27 2017 at the Wyndham Harbourside in Jupiter.