

USPHS Scientific and Training Symposium

Category Day, Wednesday, June 6, 2018

Engineer Agenda

8:30 AM - 9:00 AM

FDA's Center for Tobacco Products

LCDR Samantha Spindel, Ph.D., M.Eng., USPHS

This session will highlight FDA's role in Tobacco Products

At the end of this session attendees will be able to:

1. List the four major activities that Engineers are involved with at the FDA's Center for Tobacco Products.
2. Define engineering design parameters that are considered for various tobacco products.
3. Describe how the FDA makes determinations of substantial equivalence.

9:00 AM - 9:30 AM

Medical Device Inspections Inspection Process

LT Michael Simpson Jr., E.I.T., USPHS

This session will highlight the FDA inspection process for medical devices

At the end of this session attendees will be able to:

1. Describe the duties and responsibilities of a USPHS Engineer performing inspections at manufacturers of medical products.
2. Define and explain the regulatory requirements for the manufacturing of medical devices.
3. List the inspection techniques in the review of quality system management for medical devices.

9:30 AM - 10:00 AM

FDA: More than food and drug, regulating medical devices

LT Timothy Martin, Ph.D. USPHS

This session will highlight the roles of engineers in regulating medical devices

At the end of this session attendees will be able to:

1. List how PHS Engineers at FDA ensure devices are safe before and after reaching the Marketplace.
2. Describe how PHS Engineers at FDA engage stakeholders on device-related health and safety issues.
3. Name regulatory pathways used by PHS Engineers at FDA to get device to marketplace.

10:15 AM - 10:45 AM

Water Utilities and the Internet of Things

Freddie Guerra, REM, RS, CAPM

This session will provide an understanding of the challenges faced by water utilities

At the end of this session attendees will be able to:

1. List 3 challenges faced by water utilities.
2. Describe the internet of things (IoT).
3. List the 4 benefits of LoT and Analytics

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10:45 AM - 11:15 AM **Composite Utility GIS Service Development for Native American Tribes**
CDR Gretchen Tsosie, P.E., USPHS

This session will highlight the advantages of having GIS and its benefit with O&M programs and personnel.

At the end of this session attendees will be able to:

1. Describe the IHS's SFC program mission activities and the current web-based Sanitation Tracking and Reporting System (STARS).
2. Explain the difference between an AutoCAD drawing and a GIS map.
3. Explain how a GIS service is consumed through different desktop and mobile platforms.

11:15 AM - 1:00 PM **Exclusive Exhibit Hall Time**

Please use this time to visit our exhibitors. There will also be exhibitor showcases which some categories can receive continuing education for.

1:00 PM - 2:30 PM **Lunch and Learning Core Leadership: Building and implementing a Commissioned Corps Service-oriented leadership framework and training**
LCDR Richard Fink, P.E., USPHS

This session will guide engineers in the development of their leadership skills

At the end of this session attendees will be able to:

1. Identify and describe a foundational leadership competency for Commissioned Corps officers in their commitment to the core value of Service.
2. Describe a framework for officer leadership development and collaboration that leverages the diversity, breadth, and depth of the Commissioned Corps within and across professional categories.
3. Apply this framework to their own leadership development plan and identify opportunities for enhancing their impact on public health and leadership as a Commissioned Corps officer.

2:30 PM - 3:00 PM **PHS Engineers Respond to 2017 California Wildfires**
LT Gary Riley, P.E. USPHS

This session will highlight the engineer's role in a disaster and how to safely remove hazardous materials.

At the end of this session attendees will be able to:

1. List specific USPHS Engineer Officer skills that are essential in disaster response.
2. Identify key elements of household hazardous waste removal following disasters.
3. Identify 3 aspects of situational awareness needed to ensure safety while working in remote disaster-affected locations.

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3:00 PM - 3:30 PM

Development and Implementation of a Multi-hazard Risk Assessment Strategy Focused on Geohazards

CAPT Steven Bosiljevac, P.E., USPHS

This session will highlight hazard risk assessment as they pertain to geohazards

At the end of this session attendees will be able to:

1. List the key parameters to assess the existing context in a country in relation to how risk assessment of geohazards is being done.
2. Describe the basic approaches necessary to move from assessment to development of an implementation strategy for a MHRA program focused on geohazards.
3. Outline the process for implementing the developed strategy for a MHRA program focused on geohazards.

3:45 PM - 4:15 PM

Managing the Gray in Environmental Engineering: Case Study of Fort Hartford Stone Quarry Company Superfund Site

LCDR Deb Cox, P.E., USPHS

This session will highlight Superfund Sites and how to remediate them

At the end of this session attendees will be able to:

1. Explain 2 remedial design questions that highlight the gray in Environmental Engineering
2. List 3 entities that must work together to achieve progress at Superfund Sites.
3. Explain why creative solutions are often required to remediate Superfund Sites.

4:15 PM - 4:45 PM

Planning Process for Lagoon Improvements

CDR Matthew Zoch, P.E., USPHS

This session will highlight the planning of a lagoon treatment system

At the end of this session attendees will be able to:

1. Identify the deficiencies with the Lac du Flambeau lagoon system which are contributing to the need for an improvement project.
2. Select the appropriate treatment technology for the Lac du Flambeau situation based on a side-by-side comparison of the following two options.
3. List 4 ways in which the planning team looked beyond regulatory requirements and industry standard practices to protect groundwater quality.

4:45 PM - 5:15 PM

Engineer NEPA

CDR Kelly Mortensen, P.E., USPHS

This session will highlight the importance of NEPA and how to plan accordingly

At the end of this session attendees will be able to:

1. Define NEPA.
2. Describe the type of IHS project that requires a NEPA consultation.
3. Identify the elements of an HIS NEPA review.