Oregon AWWA CEU Approval Document Trainers: Kyla Jacobsen, Beth Read, Quinn Andreas Dates: July 20th-21st 2022 Time: 9-1:30 PST on July 20th, 9-12:30 PST on July 21st

Session 1:

Regulatory Overview:

This workshop provides an overview of the updated regulatory rules for distribution systems. Topics covered in the workshop include history of public health protection, distribution system health impacts, revised total coliform rule, ground water rule, stage 2 DBP rule, and Lead and copper rule.

Learning Objectives:

At the completion of this lesson, participants should have the ability to:

1. Describe the importance of the distribution system as a barrier for protecting public health

2. Identify distribution regulations and requirements for drinking water

Overview For Lead and Copper:

This workshop provides an overview of the requirements for addressing lead and copper in drinking water, aimed specifically at small water systems. Topics covered in the workshop include the regulations, corrosion basics, conducting an inventory, monitoring requirements, treatment requirements, public notification requirements and lead service line replacement.

Learning Objectives:

At the completion of this lesson, participants should have the ability to:

1. Apply the regulatory requirements of the Lead and Copper Rule to your system

- 2. Calculate the 90th concentration
- 3. Summarize factors that will impact the release of lead and copper
- 4. Apply action to protect consumers from lead and copper
- 5. List new requirements proposed by the LCRR

9:00 AM	9:15 AM	Introduction and Pre-Test	15 minutes
9:15 AM	9:30 AM	Regulatory Overview - Distribution	15 minutes
9:30 AM	9:45 AM	RTCR	15 minutes
9:45 AM	9:55 AM	Groundwater Rule (GWR)	10 minutes
9:55 AM	10:05 AM	Disinfection Byproducts Rule (DBP)	10 minutes
10:05 AM	10:20 AM	Lead and Copper Rule	15 minutes
10:20 AM	10:30 AM	Discussion/Reflection/Questions	10 minutes
10:30 AM	10:40 AM	Break	10 minutes
10:40 AM	11:00 AM	Regulations (activities and slides)	20 minutes
11:00 AM	11:20 AM	Lead Basics (slides and lead level scenarios)	20 minutes
11:20 AM	11:30 AM	Conducting an Inventory	10 minutes
11:30 AM	12:30 PM	Break	60 minutes
12:30 PM	12:50 PM	Monitoring Requirements (slides and activity)	20 minutes
12:50 PM	1:00 PM	Treatment Requirements (slides and activity)	10 minutes
1:00 PM	1:10 PM	Public Notification Requirements	10 minutes
1:10 PM	1:20 PM	Lead service line replacement	10 minutes
1:20 PM	1:30 PM	Lead and Copper Rule Revisions	10 minutes
1:30 PM	1:45 PM	Summary, discussion, post-test	15 minutes

215 minutes

Session 2:

Coliform Sample Collection Overview:

This lesson focuses on sample collection for TCR, even though the best practices mentioned here apply to sampling for other parameters as well. Several types of samples can be collected for total coliforms. These include routine samples, repeat samples, additional routine samples, replacement samples, and special samples. Only routine samples and repeat samples are discussed in this lesson.

Learning Objectives:

At the completion of this lesson, participants should have the ability to:

· Explain why coliform sampling is important for protecting public health

· Summarize the purpose of a sample siting plan, and discuss proper coliform sample collection procedures

· Identify factors, conditions, and common issues that can lead to inaccurate results when collecting samples

· Recognize the challenges in collecting a valid coliform sample

Cyanotoxin Overview:

Cyanotoxins may impact both drinking water utility operations and customers. This workshop helps utility personnel understand cyanotoxins and the best way to manage them at their utilities. It also provides utilities with the accurate information they need so that they can take an informed approach when managing cyanotoxins and communicating with customers. After participating in this workshop, utility personnel will understand the conditions under which cyanotoxins can be found, as well as effective monitoring and treatment approaches for managing cyanotoxin events if they occur.

Learning Objectives:

At the completion of this lesson, participants should be able to:

- 1. Describe how, when and why cyanobacteria toxins occur
- 2. Evaluate situations to determine when you need to take action and what actions to take
- 3. Effectively analyze the best options for your utility to limit exposure to cyanotoxins
- 4. Apply the self-assessment checklist

Overview for PFAS

PFAS contaminants are an emerging concern across the country, and continuing studies are identifying potential health risks associated with these chemicals. This lesson examines the origin, the concerns, and provides information for small systems about protecting public health.

Learning Objectives:

At the completion of this lesson, participants should have the ability to:

- 1. To have a greater knowledge of PFAS/PFOA and associated health concerns
- 2. Understand current regulations
- 3. Identify proper sampling procedures
- 4. Understand how to address the problem
- 5. Identify resources for assistance

9:10 AM	Introduction and Pre-Test	10 minutes
9:25 AM	Purpose of Coliform Sample Collection	15 minutes
9:35 AM	Bacteriological Sample Site Plans	10 minutes
10:00 AM	Coliform Sample Collection Process (activities)	25 minutes
10:05 AM	Discussion/Reflection/Questions	10 minutes
10:15 AM	Break	10 minutes
10:25 AM	Understanding Cyanotoxins	10 minutes
10:35 AM	Health effects and advisories	10 minutes
10:45 AM	Cyanobacteria blooms and Source Water Monitoring	10 minutes
11:00 AM	Treatment and Self-Assessment	15 minutes
11:15 AM	Planning for Cyanotoxin Events (activity) -Questions	15 minutes
11:30 AM	Break	15 minutes
11:40 AM	Intro and properties of PFAS	10 minutes
11:55 AM	Source and Health Effects	15 minutes
12:05 PM	Regulations	10 minutes
12:20 PM	Actions / Resources	15 minutes
12:30 PM	Summary / Questions / Post Test	10 minutes
	9:25 AM 9:35 AM 10:00 AM 10:05 AM 10:15 AM 10:25 AM 10:35 AM 10:45 AM 11:00 AM 11:15 AM 11:30 AM 11:40 AM 11:55 AM 12:05 PM 12:20 PM	9:25 AMPurpose of Coliform Sample Collection9:35 AMBacteriological Sample Site Plans10:00 AMColiform Sample Collection Process (activities)10:05 AMDiscussion/Reflection/Questions10:15 AMBreak10:25 AMUnderstanding Cyanotoxins10:35 AMHealth effects and advisories10:45 AMCyanobacteria blooms and Source Water Monitoring11:00 AMTreatment and Self-Assessment11:15 AMPlanning for Cyanotoxin Events (activity) -Questions11:30 AMBreak11:40 AMIntro and properties of PFAS11:55 AMSource and Health Effects12:05 PMRegulations12:20 PMActions / Resources

185 minutes