# Improving Tribal Drinking Water Systems Interdisciplinary Topics Objectives

The objective of this course is to expose drinking water treatment plant operators with a variety of topics to maintain good SDWA compliance and overall plant performance by discussing common treatment process operation, malfunction, and maintenance issues with an emphasis on source contamination prevention and protection, common drinking water quality problems, data from laboratories, and monitoring programs.

#### **Session 1**: Lori Blau/Claire Miller 3 hours

Topic I: Identifying and Correcting Significant Deficiencies from Sanitary Surveys

- What is the objective Public Water System Sanitary Survey?
- What is a Significant Deficiency?
- What is the difference between a Significant Deficiencies and minor deficiencies?
- How to use information from the Public Water System Sanitary Survey Report to address Significant Deficiencies.
- How to timely address Significant Deficiencies.
- How to timely Develop a Corrective Active Plan.

#### **Session 2**: Mario Casillas/Claire Miller 2.5 hours

Topic II- Drinking Water Source Protection

- Understanding Source and Wellhead Protection
- Mechanisms and Potential of Contaminant Threats
- Well Construction and Aquifer Protection Concerns
- Well Drilling Standards
- Benefits and Incentives for Source Water Protection

### **Session 3:** Neil Worthen/Lori Blau <u>3 hours</u>

Topic III - Identifying and Resolving Cross Connections 3 hours

- What is a Cross-Connection?
- Evaluating Cross-Connection issues
- Best management practices for Cross-Connection Control / Backflow Prevention Program

#### **Session 4**: Mario Casillas/Lori Blau 2.5 hours

Topic IV- Sampling and Reporting Requirements for Small Systems

- Overview of Sampling and Reporting Requirements
- Understanding your Chain of Custody Form for Samples
- Sample collection, processing and analysis: Coliform Sampling; Inorganic Chemical Sampling Organic Chemical sampling; Disinfection By-Products (DBP) sampling
- Understanding laboratory validation of sample, documentation and recordkeeping.

## Session 5: Jason Carman/Lori Blau 3 hours

Topic V- Leak Prevention & Repair

- Overview of steps for leak prevention
- Reviewing the components of an Emergency Plan
- Public notifications language for possible water outages
- Using proper construction practices and testing for Leaks
- Disinfecting repaired or new lines and testing for Bacteria

Courses will be taught on the Go To Training platform, and attendee participation will be tracked using platform tools such as pre- and post- tests, polls, and workshop exercises.