



Distribution Water Quality Lesson Plan

Overview:

This lesson presents the water quality changes that may occur as the water moves through the infrastructure in the distribution system. Different water quality parameters and challenges are discussed along with solutions.

Learning Objectives:

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

- Be able to describe what different water quality parameters tell us about distribution system health
- Be able to describe and apply key practices for managing water age and quality during storage

Materials Needed:

- PowerPoint presentation
- Participant handouts, pre- and post-tests

Agenda:

Agenda development is based on a 45-minute lesson:

- 5 min – Introduction to water quality parameters
- 5 min – pH and chlorine residual
- 10 min – Water age
- 5 min – Water age guided discussion
- 5 min – Bacteria, taste and odor, and customer feedback
- 5 min – Aesthetic issues discussion
- 5 min – Bacteria regrowth
- 5 min – Water quality issues in storage discussion

Evaluation:

Pre and post tests will be administered before and after the workshop along with the other lessons' questions.