



Coliform Sample Collection LESSON PLAN

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 a public water system
- 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 undesirable results when collecting samples
- Recognize the challenges in collecting a valid coliform sample

Materials Needed:

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

Agenda:

Agenda development is based on a 60-minute lesson:

- 7 min - Purpose of Coliform sample collection
- 3 min - Coliform sample collection best practices
- 10 min - Activity: Sampling Steps 1-9
- 6 min - Collection process and contamination risks
- 10 min - Activity: Sampling Steps 10-15
- 4 min - Common issues and undesired results
- 6 min - Collection and monitoring responsibilities
- 1 min - Colilert® Test
- 10 min - Activity: Group Discussion and Localization Issues
- 1 min - Summary
- 1 min - Additional Resources

Evaluation:

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