

Course Title: Fundamentals of Leak Detection

Contact Hours: 6

CEU Value: 0.6

Course Description:

This course is designed to provide participants with knowledge in the practices of water loss methodologies, water loss reduction programs, leak detection and correlation methods. They will also learn the background theory of leak detection to better understand both acoustic listening and correlation techniques.

Classroom training is supported with field work. Various methods and equipment will be demonstrated to aid participants in accurately pinpointing leaks in all types of pipe materials. Students will gain knowledge in the practices of water leak detection and correlation methods and will learn various methods available to identify and find leaks in locations of unaccounted for water loss in water systems. A variety of equipment will be demonstrated and used to aid students in accurately pinpointing leaks in all types of pipe materials.

Areas of study include:

- The importance of leak detection
- How to set up a water loss management program
- Review of water loss management methodologies
- Causes and impact of leaks and economics of leaks
- Review of methods for locating leaks and breaks
- How to assess for leaks using survey methods
- Fundamentals of acoustic leak detection
- Fundamentals of correlation for leak detection
- Field issues encountered in leak detection
- How to organize and conduct a leak survey
- Set up for leak detection using acoustic and correlation
- How to listen for a leak
- Selecting and connecting the correct transducer for the pipe type
- Measuring distance for the leak
- Entering parameters for a correlation and correlating a leak

Target audience: Water works managers, supervisors and operators.