

COURSE TITLE

Water Industry Corrosion Control (3814)

COURSE DURATION

1 hour

OVERVIEW

Every day, hundreds of water main breaks occur throughout North America. Many of these are caused by corrosion. Corrosion can lead to tubercules and scale buildup in pipelines, which can impede the flow of water and damage equipment. Rust and pitting can cause leaks in the system. The cost of repairs and maintenance can strain budgets. Additionally, lead and copper corrosion can also have adverse health effects and both are regulated by the federal and state governments. This training course has 11 learning modules with a ten-question exam. This training course has X learning modules with a 10-question exam.

PREREQUISITES

No prior knowledge is required.

BEHAVIORAL OBJECTIVES

After successfully completing this course, you will be able to:

- Explain the various types of corrosion and their causes
- Describe the effects of corrosion and the importance of corrosion control
- Discuss the federal regulations pertaining to corrosion in potable water pipelines
- Describe pH, alkalinity, and calcium hardness adjustment and their importance in controlling corrosion
- Explain water testing and the use of chemical inhibitors to control corrosion

COURSE OUTLINE

- Introduction
- The Chemistry of Corrosion
- Lead and Copper Rule
- Water Quality Parameter Samples
- Testing Water Corrosivity
- How Corrosion Occurs
- Types of Corrosion
- Overview of Corrosion Control
- pH/Alkalinity Adjustment
- Calcium Hardness Adjustment
- Phosphates and Silicates
- Summary