Drinking Water Quality – Monitoring and Security (RV-11351)
1 hour
Instructor: Jim Taube

Description

This course presents key information regarding drinking water monitoring and security required to ensure the health, safety, and welfare of the general population being served by water supply facilities. Technical personnel in the design, engineering, maintenance and operations areas of facilities will find this information critical to the successful operation of water related facilities. Maintaining drinking water monitoring and security systems are critical for integrity of drinking water facilities. This course addresses critical factors that affect health, safety, and welfare of the population being served by the drinking water system.

Intended Audience: Water Treatment and Water Distribution Operators

Objectives

After successfully completing this course, you will be able to:
   • Name the various systems utilized for monitoring drinking water facilities
   • Identify the security measures involved in protecting drinking water facilities
   • Explain the operation and maintenance requirements for monitoring and security systems
   • Describe the benefits to the population being served regarding drinking water monitoring and security

Outline

Introduction   02 minutes
   • Course Overview

Monitoring Drinking Water Supplies   02 minutes
         • Parameters for Minimum Monitoring

Surveillance   10 minutes
   • Surveillance Process
   • Water Sampling
   • Water Quality Analysis
   • Health analysis

Water Monitoring Products   13 minutes
   • Biosensors
   • Chemical Sensors – Arsenic
   • Chemical Sensors – Chlorine
   • Total Organic Carbon (TOC) Sensors

Water Quality Monitoring   10 minutes
   • Applying Water Quality Monitoring
   • Portable vs. Fixed Location Monitoring
   • Radiation Monitoring

Overall Guidelines – Water Utilities   03 minutes
- Deterrence, Detection, Delay and Response

Threats to Facilities   04 minutes
- Typical Threats
- Guidelines for Security Threats

Physical Security Elements   15 minutes
- Types of Physical Security Elements
- Protection of Site Utilities
- Facility Entrances
- Illumination
- Signage
- Electronic Security
- Access Control Systems

Conclusion   01 minutes