## Water Industry Advanced HAZWOPER Awareness (MOD #3)

## **Course Description**

It is essential that workers who are exposed to hazardous wastes understand the effects of exposure. You should be aware of the way chemicals can enter your body, how these chemicals can inflict harm, and the procedures to prevent exposure. Understanding the health effects and exposure control of hazardous waste will aid you in the detection of toxic substances, understanding how these substances will act within your body, how to establish treatment and antidotes, the prevention of poisoning, and the methods for controlling exposure. This course is designed for employees who engage in hazardous substance removal or other activities that expose or potentially expose workers to hazardous substances and health hazards

NOTE: This training program consists of four learning modules. To maximize retention of the course material, all four modules must be completed within 365 days of starting the course to receive a certificate of completion.

## **Course Objectives**

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

- Explain the basic practice of toxicology and define these terms: acute exposure, chronic exposure, local toxicity, and systemic toxicity
- Describe these potential effects that can result from the interaction of multiple chemicals on your body: additive effect, synergistic effect, potentiation effect, and antagonistic effect
- Explain the effects of these chemicals on your body: central nervous system depressants, convulsants, neurotoxins, hepatotoxins, nephrotoxins, and reproductive toxins
- Relate at least four hazardous substance routes of entry into the human body
- Identify at least three organizations that provide specific guidelines for safe exposure limits and explain how the time-weighted average is used in their calculations
- Provide a basic overview for choosing personal protective equipment (PPE) when working with hazardous substances; include the advantages and disadvantages of air-purifying respirators and how to perform qualitative and quantitative fit tests
- Describe the effects of the following medical emergencies: heat stress, heat cramps, heat exhaustion, and heat stroke

## Agenda

- Introduction 2 minutes
- Hazard Identification Methods 8 minutes
- Hazard Communication 20 minutes
- DOT Placards and Labels 35 minutes
- NFPA 704 10 minutes
- Hazardous Materials Information System 8 minutes
- Safety Data Sheets 14 minutes
- North American Emergency Response Guidebook 14 minutes
- Other Hazard Identification Systems 8 minutes
- Conclusion 1 minute