

COURSE OUTLINE

HAZARDOUS WASTE OPERATIONS & EMERGENCY RESPONSE (HAZWOPER)

To fulfill classroom requirements of OSHA 29 CFR 1910.120(e)

24-HOUR COURSE OUTLINE



OVERVIEW

This course provides the 24-hour safety training requirement mandated by OSHA 29 CFR 1910.120. Workers attending this course will cover health and safety procedures, and personnel protection during work operations at hazardous material sites.

Each day contains hands on and tabletop exercises.

DAY ONE

OPENING

1. Who is COMPLIANCE SOLUTIONS
2. Course introduction

OSHA REGULATIONS DISCUSSION

1. What is OSHA and how does it work?
 - A. Employer and employees rights and responsibilities
2. Overview of Environmental Legislation
 - A. Comprehensive Environmental Response Compensation and Liability Act of 1986 (CERCLA)
 - B. Superfund Amendments and Reauthorization Act
 - C. Resource Conservation and Recovery Act - 11976 (RCRA)
3. Overview of 29 CFR 1910.120

GENERAL SAFETY HAZARDS

1. Types of hazards
2. Personal Safety Issues
3. General Safety Issues
4. Fall Protection
5. Excavation Safety
6. Hand and Power Tools
7. Lock out/Tag out
8. Heavy Equipment

PLANNING AND ORGANIZATION

1. Site Characterization
2. Health and Safety Plans

HAZARD COMMUNICATION FOR HAZWOPER

1. NFPA 704
2. DOT System
3. HMIS III
4. Safety Data Sheets
5. Other Identification Systems



COURSE OUTLINE

CHEMICAL HAZARD ID SYSTEMS

1. Properties of chemicals
 - A. Toxic
 - B. Reactive
 - C. Ignitable
 - D. Corrosive
 - E. Radioactive

DAY TWO

TOXICOLOGY

1. Acute vs. Chronic
2. Immediate vs. Delayed Effects
3. Reversible vs. Irreversible
4. Routes of entry
 - A. Inhalation
 - B. Absorption
 - C. Ingestion
 - D. Injection
 - E. Ocular
5. Chemical interaction effects
6. Target organ responses
7. Dose/Response relationship
8. Measuring toxins

IONIZING RADIATION

1. Fission
2. Particles
 - A. Alpha
 - B. Beta
 - C. Gamma
 - D. Neutrons
3. Radiation Meters
4. Exposure Doses

RESPIRATORY PROTECTION

1. Respiratory Protection Programs
 - A. Selection
 - B. Training
 - C. Sanitizing
 - D. Inspection
 - E. Maintenance

CHEMICAL PROTECTIVE CLOTHING

1. Fabric Properties
 - A. Levels of Protection
 - B. Level A
 - C. Level B
 - D. Level C
 - E. Level D
 - F. Modifications
2. CPC Factors

HEAT STRESS

1. Factors
2. Heat Illnesses
 - a. Heat Rash
 - b. Heat Cramps
 - c. Heat Syncope
 - d. Heat Exhaustion
 - e. Heat Stroke
3. Related Stressors
4. Pre/Post Entry Assessments
5. Prevention

MEDICAL SURVEILLANCE

1. Surveillance
 - A. Pre-Assignment Examinations
 - B. Periodic Examinations
 - C. Termination Examinations
2. Treatment
 - A. Emergency
 - B. Non-emergency
3. Record Keeping

DAY THREE

METERS AND MONITORING

1. Reasons for monitoring
2. Sampling Techniques
3. Meter Characteristics
4. Combustible Gas Indicators
5. Photo Ionization Detectors
6. **Flame Ionization Detectors**
7. **Vapor Analyzers**
8. **Toxic Meters**
9. **Multi-gas Analyzers**
10. **Colorimetric Detectors**
11. **Sound Meters**
12. **Heat Stress Monitors**
13. **Instrument Safety**
14. **Meter Limitations**

COURSE OUTLINE

FIRE PROTECTION REQUIREMENTS

1. Classes of Fire

FIRE PROTECTION REQUIREMENTS

1. Classes of Fire
 - A. Class A
 - B. Class B
 - C. Class C
 - D. Class D
 - E. Class K
2. Fire Extinguishers
3. Open Yard Storage
4. Fire Brigades
5. Foams

CONFINED SPACES

1. Overview
2. Statistics
3. Training
4. Non-permit Required Confined Spaces
5. Permit Required Confined Spaces
6. Entrants
7. Attendants
8. Supervisors
9. Confined Space Rescue

FINAL EXAMINATION

