HAZWOPER – Operations Level

Course Outline

Prerequisites: This course shall have no formal pre-requisite.

Course Length: 8 hours – Course length shall vary depending on the number of delegates. Total course time include breaks.

Class Size: The maximum number of delegates that may be trained and tested per instructor shall be thirty–five (35) in the classroom session.

Course Objective

- Provide knowledge of the basic hazard and risk assessment techniques.
- Understand basic hazardous materials terms.
- Know how to select and use proper PPE provided to the first responder personnel.
- Know how to perform basic control, containment and/or confinement operations within capabilities.
- How to implement basic decontamination procedures.
- Understanding of relevant standard operating procedures and termination procedures.
- Delegates should be able to demonstrate knowledge during written examination.

Course Design

- Power Point© / Lecture / Audio Video / Visual Aids
- Demonstrations

Successful Course Completion

- Requires a minimum score of 75% or better.
- Delegates will have no more than thirty (30) minutes to complete the exam.
- Grades shall be calculated by dividing the number of questions answered correctly by the total number of exam questions.

Course Content Summary

- Classroom

Breaks: 10 minutes (approximately every hour)

Lunch: 1 Hour

Course Outline

HAZWOPER Overview

- HAZWOPER Standard
- Why is HAZWOPER Important?
- Laws Leading to HAZWOPER

- Key Agencies & Associations
- Video: History of HAZWOPER
- Rights and Responsibilities
- Written Safety and Health Programs
- Worker Protection
- Medical Surveillance Programs

HAZWOPER Training

- Education and Training
    - First Responder – Awareness
    - First Responder – Operations
    - Other Training Levels
    - Chain of Command

Chemical Hazards

- Hazardous Substances and Wastes
- Types of Hazards
- Physical and Chemical Properties of Hazardous Substances
    - States of Matter
    - Physical Changes
    - Other Physical Properties
- Incompatible Substances
- Corrosive Hazards
- The pH Scale
- Fire and Explosion Hazards
- Toxicology
    - Types of Exposure Effects
    - Routes of Exposure & Target Organs
    - Concentration
    - Measures of Toxicity
- Exposure Limits
    - TWA, PEL, STEL, C
    - Other Exposure Limits
    - IDLH

Infectious Disease Hazards

- About Infectious Disease
- Infectious Disease Routes of Transmission
- Preventing Occupational Exposure
- Disinfection and Decontamination

Hazard Communication

- Hazard Communication Standard
- Requirements of the HazCom Standard
- Written HazCom Program
- Safety Data Sheets
    - Video: How to Read an SDS
    - Activity: Review an SDS
- Container Labeling
    - GHS Labels
    - GHS Pictograms
    - DOT
        - Hazard Classes
        - HazCom Requirements
    - Other Labeling Systems
        - NFPA
        - HMIS

Hazard Recognition

- Importance of Hazard Recognition
- When is Hazard Recognition Most Important?
- Hazard ID and Assessment Process
- Common Safety Hazards
- Activity: Identifying Hazards
- Hierarchy of Controls
- Job Hazard Analysis

Personal Protection Equipment

- Overview
- Safety Equipment
- Head Protection
- Eye and Face Protection
- Chemical Protective Clothing
- Levels of Protection (Video)
    - Level A
    - Level B
    - Level C
    - Level D
- Chemical Protective Gloves
- Chemical Protective Boots
- Video: Donning Level A
- Respiratory Protection

  - Overview
  - Fit Testing
  - Types of Respirators
    - Air Purifying Respirators
    - Atmosphere Supplying Respirators
  - Respirator Donning and Doffing
  - Inspection, Storage, & Maintenance
  - Video: Respirators in the Workplace

Incident Response

- Incidental Spill vs Emergency Response
- Spill vs Release
- Emergency Response Plans
  - Video: HAZWOPER ERP
- Responding to Emergencies – APIE
- Analyze the Incident
- Plan a Response
  - Plan for Defensive Control
    - Confinement (Diking, Damming, Diverting, Retention)
    - Absorption
    - Dilution
  - Spill Control Materials (Demo)
- Implement the Response Plan
  - Site Control
  - Protective Actions
- Evaluate Progress
- Emergency Response Guidebook
  - Video: ERG 2020
  - ERG Sections
  - ERG Tabletop Exercise

Decontamination

- Overview
- Methods of Decontamination
- Decontamination Solutions
- Preventing Contamination
- Hazardous Waste

Termination

- Termination Procedures

Marine Debris

- Video: BSEE Marine Trash and Debris

Practical Session

- None

Training Center Provided Material

- Course Materials
  - Safety Data Sheets
  - Training Spill Control Kit
  - Various Chemical PPE
  - Emergency Response Guide

Delegate Requirements

- None

Reference Material / Documents

OSHA 29 CFR 1910.120
EPA 40 CFR 311
Emergency Response Guide