HAZWOPER 40-Hour
Specialist Level (Incident Commander)

Course Outline

Prerequisites: The delegate should have valid HAZWOPER Technician Level Training.

Course Length: 16 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 and twenty (20) in the practical session. A second instructor shall be added for the practical session once the participation exceeds twenty (20).

Course Objective

- Provide formal class instruction to describe the requirements and related information that a HAZMAT trainee must possess in order to become a competent "HAZMAT Specialist" level employee.
- Provide the training and certification to individuals that have a desire and can demonstrate the formal skills necessary to become a HAZMAT Specialist.
- Learn the importance and reasons for proper communication with varies news media agencies concerning a facility incident.
- Learn the duties and responsibilities of the Incident Commander and associated incident or emergency response personnel.
- Delegates should be able to demonstrate the necessary skills during practical examination and demonstrate knowledge during written examination.

Course Design

- Power Point© / Lecture / Audio Video / Visual Aids
- Practical Exercises

Successful Course Completion

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

Course Content Summary

- Classroom
- Practicals

Breaks: 10 minutes (approximately every hour)

Lunch: 1 Hour

Course Outline

Day 4

Hazardous Materials Specialist
- Training Requirements

Incident Command system
- What is ICS
- ICS Structure
    - Incident Commander
    - Command Staff
    - General Staff
    - Local Response
    - Local Emergency Planning Committees
    - State Emergency Response Commission
    - Federal or Local
    - Non-emergency (incidental) Release
    - Emergency Release

National Response Center
Federal On-Scene Coordinator
Emergency Response Plan
- Implementation
- Site Characterization and Analysis
- Reference Materials
- Pre-Deployment
- During Deployment
- Post Deployment
- Safety Briefing
- Communication

Incident Reporting
Media Relations
- Rights of the Media
- Working with the media
- Public Information Officer
    - Requirements
    - Duties
- Media Management
- Emergency Alert System
- Interviewing Do's
- Interviewing Don'ts

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Risk Assessment
Health Hazards

- Thermal
  - Elevated temperatures
  - Cold temperatures
- Radiation
- Asphyxiation
- Chemicals
- Etiologic
- Mechanical
- Psychological
- Routes of Exposure
  - Skin absorption
  - Inhalation
  - Ingestion
  - Injection

Methods of Detection

- Radiation Meter Types
  - Scintillation counter
  - Geiger counter
  - Ion chamber

Ionizing Radiation

- Alpha particles
- Beta particles
- Gamma radiation
- Protection for exposure to ionizing radiation
  - Time, Distance, Shielding

Methods of Detection

- Personal Electronic Detectors
  - Selection considerations
  - Calibration/Bump test
- Infrared Gas Detectors
- Catalytic Gas Detectors
- Fixed Detectors
- Smart Strips
- Colorimetric Tubes

Physical Effects of Wearing PPE

- Ambient Temperatures
- Humidity
- Dew Point

- Heat
  - Heat Index
  - Heat Stress
  - Ways the body is affected by heat
  - Conditions affecting cooling and increasing heat stress
  - Signs and Symptoms
  - Preventing heat stress
  - Rehabilitation
    - Vitals
    - Rehab station
    - Work/Rest and Water Consumption
- Cold
  - Cold Stress
  - Factors that contribute to cold stress
  - Wind chill
  - Hypothermia
  - Cold-related health Problems
  - Degrees of Hypothermia
  - Frostbite
- Medical History

PPE Selection

- Criteria
- Considerations
- Basic Principles
  - Evaluating PPE
  - Degradation
  - Penetration
  - Permeation
- Clothing materials
- Categories of Chemical Protective Clothing
  - Limited-Use
  - Reusable
- Chemical Compatibility
- Precautions: Medical History

Hazmat Decontamination

- Introduction
- Decontamination plan
- Preventing contamination
- Types of contamination
- Decontamination Methods

    - Physical
    - Chemical
- Determination of Decontamination
    - Personnel
    - Equipment
    - Waste
    - Timeframe
    - Location
- Effectiveness of Decontamination
- Health and Safety Hazards
- Disposal Methods
- Emergency Decontamination
- Contamination area Operations
    - Zones
    - Corridors
- Level A Maximum Decontamination
- Level A & B Minimum Decon Layout

Hot Area Entry

- Necessities
- Reconnaissance

Termination

- Incident debriefing
- Post-Incident Analysis
- Critique

Scenario

Day 5

HAZWOPER Day 5

- Objectives

Emergency Response Plan

- What to address
- Emergency Escape Procedures
- Continuance of Critical Facility Operations
- Accounting for Employees
- Rescue and Medical Duties
- Alarm Systems

Elements of an Incident

- Performance-Oriented
- Supportive
- Recognition

- Evaluation
- Control
- Information
- Safety

Incident Command

- Main Points
- Need for Incident Management
- General Premise
- Authority
- Positions
- Organization
- Command Post
- Procedures
- Incident Scene Management

Chemical Suit Hazards

- Heat
    - Heat Rash
    - Heat Cramps
    - Heat Exhaustion
    - Heat Stroke
    - Combating Heat Stress
- Vitals
- Time limitations
- Water intake

Air Monitoring

- Hazard and mitigation identification
- Oxygen content
- Toxic Atmospheres
- Where to monitor
- What to consider
- Selecting a monitor

Informational Resources

- EPA regulations
- OSHA regulations
- BSEE regulations
- Coast Guard info
- Emergency Response Guide

Important Calls

Facility Documentation

Final Scenario

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Practical Session:
Practical training shall utilize a table top scenario which allows for open discussion involving individual company procedures for a similar incident.

Practical shall verify the following:

- Properly select and wear appropriate PPE during practical training
- Inspect and identify damaged tools/PPE
- Effectively don all required PPE
- Implement Emergency Response Plan and establish an Incident Command
- Respond to a spill and implement response containment
- Use tools and equipment to properly neutralize a hazardous waste cleanup
- Properly utilize decontamination equipment
- Properly navigate all decontamination stations
- Ability to properly dispose of all contaminated PPE and HAZMAT Tools

Training Center Provided Material

- Course materials
- Practical Equipment

Delegate Requirements

- None

Reference Material / Documents
OSHA 29 CFR 1910.120 – HAZWOPER Standard
OSHA 29 CFR 1910.38 – Emergency Response (Action) Plans
EPA 40 CFR 311 – Worker Protection
EPA 40 CFR 112 – SPCC Plans/Facility Response Plans
EPA 40 CFR 372 – SARA/EPCRA Requirements
EPA 40 CFR 68 – Risk Management Program
EPA 40 CFR 264-265 – Contingency Planning Requirements
EPA 40 CFR 279 – Used Oil Management Standards
EPA 40 CFR 280 – Underground Storage Tank Standards