

OSHA 24 HOUR HAZWOPER

The **OSHA 24-Hour HAZWOPER** (Hazardous Waste Operations and Emergency Response) course is designed for workers who are on-site occasionally for specific limited tasks and are unlikely to be exposed over permissible exposure limits (PELs). It is also the standard entry-level training for **Emergency Responders at the First Responder Offensive Level (Technician Level)** under 29 CFR 1910.120(q).

To satisfy OSHA standards **29 CFR 1910.120** (General Industry) and **29 CFR 1926.65** (Construction), the course must cover a specific layout of core safety, regulatory, and technical competencies.

Core Curriculum & Content Layout

1. Regulatory Framework & Introduction

Scope of HAZWOPER: Understanding the three pillars of the standard (Uncontrolled hazardous waste sites, TSD facilities, and emergency response operations).

Key Agencies: The roles of OSHA, the EPA, the DOT, and NIOSH in hazardous material regulation.

2. Hazard Recognition & Identification

Chemical, Physical, and Biological Hazards: Identifying safety and health hazards on a site (e.g., fire, explosion, toxicity, ionizing radiation).

Chemical Properties: Understanding material behaviors, including vapor pressure, flash points, pH, lower/upper explosive limits (LEL/UEL), and compatibility.

Recognition Systems: Utilizing the Department of Transportation (DOT) Plackarding system, NFPA 704 diamond, and Global Harmonized System (GHS) labeling.

3. Toxicology & Exposure Limits

Routes of Entry: How chemicals enter the body (inhalation, ingestion, skin absorption, injection).

Acute vs. Chronic Health Effects: Recognizing immediate symptoms versus long-term illnesses.

Navigating Exposure Limits: Interpreting OSHA Permissible Exposure Limits (PELs), ACGIH Threshold Limit Values (TLVs), and IDLH (Immediately Dangerous to Life or Health) designations.

4. Personal Protective Equipment (PPE)

Levels of Protection: Comprehensive training on the selection, capabilities, and limitations of Levels A, B, C, and D protective ensembles.

Respiratory Protection: Inspection, fit-testing concepts, and differences between Air-Purifying Respirators (APR) and Atmosphere-Supplying Respirators (SCBA and Supplied-Air Systems).

Chemical Protective Clothing (CPC): Understanding breakthrough times, permeation rates, and degradation.

5. Site Control & Safety Planning

Work Zones: Establishing the boundaries for the Hot Zone (Exclusion), Warm Zone (Contamination Reduction), and Cold Zone (Support).

The Site Safety and Health Plan (HASP): Navigating and understanding the elements required in a site-specific safety plan.

Medical Surveillance: Identifying when workers must be enrolled in medical monitoring programs.

6. Decontamination Procedures

Decon Line Setup: Designing and operating physical decontamination stations for personnel and equipment.

Preventing Cross-Contamination: Proper methods for the safe doffing (removal) of contaminated PPE without exposing the worker or clean environments.

7. Emergency Response & Handling Controls

Incident Command System (ICS): Introduction to standard organizational structures used to manage emergency response operations.

Spill Containment: Basic offensive and defensive tactics for controlling a release (e.g., diking, damming, absorbing, and patching/plugging containers).

Drum & Container Handling: Safe procedures for inspecting, opening, and sampling uncharacterized storage drums.

Key Compliance Requirements

Target Audience: Typically required for Occasional Site Workers (who do not face exposures above PELs and do not wear respirators regularly) or initial emergency response team members.

Field Experience Component: Unlike the 10-hour or 30-hour Outreach courses, OSHA HAZWOPER standards explicitly state that classroom or online training must be supplemented by **at least 1 day (8 hours) of actual field experience** under the direct supervision of a trained, experienced supervisor.

Upgrade to 40-Hour: If an occasional worker's duties change, requiring regular respirator use or exposing them to hazards above PELs, they must complete the remaining 16 hours of training to upgrade to the full 40-Hour certification.

Maintenance: To keep this certification active, the worker must complete an **8-Hour HAZWOPER Refresher** annually.