

**TITLE: 24-Hour Operations**

**TARGET POPULATION:** Members of emergency response teams which may have to respond to an incident involving hazardous materials at an industrial facility.

**OVERALL LEARNING OBJECTIVES:**

- Describe the risks of hazardous materials.
- Understand the possible outcomes of an emergency.
- Learn ways to recognize hazardous materials.
- Understand your role as an operations-level responder.
- Become aware of the need for other resources.
- Perform basic hazard and risk assessment techniques.
- Select and use proper protective equipment provided.
- Know basic hazardous material terms.
- Perform basic control, containment, and confinement procedures.
- Perform basic decontamination procedures.
- Implement standard operating procedures and incident termination.
- Size up a scene.
- Work within the system set up for response actions.
- Use protective equipment.
- Perform certain basic response actions.

**CHAPTER 1: INTRODUCTION**

- What is a Hazardous Material?
- The Employer's Emergency Response Plan

**CHAPTER 2: LEGAL RIGHTS AND RESPONSIBILITIES – MAJOR CONTENTS**

- **Exercise 1: Worker and Employer Rights and Responsibilities**
- SARA, HAZWOPER
- **Exercise 2: Using HAZWOPER**
- Training Requirements of HAZWOPER
- OSHAct, OSHA

**CHAPTER 3: HAZARD RECOGNITION – MAJOR CONTENTS**

- Recognizing an Emergency
- Types of Hazards
- Recognizing Chemical and Biological Hazards – Labels and Placards
- Material Storage and Transport
- Documentation
- Recognizing Physical Hazards
- **Exercise: Hazard Recognition**

**CHAPTER 4: HEALTH HAZARD RECOGNITION – MAJOR CONTENTS**

- Chemical Reactions
- Chemical and Physical Reactions
- Fire Triangle
- Explosive Limits
- Radioactivity
- Chemicals and the Body
- Medical Surveillance

**CHAPTER 5: MONITORING – MAJOR CONTENTS**

- The Importance of Monitoring
- Uses for Monitoring Data
- What Can Be Monitored in the Air?
- Measures of Concentration
- Exposure Limits
- Important Points to Remember About Exposure Limits
- Explosive Limits
- Types of Air Monitoring
- Monitoring Instruments
- Monitoring at an Emergency
- Selecting Monitoring Equipment
- Environmental Monitoring
- **Monitoring Lab**

**CHAPTER 6: RESPIRATORS – MAJOR CONTENTS**

- Use of Respirators for Emergency Response
- Types of Respirators
- Respirator Fit
- Medical Fitness to Wear a Respirator
- Taking Care of Respirators (Cleaning and Storage)
- Facial Hair and Respiratory Protection
- Minimum Requirements for a Respirator Program
- Sample Respirator Program
- **Respiratory Protection Lab**

**CHAPTER 7: PERSONAL PROTECTIVE EQUIPMENT – MAJOR CONTENTS**

- Regulations Requiring Personal Protective Equipment
- Chemical Protective Clothing (CPC)
- Levels of PPE
- Precautions When Wearing CPC
- Inspection, Maintenance, and Storage of CPC
- **Exercise: Levels of PPE**

**CHAPTER 8: DECONTAMINATION – MAJOR CONTENTS**

- Introduction
- Preplanning for Decontamination
- Preventing Contamination
- Work Zones
- Decontamination Procedures
- The Decontamination Line
- **Suit-Up and Decontamination Lab**

**CHAPTER 9: WORK PRACTICES – MAJOR CONTENTS**

- Standard Operating Procedures (SOPs)
- SOPs for Emergencies
- Work Practices Lab

**CHAPTER 10: EMERGENCY RESPONSE PLAN – MAJOR CONTENTS**

- Emergency Response Plan (ERP) Requirements
- The Incident Command System
- Communication
- Zones and the Primary Activities in Each Zone
- **Emergency Response Exercise**
- Example of an Emergency Response Plan

**CHAPTER 11: SIMULATIONS – MAJOR CONTENTS**

- Overview of Simulations
- **Spill Response Table-Top Exercise**