



Course Title: Hazardous Materials Awareness

Time: 1 hour

Learning Objectives:

- Identify hazardous substances and understand the risks associated with them during an incident.
- Assess the potential outcomes of emergencies involving hazardous substances.
- Recognize the presence of hazardous substances in an emergency situation.
- Determine the identity of hazardous substances, if possible.
- Understand your role in emergency response, including site security, control measures, and the use of the U.S. D.O.T Emergency Response Guidebook.
- Evaluate the need for additional resources and notify the communication center appropriately.

Course Outline Sections:

- Introduction
 - Hazardous Materials Awareness Level
 - Video – HAZMAT Placards
- Hazardous Materials Awareness Training
 - OSHA Definition
 - Hazardous Substances
- Dangers of Hazardous Substances
 - Contamination
 - Illness
 - Injury
 - Acute and Long-Term Effects
 - Environmental Impact
 - Decomposition
- Hazardous Material Identification



DIRIGO SAFETY, LLC

PUBLIC SAFETY ADVOCATES

- Hazardous Materials Identification System (HMIS)
- Visual Cues
 - NFPA 704
 - Placards
 - SDS (Safety Data Sheets)
 - Shipping Papers
- NFPA 704
- Placards
 - Hazard Classes
 - Explosives
 - Gases
 - Flammable Liquids
 - Flammable Solids
 - Oxidizers and Organic Peroxides
 - Toxic and Infectious Substances
 - Radioactive Materials
 - Corrosive Substances
 - Miscellaneous Hazardous Materials
- Emergency Response Guidebook (ERG) and Globally Harmonized System (GHS)
- Emergency Response Guidebook (ERG)
 - Summary of Changes
 - The White Section
 - How to Use the ERG
 - Shipping Papers
 - Placard and Container Identification Charts
 - Pipeline Information
 - Terrorism Information
 - Emergency Response Steps
 - Glossary of Terms
 - Response Center Contact Numbers



DIRIGO SAFETY, LLC

PUBLIC SAFETY ADVOCATES

- Placards Table Example
- Rail Car and Road Trailer Identification Chart
 - Common Markings on Rail Cars
 - Common Road Trailers
- Globally Harmonized System Hazard Pictograms
 - Health Hazard
 - Gas Cylinder
 - Flame Over Circle
 - Corrosion
 - Environment
 - Flame
 - Exploding Bomb
 - Exclamation Mark
 - Skull and Crossbones
- Intermodal Container Labeling
- Pipeline Transportation of Hazardous Materials
 - Types of Pipelines
 - Natural Gas Pipelines
 - Transmission Pipelines
 - Distribution Pipelines
 - Gathering/Well Production Pipelines
 - Hazardous Liquid Pipelines
 - Highly Volatile Liquid (HVL) Pipelines
 - Pipeline Markers
- Pages with Yellow Border
- Pages with Blue Border
- Pages with Orange Border
 - Potential Hazards
 - Public Safety
 - Emergency Response
- Pages with Green Border



DIRIGO SAFETY, LLC

PUBLIC SAFETY ADVOCATES

- Table 1: Initial Isolation and Protective Distances
- Table 2: Water-Reactive Materials
- Table 3: Toxic Inhalation Hazard (TIH) Gases)
- Reference Section
 - Instructions
 - Glossary
 - BLEVE Table
 - CBRN Information
 - Contact Information
- QUIZ: Hazardous Materials Awareness