

EXPANDED COURSE OUTLINE
REGULAR BASIC COURSE
LEARNING DOMAIN 41
HAZARDOUS MATERIALS AWARENESS

Effective date of outline: August 1, 2013

I. LEARNING NEED

Peace officers need to know the risks presented by hazardous materials and their role in responding to hazardous materials incidents.

LEARNING OBJECTIVES

- A. Identify a hazardous materials incident
 - 1. EPA definition
 - 2. DOT definition
 - 3. OSHA definition

- B. Identify the specific challenges that are presented by incidents involving hazardous materials
 - 1. Difficulty in identifying the materials
 - 2. Potential long-and short-term health effects on humans and animals
 - 3. Environmental impact
 - 4. Public safety implications
 - 5. Multiple hazards (toxic, flammable, reactive, radioactive or corrosive hazards, physical hazards.
 - 6. Complexity of the situation (rescue problems, fire, flood explosion, closures of major thoroughfares, closures of business. Large perimeters, major evacuations, etc

- C. Recognize the roles and responsibilities of a First Responder at the awareness level.
 - 1. Trained to initiate an emergency response sequence by notifying the proper authorities of the release
 - 2. Isolate entry
 - 3. Deny entry

- D. Identify the primary pathways in which a hazardous material can enter the human body, including:
 - 1. Inhalation
 - 2. Absorption
 - 3. Ingestion
 - 4. Injection

- E. Identify precautions peace officers can take to protect themselves from contacting a hazardous material
 - 1. Effect of exposure from acute to chronic
 - 2. Documentation
 - 3. Medical evaluations

II. LEARNING NEED

Peace officers must become familiar with the indicators and warning systems that identify specific dangers of hazardous materials in order to respond safely and effectively to hazardous materials incidents.

LEARNING OBJECTIVES

- A. Recognize the indicators, of a hazardous materials incident including, but not limited to:
 - 1. National Fire Protection Association 704 (NFPA)
 - 2. Placards/Labels
 - 3. Physical Indicators
 - 4. Witnesses or involved parties
 - 5. Container(s)
 - 6. Victim/Injuries

- B. List standardized sources of information of materials present at a hazardous incident, including, but not limited to:
 - 1. Emergency Response Guide (ERG)
 - 2. Material Safety Data Sheets (MSDS)
 - 3. Shipping papers
 - 4. Other documents

III. LEARNING NEED

Peace officers must have a clear understanding of the need for safety, isolation, and notification when acting as First Responders at the scene of a hazardous materials incident.

LEARNING OBJECTIVES

- A. Recognize the guidelines for safely assessing and approaching a hazardous materials incident
 - 1. Size and location of incident
 - 2. Occupancy type (is incident near a building or buildings)
 - 3. Description of vehicle involved
 - 4. Weather conditions, such as wind direction
 - 5. Victims
 - 6. Information or warning signs on containers (such as placards, levels, identification numbers, manufacturers and chemical names)
 - 7. Where to meet the reporting party
 - 8. Safe approach route

- B. Identify factors to consider when establishing a perimeter around a hazardous materials incident
 - 1. Maintain safe distance from the hazard at all times
 - 2. Observing the incident from that safe distance using binoculars, if possible.
 - 3. Giving the exact location and other available information when reporting the incident.

- C. Identify the types of control zones at a hazardous materials incident, including:
 - 1. Exclusion zone
 - 2. Contamination reduction zone
 - 3. Support zone

- D. Identify the information that should be communicated to dispatch from the scene of an incident, including:
1. Location of the incident
 2. Type of premises and/or vehicles involved
 3. Size and perimeter of the involved area
 4. Weather conditions
 5. Name of hazardous material involved, if known
 6. Information about placards, ID numbers, warning signs, etc.
 7. Safe entry and exit routes to and from the scene
 8. EMS, if appropriate
 9. Location of command post
- E. Identify the procedures to be followed before leaving the scene, (e.g., decontamination, exposure reporting)
1. Check with authorized personnel (specialist's technicians, etc.) regarding the need for personnel and equipment documentation.
 2. Complete a personal exposure report.

IV. REQUIRED LEARNING ACTIVITIES

- A. The student will participate in a learning activity designed to reinforce an understanding of first responder actions at the scene of a hazardous materials incident to include:
1. Identification of the event as a hazardous materials incident
 2. Application of recommended safety precautions
 3. Use of the Emergency Response Guidebook (ERG) to determine the initial isolation and protective action distances
 4. The need to isolate the scene
 5. Notification considerations
- B. The student will participate in a learning activity designed to reinforce an understanding of the indicators for determining the hazard potential of the suspected material to include:
1. Placard
 2. Sign
 3. Warning label
 4. Any other indication

<u>Description</u>	<u>Hours</u>
POST Minimum Required Hours	<u>4</u>
Agency Specific Hours	<u> </u>
Total Instructional Hours	<u>4</u>