Course Title: Statewide WMD Response: Hazardous Materials Technician A

Course Duration: 45 hours

Program: Hazardous Materials Program

Level of Training: Performance – Offensive (OSHA Technician)

Associated Target Capabilities:
- Information Gathering & Recognition of Indicators & Warnings
- CBRNE Detection
- Responder Safety & Health
- Public Safety & Security Response
- On-Site Incident Management
- WMD/Hazardous Materials Response & Decontamination

Course Prerequisites:
- Statewide WMD Response: Hazardous Materials Awareness
- Statewide WMD Response: Hazardous Materials Operations

Recommended Prerequisites:
- Technical Rescue Awareness

Course Description: The Statewide WMD Response: Hazardous Materials Technician ‘A’ course provides those who are or will be operating as a member of any of the Illinois Statewide WMD/Hazmat teams (fire department or law enforcement agency) the essential skills needed to evaluate and work defensively or offensively at an incident involving the release of hazardous materials. The objectives of the course are to teach participants: to classify, identify, and verify known and unknown material by using field survey instruments and equipment; to select and use the proper chemical protective equipment provided to the hazardous materials Technician; to understand hazard and risk assessment techniques for Hazmat and CBRNE environments; to be able to perform advanced control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available; and to develop action plans within the parameters of the State plan for statewide response to WMD events.
Course Content:

Module: 1
Title: Laws and Regulations

Terminal Learning Objective:
At the conclusion of this module, the student will explain the laws, regulations and standards that apply to hazardous materials/WMD incidents.

Module: 2
Title: Response Components

Terminal Learning Objective:
At the conclusion of this module, the student will explain the 5-step Isolate to Terminate process and how it affects the hazardous materials response.

Module: 3
Title: Chemical and Physical Properties

Terminal Learning Objective:
At the conclusion of this module, the student will apply chemical and physical properties of a material to predict how hazardous materials respond in different situations.

Module: 4
Title: Toxicology

Terminal Learning Objective:
At the conclusion of this module, the student will explain how hazardous materials enter the body and what their potential effects are.

Module: 5
Title: Collecting & Interpreting Hazard & Response Information

Terminal Learning Objective:
At the conclusion of this module, the student will utilize a minimum of three resources to collect and interpret information concerning a hazardous material.
Module: 6
Title: Personal Protective Equipment

Terminal Learning Objective:
At the conclusion of this module, the student will demonstrate the proper selection, use, and maintenance of all four EPA ensemble classifications.

Drill One – Suit Familiarization

Module: 7
Title: Recognition and Identification – Part I

Terminal Learning Objective:
At the conclusion of this module, the student will recognize different types of transportation containers and markings and determine the hazards associated with the materials transported or stored within the container.

Module: 8
Title: Recognition and Identification – Part II

Terminal Learning Objective:
At the conclusion of this module, the student will identify potential materials present at an incident, based on the type of pipeline or fixed facility container involved.

Module: 9
Title: Monitoring

Terminal Learning Objective:
At the conclusion of this module, the student will demonstrate the use of monitoring equipment available to the hazardous materials Technician.

Module: 10
Title: Container Behavior

Terminal Learning Objective:
At the conclusion of this module, the student will identify factors that determine how hazardous materials containers will behave during an incident and develop a strategy for a response based on the analysis of the container and its behavior.
Drill Two – Skill Stations in Level A

**Module: 11**
Title: Control Functions

**Terminal Learning Objective:**
At the conclusion of this module, the student will *demonstrate* performing control functions, available to the Technician, in support of the Incident Action Plan.

**Module: 12**
Title: Site Safety Plan

**Terminal Learning Objective:**
At the conclusion of this module, the student will *demonstrate* the completion of a Site Safety Plan.

**Module: 13**
Title: Incident Management System

**Terminal Learning Objective:**
At the conclusion of this module, the student will *identify* the positions that make up the Incident Management System and how to use IMS, Unified Command and NIMS at a hazardous materials/WMD incident.

Drill Three – Tech Level Skills in Level A

**Module: 14**
Title: Decontamination

**Terminal Learning Objective:**
At the conclusion of this module, the student will *demonstrate* proper selection, set-up, operation, and tear down of a decontamination line.
Module: 15
Title: Terrorist & Other Criminal Activities

Terminal Learning Objective
At the conclusion of this module, the student will classify terrorist incidents into the five basic categories of Chemical, Biological, Radiological, Nuclear, and Explosive.

Module: 16
Title: Standard Operating Guidelines

Terminal Learning Objective:
At the conclusion of this module, the student will summarize key information that should be contained in Standard Operating Guidelines (SOG) for hazardous materials/WMD incidents.

Tabletop

Night Drill

Final Incident

Textbook:

Evaluation Strategy:
Written and practical skills testing are conducted at the end of the course. In addition, simulated evolutions involving various hazardous materials situations are conducted throughout the course.
References:


# Course Schedule

## DAY ONE

Start Time: 0800

<table>
<thead>
<tr>
<th>Event</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation and Introductions</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Module 1: Laws and Regulations</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Module 2: Response Components</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Module 3: Chemical/Physical Properties</td>
<td>1 hour</td>
</tr>
<tr>
<td>Module 4: Toxicology</td>
<td>1 hour</td>
</tr>
<tr>
<td>Module 5: Collecting &amp; Interpreting</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

**Lunch**

Module 6: Personal Protective Equipment 1 hour

**Drill One: Suit Familiarization** 2 hour and 30 min

**Assignment: Reading Assignment One – Due Day Two 0800**
# DAY TWO

**Start Time:** 0800

<table>
<thead>
<tr>
<th>Event</th>
<th>Duration</th>
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</thead>
<tbody>
<tr>
<td>Review Homework</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Module 7: Recognition and Identification – Part I</td>
<td>1 hour and 15 min</td>
</tr>
<tr>
<td>Module 8: Recognition and Identification – Part II</td>
<td>1 hour</td>
</tr>
<tr>
<td>Module 9: Monitoring</td>
<td>1 hour and 30 min</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
</tr>
<tr>
<td>Module 10: Container Behavior</td>
<td>1 hour</td>
</tr>
<tr>
<td><strong>Drill Two: Skill Stations in Level A</strong></td>
<td>3 hours</td>
</tr>
</tbody>
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**Assignment: Reading Assignment Two – Due Day Three 0800**
DAY THREE

Start Time: 0800

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<thead>
<tr>
<th>Event</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Review Homework</td>
<td>15 minutes</td>
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<tr>
<td>Module 11: Control Functions</td>
<td>3 hours and 45 min</td>
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<tr>
<td><strong>Lunch</strong></td>
<td></td>
</tr>
<tr>
<td>Module 12: Site Safety Plan</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Module 13: Incident Management System</td>
<td>1 hour</td>
</tr>
<tr>
<td><strong>Drill Three: Tech Level Skills in Level A</strong></td>
<td>3 hours and 30 min</td>
</tr>
<tr>
<td><strong>Assignment: Reading Assignment Three – Due Day Four 0800</strong></td>
<td></td>
</tr>
</tbody>
</table>
## DAY FOUR

**Start Time:** 0800

<table>
<thead>
<tr>
<th>Event</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review Homework</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Module 14: Decontamination</td>
<td>1 hour and 30 min</td>
</tr>
<tr>
<td><strong>Science Activity</strong></td>
<td>1 hour</td>
</tr>
<tr>
<td>Module 15: Terrorist and Other Criminal Activities</td>
<td>1 hour and 15 min</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
</tr>
<tr>
<td>Module 16: Standard Operating Guidelines</td>
<td>1 hour</td>
</tr>
<tr>
<td><strong>Table Top Exercise</strong></td>
<td>2 hours</td>
</tr>
<tr>
<td><strong>Dinner</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Night Drill</strong></td>
<td>5 hours</td>
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### Day Five

**Start Time:** 0800

<table>
<thead>
<tr>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Final Incident</td>
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<tr>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>Review &amp; CEQ's</td>
<td>1 hour</td>
</tr>
<tr>
<td>Test</td>
<td>3 hours</td>
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