Pennsylvania State Fire Academy

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Minimum Standard for Accreditation (MSA)

September 2000

Course Title: Emergency Response to Terrorism - Tactical Considerations - Hazardous Materials (NFA)

Course Code: ERTTCHM

Course Length: 16 hours

Lecture/Lab Breakdown: 16/0

Prerequisites: One of the following: FEMA's Basic Concepts course (ERT:BC) **or** self-study course (ERT:SS) **or** PSFA Terrorism Operations (TODP). Students must also be certified by their employers at the Hazardous Materials Technician or Specialist lever per OSHA 29CFR1910.120[q] / EPA 40CFR 311.

Referenced Text(s): National Fire Academy Instructor Guide & Student Manual for the course in question

Course Goal:

- Increase an emergency responder's chance of surviving a terrorist incident. Increase a haz mat technician's ability to anticipate potential terrorist incident targets.

- Increase a department's ability to respond effectively to a terrorist incident through coordinated planning, training, and exercising.

- Increase a haz mat technician's skills level to work in a team setting to address terrorist incidents.

Course Description: This course was designed for the first-on-the-scene career or volunteer hazardous material technician or persons with haz mat responsibilities for developing initial tactical considerations. The student will be trained in security considerations, identifying signs of terrorism, anticipating unusual response circumstances, assessing information and taking corrective actions, and importantly determining strategies for survival. The student will also apply his/her knowledge about response to Biological, Nuclear, Incendiary, Chemical, and Explosive (B-NICE) events: identifying and preserving evidence, managing site safety, mitigating the incident, documenting the event, and debriefing personnel.

Description of Methodology to be used (brief): A combination of lecture, guided discussion, and individual/small group activities.

Student Equipment/Supply needs: Pen/Pencil, notebook, copy of the Student Manual for the course in question.

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Equipment/audiovisual/supply requirements: Classroom of adequate size with the usual amenities; audiovisual kit (CD ROM or 35 mm slides) for the course in question; audiovisual projection equipment appropriate for the AV kit used (see Instructor Guide); easel pads (6) and marker pens; one copy of student manual per student.

Special notes and conditions: Maximum class size: 25 students; Student Manual to remain in possession of the student at the course's conclusion.

Course Outline (Topical)

Topic	Time	Notes
Welcome And Registration	30 minutes	
Introduction	1 hour	
Security	1 hour, 30 minutes	
Chemical and Physical Properties	3 hours, 15 minutes	
Monitoring	4 hours	
Protection	1 hour, 50 minutes	
Product Control	1 hour, 5 minutes	
Decontamination	1 hour, 35 minutes	
Examination/Grading/Conclusion	1 hour, 15 minutes	
Total Classroom Time	**16 hours**	

Competency Evaluation Mechanism: 33 question written examination at conclusion of course; instructor assessment of student performance in individual small group activities.

Course Objectives:

Upon completion of this course, the student will be able to:

1. Participate in an exercise in order to provide instructors with an assessment of their recognition and identification skills for a terrorist incident.
   - 1.1. Complement existing knowledge of identification and recognition skills.
   - 1.2. Recognize some of the issues surrounding haz mat tactical considerations for a terrorism event.
   - 1.3. Recognize the importance of approaching the haz mat emergency response to terrorism with a different mindset.
2. Identify basic security tactics required in responding to terrorist incidents.
   - 2.1. Compare and contrast security considerations between incidents that are known and unknown to be terrorist.
   - 2.2. Identify several primary actions for first responders to take in responding to a terrorist incident.
   - 2.3. Identify several ways that weather and lay of the land affect first responder security.
   - 2.4. Identify at least two security-related strategies and two related tactics for each that are likely to facilitate responder survivability.

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Course Objectives (continued)

3. Given chemical and physical properties of an unknown material, estimate risk and determine appropriate response actions and precautions.
   3.1. Identify chemical and physical properties of terrorist agents that relate directly to providing a safe and effective response.
   3.2. Identify the mechanisms of harm for Biological, Nuclear, Incendiary, Chemical, and Explosive (B-NICE) agents.
   3.3. Identify various B-NICE dissemination methods and devices.
4. By reviewing existing conventional and nonconventional monitoring devices, identify equipment likely to be useful in a response to a terrorist incident.
   4.1. Identify both strengths and weaknesses of their existing monitoring equipment.
   4.2. Convey the importance of monitoring in making key decisions resulting from the emergency response to terrorism, i.e., determining a hoax, establishing zones, making evacuation decisions, and mandating personal protective equipment (PPE).
   4.3. Identify the "life cycle" implications for acquiring sophisticated monitoring and sampling equipment.
   4.4. Identify the contributions of monitoring to a risk-based response that are likely to apply to a terrorist event.
   4.5. Review several basic safety rules for sampling unknown materials.
5. Given an exercise, select appropriate personal protective equipment (PPE) based on the chemical and physical properties of the agent.
   5.1. Identify the types and importance of respiratory protection relative to a terrorist event.
   5.2. Identify the advantages and risks involved with using conventional PPE in a terrorist response.
6. Identify appropriate product control methods as they relate to tactical operations at a terrorist incident.
   6.1. Identify steps required to maintain the chain of custody.
   6.2. Identify considerations for haz mat technicians in the preservation of evidence.
   6.3. Identify the impact of agent physical properties on product control.
   6.4. Identify uses of conventional and innovative engineering controls in the response to terrorism.
7. Identify the components of a decontamination plan for victims, response personnel, and equipment that have become contaminated during a terrorist incident.
   7.1. Identify gross decon methods for personnel, equipment, and victims.
   7.2. Identify emergency decon methods, including gross decon.
   7.3. Identify decon plans for Biological, Nuclear, Incendiary, Chemical, and Explosive (B-NICE) incidents involving agents.
   7.4. Identify the components of the four-stage decontamination method.

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Course Objectives (continued)

8. Identify key resources available to their communities in the emergency response to terrorism.
   8.1. Identify the advantages of haz mat and bomb squad interaction.
   8.2. Identify several actions that could improve a community's preparation for the Federal response to a terrorist incident.
   8.3. Identify several ways the responders can help the medical community prepare for response to a terrorist incident.
   8.4. Explain the steps for activating a Federal response

Questions/Comments: Contact the Curriculum Specialist