



# Pennsylvania State Fire Academy

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## Minimum Standard for Accreditation (MSA)

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**Course Title:** Hazardous Materials Incident Management - IAFF (HMIM)

**Length of Course:** 20 Hours

**Lecture/Lab Breakdown:** 14/6

**Prerequisites:** UPRR, IAFF, or HISI or certification by employer at least at First Responder Operations level [29 CFR 1910.120(q)].

**Referenced Texts:** Instructor Guide and Student Manual for course in question as published by the International Association of Fire Fighters (IAFF).

**Course Goal:** Upon completion of this course, the student will be able to successfully establish and implement a well-defined management structure at emergencies involving the release of hazardous materials.

**Description of Course:** This course was developed to meet the needs of responders at the First Responder-Operations level who might find themselves in the role of On Scene Incident Commander at a hazardous materials incident. It is designed to a.) increase responder knowledge of incident management; b.) influence responder attitudes toward implementation of a management structure and c.) teach appropriate skills in building a management system and delegating tasks at a hazardous materials incident. While this course may be useful for persons at the Technician/Specialist level, its intended audience is persons at the First Responder-Operations level.

**Description of Methodology to be used: (Brief)** This course uses a combination of lecture, guided discussion, and group exercises (including a full field exercise) to accomplish its goal. The IAFF Instructor Guide will be followed.

**Student Equipment/Supply Needs:** Pen/Pencil & notebook; 1 copy of Student Text; 1 copy of supplemental handout material.

**Equipment/Audiovisual/Supply requirements:** Classroom with adequate seating; chalkboard/flip chart; 35 mm projector with adequate screen; VHS VCR with adequate monitors; 1 copy of Student Text and supplemental handout material for each student; 1 set of 3 commonly used chemical reference books (to include the D.O.T. ERG) for each 10-15 students. The practical field exercise will require a site, site preparation, and props as specified in Appendix 5B of the course Instructor's Guide. Specifics will depend on resources available and the precise scenario selected by the instructor, course sponsor, or educational training agency.

**Continued**

MINIMUM STANDARDS FOR CCREDITATION

**COURSE OUTLINE**  
**(General - Not Detailed)**

<b><u>Time</u></b>	<b><u>Content</u></b>	<b><u>Instructor Notes</u></b>
4:00	Introduction/Incident Management	
3:00	Command Staff	
3:00	Structuring the Response	
3:00	The Hazardous Materials Sector/Group	
1:00	Terminating the Incident	
1:00	Video Exercise	
:30	Written Examination	
4:00	Field Exercise & Critique	
:30	Course Summary	

**Competency Evaluation Mechanism (Brief description-attach copy):** 30 question written examination; evaluation of student performance in exercises.

**Course Objectives (specific):** Upon completion of this course, the student will be able to correctly (as demonstrated in the written examination and practical exercises):

1. Describe the purpose of an incident management system.
2. Define the management concepts that apply to an incident management system.
3. Identify the major components of an incident management system.
4. List at least three agencies/laws that relate to incident management at hazardous materials incidents.
5. Briefly explain how command is established
6. Explain how to assess the hazards at an incident and evaluate the resources needed.
7. State the guidelines for balancing risks and benefits when determining a course of action.
8. Discuss situations when protecting in-place may be an alternative to evacuation.
9. Describe the difference between strategic goals and tactical objectives.
10. Identify at least one method for tracking personnel at an incident scene.
11. Explain how command is transferred.
12. Describe the role and responsibilities of the Safety Officer.
13. List at least five areas monitored by the Safety Officer.
14. List two or more concerns that might be included in a Safety Officer's follow-up report after an incident.
15. Describe the role and responsibilities of the Liaison Officer.
16. List at least five state and local agencies that may respond to hazardous materials incidents.
17. List at least three federal agencies that may respond to hazardous materials incidents.

**continued**

MINIMUM STANDARDS FOR CCREDITATION

Hazardous Materials Incident Management - IAFF (HMIM)

**Course Objectives (specific): continued**

18. List at least two private agencies that may respond to hazardous materials incidents.
19. Describe the role and responsibilities of the Public Information Officer.
20. Identify the terms and staff titles applied to the components of his or her department's incident management system.
21. Explain how different command levels are implemented as an incident grows in complexity.
22. Describe the purpose and responsibilities of the Planning Section.
23. Identify three or more Units that may be part of the Planning Section.
24. Describe the purpose and responsibilities of the Logistics Section.
25. Identify three or more Units that may be part of the Logistics Section.
26. Describe the purpose and responsibilities of the Finance Section.
27. Identify two or more Units that may be part of the Finance Section.
28. Describe the purpose and responsibilities of the Operations Section.
29. Identify at least three Units that may be part of the Operations Section.
30. Identify the staffing requirements for the major teams within the Hazardous Materials Sector/Group.
31. Describe the purpose and responsibilities of the Site Control function.
32. Define Hot, Warm, and Cold Zones.
33. Describe the purpose and responsibilities of the Hazardous Materials Safety Officer.
34. List five or more common hazards at hazardous materials incidents.
35. Describe the purpose and responsibilities of the Research function.
36. Describe the purpose and responsibilities of the Entry function.
37. Describe the purpose and responsibilities of the Decontamination function.
38. Explain how a decontamination plan is developed.
39. Define the types of chemical protective clothing.
40. List three factors that determine field selection of protective clothing and self-contained breathing apparatus.
41. Identify his or her jurisdiction's role in incident cleanup.
42. Identify the concerns that should be addressed when concluding the fire department's activities at the site.
43. Describe how hazardous waste is handled during the termination phase.
44. List three follow-up measures that will help protect the health and safety of personnel responding to a hazardous materials incident.
45. List at least five items that can be used to document the fire departments' activities at hazardous materials incidents.
46. List at least five concerns that should be addressed during a post-incident analysis.
47. Overview his or her jurisdiction's cost recovery laws.

**Questions/Comments: Rita Wessel, Curriculum Specialist: Extension 106**

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