



COURSE TITLE

Course Subtitle

LESSON ICS-361-8
Technical Specialist –
Hazardous Materials Reference

<i>TOPIC:</i>	TECHNICAL SPECIALIST – HAZARDOUS MATERIALS REFERENCE
<i>TIME FRAME:</i>	30 Minutes
<i>LEVEL OF INSTRUCTION:</i>	Level I
<i>BEHAVIORAL OBJECTIVE:</i>	
• Condition:	Given a written examination
• Behavior:	The student will recognize the roles and responsibilities of the Technical Specialist - Hazardous Materials Reference
• Standard:	With a minimum 80% accuracy according to the information in the Incident Command System Hazardous Materials Module ICS-361-8
<i>MATERIALS NEEDED:</i>	Dry erase board, pens, presentation capabilities, charts, handouts, worksheets, Technical Specialist Position Manual (ICS-1108), written quiz
<i>REFERENCES:</i>	ICS 361-8 Lesson Plan and ICS 1108 Position Manual for the Technical Specialist–Hazardous Materials Reference, Field Operations Guide (FOG)
<i>PREPARATION:</i>	<p>The Technical Specialist – Hazardous Materials Reference is responsible for having a thorough knowledge of the duties and Responsibilities of the position as listed in the Technical Specialist Position Manual. You will report to the Hazardous Materials Group Supervisor. The Technical Specialist-Hazardous Materials Reference may provide product identification, verification, physical properties, and hazardous characteristics using various reference sources, hazardous categorization tests and/or by any other available means.</p> <p>You will be given a written quiz at the end of this lesson. The performance standard for this quiz will be 80% correct.</p>

PRESENTATION	APPLICATION
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<p>I. ORGANIZATION</p> <p>A. Reports to HM Group Supervisor</p> <p>B. Assigned to</p> <ol style="list-style-type: none"> 1. HM Group Supervisor 2. Or HM Branch if activated <p>C. Responsibilities</p> <ol style="list-style-type: none"> 1. Technical information <ol style="list-style-type: none"> a) Computer databases b) Reference manuals c) Information agencies d) Facility representatives e) Product specialists 2. Provide information to the HM Group 3. Product identification <ol style="list-style-type: none"> a) Verification b) Physical properties c) Hazard characteristics <p>II. PERSONNEL</p> <p>A. General objectives of this position</p> <ol style="list-style-type: none"> 1. Provide IC with <ol style="list-style-type: none"> a) Product identification b) Hazard assessment c) Environmental impact <p>B. Technical Specialist Position Requirements</p> <ol style="list-style-type: none"> 1. Minimum equivalent to <ol style="list-style-type: none"> a) Federal, state and local laws <p>III. MAJOR RESPONSIBILITIES AND PROCEDURES</p> <p>A. Review Common Responsibilities, FOG (Page 1-2)</p>	<p>Show ICS Organization Chart</p> <p>Technical Specialist Responsibilities</p> <p>What other information does the Technical Specialist provide?</p> <p>Technical Specialist position requirements</p> <p>What are the check in procedures?</p>
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<ul style="list-style-type: none">1. Complete ICS Form 2112. Check in via radio if reporting directly to the assignment3. Request Briefing information<ul style="list-style-type: none">a) Incident briefing form ICS 201b) Verbal information<ul style="list-style-type: none">(1) Concerning work activities4. Obtain Incident Action Plan5. Provide Planning Section with Technical Information6. Start Unit Activity Log<ul style="list-style-type: none">a) ICS Form 214B. Obtain briefing from HM Group Supervisor, HM Branch or Plans Section Chief<ul style="list-style-type: none">1. Objectives for the operational period2. Requests for the next operational period3. Summary of reference sources<ul style="list-style-type: none">a) Assigned to HM Reference4. Instructions concerning work activities5. Provide technical information6. Determine additional resource needs<ul style="list-style-type: none">a) Need for resourcesb) Additional personnelc) Make resource request<ul style="list-style-type: none">(1) Through the HM Group SupervisorC. Provide technical support to HM Group Supervisor or Branch Director if activated<ul style="list-style-type: none">1. Establish reference library as needed<ul style="list-style-type: none">a) Written materialb) Computer based material	<p>What official form will the Technical Specialist utilize to record unit activities?</p> <p>What information would be included in the briefing for the person filling this position?</p> <p>How does the Technical Specialist support the HM Group?</p>
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<ul style="list-style-type: none">(1) Data Bases(2) Plume modelingc) Facility representatives2. Coordinate Work Zone Control Lines<ul style="list-style-type: none">a) With the HM Group supervisor<ul style="list-style-type: none">(1) Technical data(2) Plume modeling(3) Environmental monitoring(4) Hazard assessment(5) Geography3. Coordinate Decontamination<ul style="list-style-type: none">a) With Decon Leaderb) Decontamination Actionsc) Analysis for Decon effectiveness4. Provide ASO HM with informationD. Coordinate and Communicate with the Entry Leader<ul style="list-style-type: none">1. Provide<ul style="list-style-type: none">a) Hazard assessmentb) Risk / benefit information2. Provide task analysis recommendationsE. Provide and interpret environmental monitoring<ul style="list-style-type: none">1. Provide monitoring as needed<ul style="list-style-type: none">a) Establish monitoring stationsb) Obtain and arrange weather monitoringc) Determine sites for remote monitoringd) Interpret monitoring results2. Receive weather data and forecasts	<p>What technical expertise would this position provide to assist with mitigation of the incident?</p>
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<p>F. Provide identification, characteristics, and hazard information</p> <ol style="list-style-type: none">1. Obtain sampling equipment2. Determine sampling techniques<ol style="list-style-type: none">a) Locationsb) Frequencyc) Coordinate sample acquisition with Entry Leaderd) Provide sample containers to entry teame) Coordinate sampling methods with Entry Leaderf) Chain of evidence<ol style="list-style-type: none">(1) Crime scene3. Establish testing / identification methods<ol style="list-style-type: none">a) Hazard identification equipmentb) Identify laboratory location if needed4. Provide safety information to personnel5. Product and exposure identification<ol style="list-style-type: none">a) To medical personnel <p>G. Determine Personal Protective Equipment</p> <ol style="list-style-type: none">1. Recommend PPE to<ol style="list-style-type: none">a) Group supervisorb) Safety officer and ASO HMc) Entry Leaderd) Entry Teams2. Arrange for swipe testing as needed <p>H. Provide technical information for documentation</p> <ol style="list-style-type: none">1. Obtain communication services2. Recording and photo capabilities	<p>What assistance would this position provide to the Entry Leader?</p> <p>Would this position require specialized documentation equipment?</p>
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<ol style="list-style-type: none"> 3. Interpret data for the Information Officer 4. Place information requests through appropriate supervisor 5. Request through the HM Group Supervisor <ol style="list-style-type: none"> a) Industry representatives b) government representatives / agencies c) Response teams 6. Forward documents to the Documentation Unit <p>I. Obtain technical information from public and private sources</p> <ol style="list-style-type: none"> 1. Poison Control Centers 2. Toxicology Centers 3. CHEMTREC 4. Manufacturer, Shipper 5. National Response Center 6. Additional Technical Specialists <ol style="list-style-type: none"> a) Request through Incident Commander <p>J. Assist Planning Section</p> <ol style="list-style-type: none"> 1. Projection of environmental impact of the release 2. Assess environmental impact 3. Forecast environmental impact <ol style="list-style-type: none"> a) Computer modeling <p>K. Participate in preparation of the Site Safety and Control Plan (ICS Form 208)</p> <ol style="list-style-type: none"> 1. Provide technical information to the ASO-HM 	<p>What other considerations would the Technical Specialist have when gathering information?</p> <p>Who else would the Technical Specialist support?</p>
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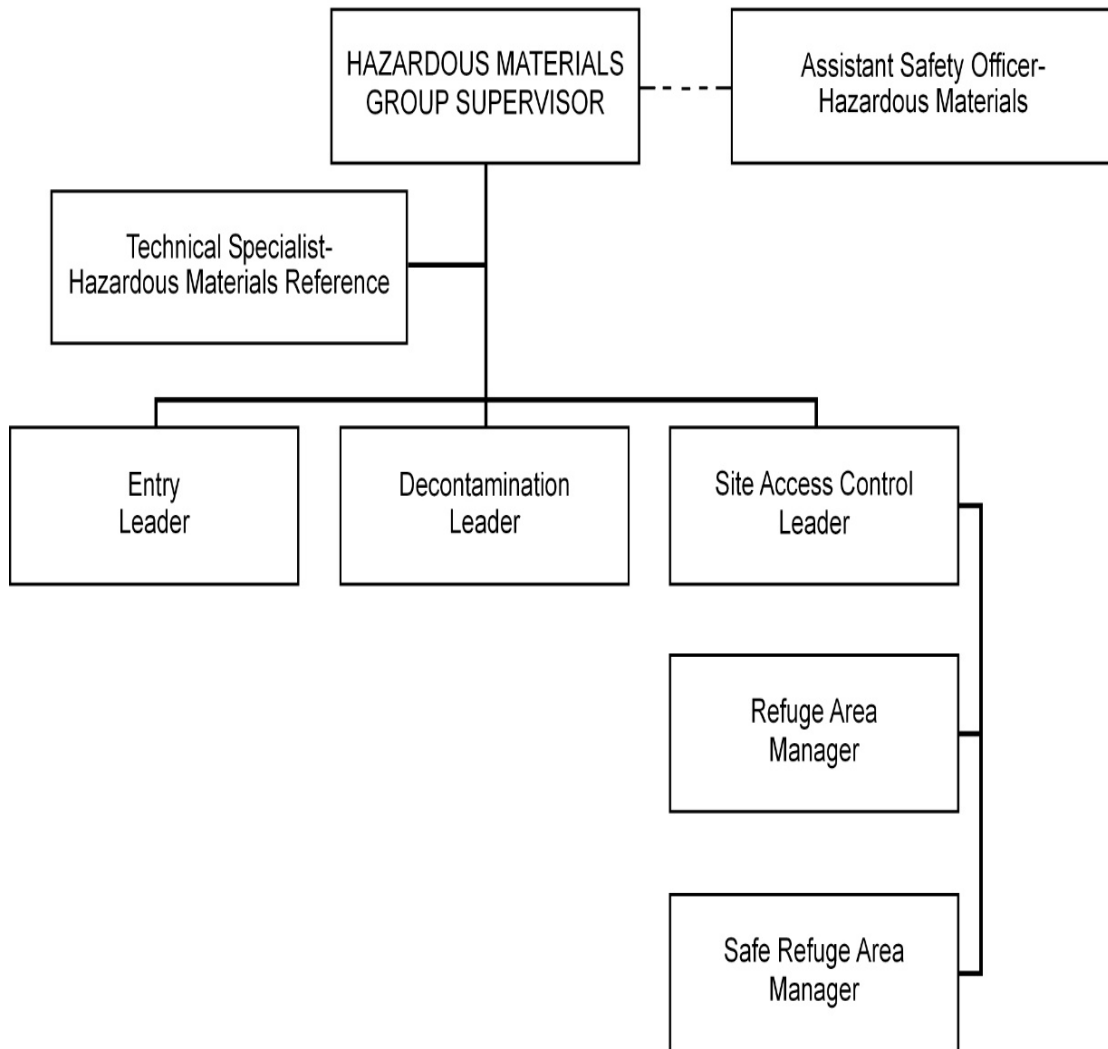
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<ul style="list-style-type: none">2. Interpret Hazard Risk Analysis<ul style="list-style-type: none">a) For the Site Safety Plan3. Advise monitoring and detection equipment4. Recommend Decontamination proceduresL. Maintain Unit/Activity Log (ICS Form 214)<ul style="list-style-type: none">1. Record significant events2. Submit form to the Documentation Unit<ul style="list-style-type: none">a) Through the HM Group Supervisor	<p>The Unit Log is submitted to whom?</p>
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Hazardous Materials Group Organization



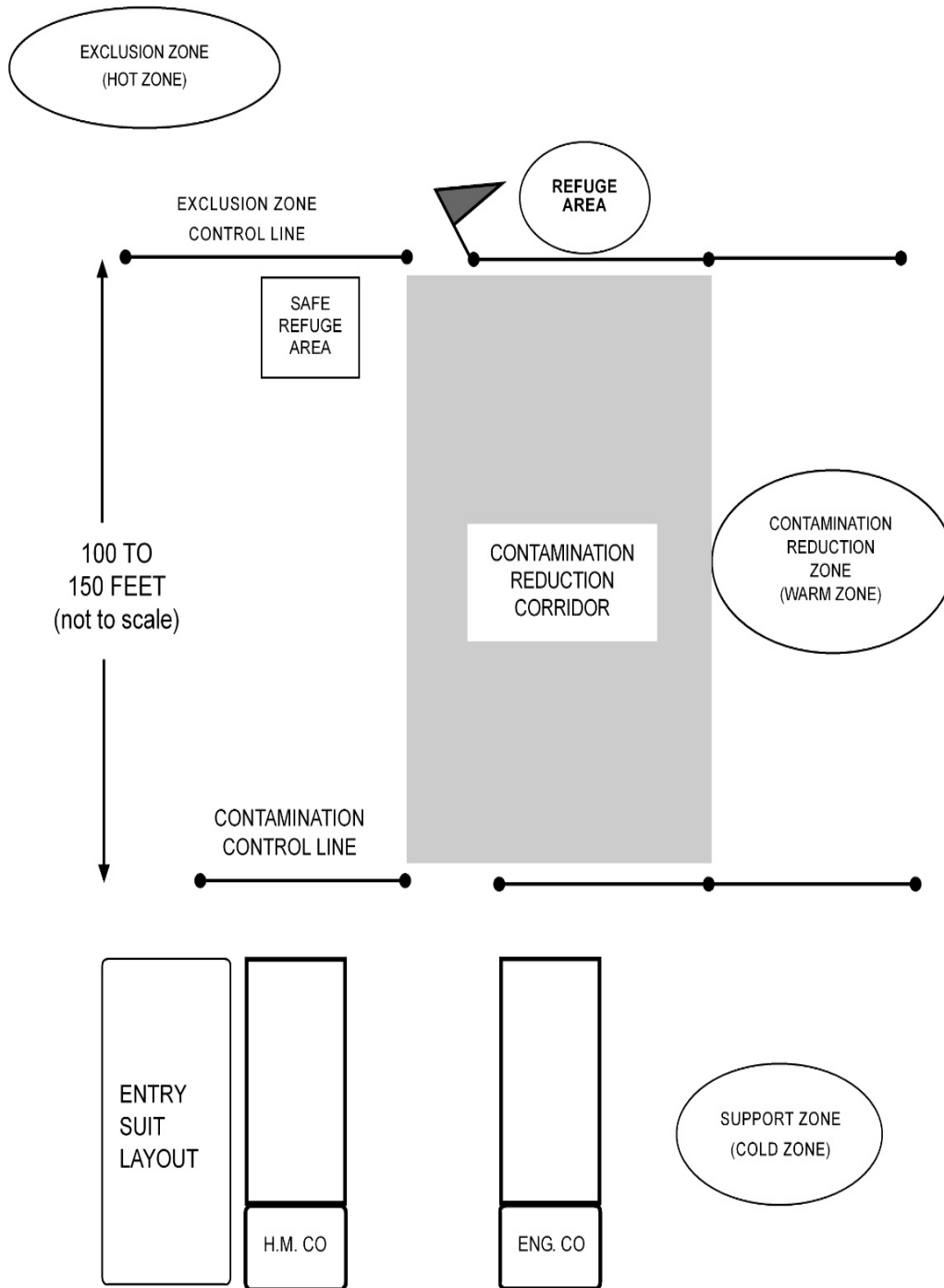


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CONTROL ZONE LAYOUT



SUMMARY:



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We have taken a detailed look at the duties of the Technical Specialist – Hazardous Materials Reference. It is important to remember when filling this position to coordinate with both the Hazardous Materials Group Supervisor and the Planning Section Chief. You will also be required to coordinate with the Entry Leader, the Decontamination Leader, the Site Access Control Leader and the Assistant Safety Officer – Hazardous Materials. The responsibilities of your position include evaluating and analyzing samples, data and information collected on the incident. You will assist in determining the hazard to responders, the public and the environment.

EVALUATION:

Give student quiz ICS 361-8 Technical Specialist Hazardous Materials Reference.

ASSIGNMENT:

Read Technical Specialist - Hazardous Materials Reference Position Manual

**Technical Specialist – Hazardous Materials Reference
ICS-361-8 Quiz**



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Name: _____

Date: _____

Technical Specialist – Hazardous Materials Reference

INSTRUCTIONS: This is a multiple-choice quiz. For each of the following questions or statements, circle the letter preceding the correct answer.

INSTRUCTIONS: This is a multiple-choice quiz. Circle the letter preceding the correct answer for the following questions or statements.

EXAMPLE: Methods and operating procedures which reduce fire, water and smoke damage during and after a fire are called:

- A. Overhaul
- B. Ventilation
- C. Extinguishment
- D. Salvage**

1. The Technical Specialist – Hazardous Materials Reference (Tech Spec – HM Reference) reports to:
 - A. The Incident Commander
 - B. Operations Section Chief
 - C. The Hazardous Materials Group Supervisor
 - D. The Logistics Section Chief

 2. General Responsibilities of the Tech Spec – HM Reference includes providing technical information obtained from all of the following except:
 - A. Product Specialist
 - B. Reference Manuals
 - C. Computer Databases
 - D. Media Releases

 3. To whom does the Tech Spec – HM Reference recommend the location of control lines:
 - A. The Site Access Control Leader
 - B. Entry Leader
 - C. Hazardous Materials Group Supervisor
 - D. Decontamination Leader

 4. The Tech Spec – HM Reference is assigned to the:
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- A. The "T" card monitor
 - B. Hazardous Materials Group
 - C. Entry Team Leader
 - D. The Overall Scene Commander
5. The general objectives of the Tech Spec – HM Reference include providing the IC:
- A. Expertise in identifying and assessing hazards
 - B. Measuring operational benefits
 - C. Environmental impact projections
 - D. All of the above
6. The Tech Spec – HM Reference will assist the _____ Section with projecting the potential environmental effects of the release or threatened release:
- A. Operations
 - B. Planning
 - C. Logistics
 - D. Finance
7. The Tech Spec – HM Reference provides support to the HM Group Supervisor by:
- A. Interfacing with facility representatives
 - B. Assisting ASO – HM with safety information
 - C. Setting up the Safe Refuge Area
 - D. A & B only
8. Other information management agencies that the Tech Spec – HM Reference might gather information from would include:
- A. Poison Control Center
 - B. Tox Center
 - C. CHEMTREC
 - D. A & C only
9. To whom does the Tech Spec – HM Reference make PPE recommendations?
- A. HM Group Supervisor, ASO – HM and IC
 - B. ASO – HM, HM Group Supervisor and Entry Leader
 - C. Safety Officer, HM Group Supervisor and HM Branch Director
 - D. HM Group Supervisor, ASO – HM and Safety Officer
10. What ICS form must the Tech Spec – HM Reference maintain at a minimum?
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- A. ICS Form 211
- B. ICS Form 214
- C. ICS Form 202
- D. ICS Form 299

Technical Specialist – Hazardous Materials Reference ICS-361-8 Quiz KEY

Name: _____

Date: _____

Technical Specialist – Hazardous Materials Reference

INSTRUCTIONS: This is a multiple-choice quiz. For each of the following questions or statements, circle the letter preceding the correct answer.

INSTRUCTIONS: This is a multiple-choice quiz. Circle the letter preceding the correct answer for the following questions or statements.

EXAMPLE: Methods and operating procedures which reduce fire, water and smoke damage during and after a fire are called:

- E. Overhaul
- F. Ventilation
- G. Extinguishment
- H. Salvage**

1. The Technical Specialist – Hazardous Materials Reference (Tech Spec – HM Reference) reports to:

- A. The Incident Commander
- B. Operations Section Chief
- C. The Hazardous Materials Group Supervisor**
- D. The Logistics Section Chief

2. General Responsibilities of the Tech Spec – HM Reference includes providing technical information obtained from all of the following except:

- A. Product Specialist
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D. Media Releases

3. To whom does the Tech Spec – HM Reference recommend the location of control lines:
 - A. **The Site Access Control Leader**
 - B. Entry Leader
 - C. Hazardous Materials Group Supervisor
 - D. Decontamination Leader

 4. The Tech Spec – HM Reference is assigned to the:
 - A. The “T” card monitor
 - B. **Hazardous Materials Group**
 - C. Entry Team Leader
 - D. The Overall Scene Commander

 5. The general objectives of the Tech Spec – HM Reference include providing the IC:
 - A. Expertise in identifying and assessing hazards
 - B. Measuring operational benefits
 - C. Environmental impact projections
 - D. **All of the above**

 6. The Tech Spec – HM Reference will assist the _____ Section with projecting the potential environmental effects of the release or threatened release:
 - A. Operations
 - B. **Planning**
 - C. Logistics
 - D. Finance

 7. The Tech Spec – HM Reference provides support to the HM Group Supervisor by:
 - A. Interfacing with facility representatives
 - B. Assisting ASO – HM with safety information
 - C. Setting up the Safe Refuge Area
 - D. **A & B only**

 8. Other information management agencies that the Tech Spec – HM Reference might gather information from would include:
 - A. Poison Control Center
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 - C. CHEMTREC
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D. A & C only

9. To whom does the Tech Spec – HM Reference make PPE recommendations?

- A. HM Group Supervisor, ASO – HM and IC
- B. ASO – HM, HM Group Supervisor and Entry Leader**
- C. Safety Officer, HM Group Supervisor and HM Branch Director
- D. HM Group Supervisor, ASO – HM and Safety Officer

10. What ICS form must the Tech Spec – HM Reference maintain at a minimum?

- A. ICS Form 211
- B. ICS Form 214**
- C. ICS Form 202
- D. ICS Form 299