

Hazardous Materials and Terrorist Incident Response Curriculum Guidelines

Safety Officer at Hazardous Materials Incidents

Response
Training
Considerations

Awareness

Operations

Core

Mission-
Specific

Hazardous
Materials
Technician

Specialist
Employee

Hazardous
Materials
Specialist

Incident
Commander

Hazardous
Materials
Officer

Safety
Officer

BLS
Responder

ALS
Responder

Hospital
First
Receiver

Appendix A:
Related
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Introduction

There are two training categories combined in this section. The first is the safety officer at hazardous materials incidents, as defined by OSHA and the second is the hazardous materials safety officer, as defined by NFPA. The safety officer at hazardous materials incidents, as defined by OSHA, shall be trained to meet appropriate OSHA regulatory requirements to identify and evaluate hazards and provide direction to the safety of operations for emergency response sites. The hazardous materials safety officer, as defined by NFPA, shall be trained to meet all competencies for the first responder at the awareness, operational, and technician levels and the competencies in this section. They also shall receive any additional training to meet applicable Department of Transportation (DOT), Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA) and other appropriate state, local or provincial occupational health and safety regulatory requirements.

Definition

The safety officer at hazardous materials incidents (OSHA) and the hazardous materials safety officer (NFPA) are those persons who work within an incident command system (also called an incident management system) to ensure that recognized safe practices are followed within the hazardous materials branch. The safety officer at hazardous materials incidents (OSHA) has the authority to alter, suspend or terminate activities that involve dangerous conditions. The safety officer advises the incident commander of actions that need to take place in order to correct the hazards. The hazardous materials safety officer (NFPA) will be called upon to provide technical advice or assistance regarding safety issues to the hazardous materials officer and incident safety officer at a hazardous materials incident.

Training Audience

The training audience for both the safety officer at hazardous materials incidents (OSHA) and the hazardous materials safety officer (NFPA) is relatively small in number and is technically advanced. The safety officer at hazardous materials incidents (OSHA) are persons with the potential to be qualified at the incident commander level with sufficient hazardous materials knowledge to identify risks and needed interventions. The training audience should include existing members of hazardous materials response teams who have experience and training at the technician level and who have also demonstrated sufficient potential to warrant training and subsequent assignment at the hazardous materials safety officer level.

Methodology Recommendations

The safety officer at hazardous materials incidents (OSHA) and the hazardous materials safety officer (NFPA) training is best conducted with a combination of classroom instruction using traditional lecture and small-group activities and field exercises involving group practice in simulated emergencies. There should be a strong emphasis on field training to include incident operations, safety evaluation and problem solving, to include real time practice identifying and implementing safety interventions during the incident scene operations of the hazardous materials team. Content instruction should be synthesized in student activities requiring analysis of incident information to determine safe plans of action and requiring assessment of the

performance of hazardous materials team members during operations to determine needed safety interventions. Training should include instructor modeling, student walk-throughs, and student practice under stress until competency is achieved. Proper critiques and corrective instruction are essential.

Refresher training should include (1) technical information updates, (2) critique of the ability to analyze an incident and assist in planning a safe response, and (3) critique of incident scene safety evaluation and intervention skills using simulated emergencies.

Response Training Considerations	Awareness	Operations		Hazardous Materials Technician	Specialist Employee	Hazardous Materials Specialist	Incident Commander	Hazardous Materials Officer	Safety Officer	BLS Responder	ALS Responder	Hospital First Receiver	Appendix A: Related Standards	Appendix B: NIMS/ICS	Appendix C: Special Topics
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Summary: Safety Officer at Hazardous Materials Incidents (OSHA) and Hazardous Materials Safety Officer (NFPA)

Audience:	<p>Small in number.</p> <p>Safety Officer (OSHA) responders at the incident command level with potential for assignment as incident safety officer (NFPA)</p> <p>Responders at the technician level with potential for assignment at the hazmat safety officer level.</p>
Pre-Req:	<p>Prior training and demonstrated competency at the awareness, operational, technician and incident command levels.</p>
Training:	<p>No specific length of training is recommended or commonly in use. Length of training should be sufficient to allow students to achieve competency.</p> <p>Classroom, lab, and field exercise formats recommended, with an emphasis on real time field simulations requiring practice in developing safe response plans and identifying safety problems during the implementation of the response plan.</p> <p>Competencies:</p> <ul style="list-style-type: none">• Analyzing the incident• Assisting in developing a safe response plan• Assisting in implementing the response plan safely• Evaluating the response for safety problems and identifying need interventions.
Refresher:	<p>Technical information updates</p> <p>Using simulated emergencies, refreshing of ability to analyze incident and develop safe response plans.</p> <p>Using simulated emergencies, refreshing of ability to evaluate the response and identify safety problems and needed interventions.</p>

Federal Requirements for Safety Officers at Hazardous Materials Incidents

There are no federally specified training requirements for hazardous materials safety officers, but OSHA 29 CFR 1910.120 (q) (3)(vii-viii) specifies certain performance and competency requirements for safety officer at hazardous materials incidents, and employers are required to ensure that employees demonstrate competency in the skills defined. Although the safety officer was initially defined in OSHA as advising the incident commander only, subsequent OSHA interpretations acknowledge that there may be multiple safety officers at the incident scene, advising to several levels of command.

(vii) *The individual in charge of the ICS shall designate a safety officer, who is knowledgeable in the operations being implemented at the emergency response site, with specific responsibilities to identify and evaluate hazards and to provide direction with respect to the safety of operations for the emergency at hand.*

(viii) *When activities are judged by the safety officer to be an IDLH and/or to involve an imminent danger condition, the safety officer shall have the authority to alter, suspend, or terminate those activities. The safety official shall immediately inform the individual in charge of the ICS of any actions needed to be taken to correct these hazards at the emergency scene.*

OSHA 29 CFR 1910.120 (q) (3)(vii-viii)

S.O. - A	Given a simulated incident involving hazardous materials, demonstrate the ability to identify and evaluate hazards at the incident and provide direction to development of a safe response plan.
S.O. - B	Given a simulated response to an incident involving hazardous materials, demonstrate the ability to identify and evaluate unsafe operations, activities and/or conditions involving imminent danger.
S.O. - C	Given identified unsafe conditions in a simulated response to an incident involving hazardous materials, demonstrate the ability to determine appropriate interventions, including altering, suspending or terminating selected response activities, and coordinating those interventions with the individual in charge of the ICS at the incident.

Recommended Training Objectives

The following training objectives are recommended for hazardous materials safety officer training. The primary source for this material is NFPA 472, *Chapter 11: Competencies for the Hazardous Materials Safety Officers*. Training objectives from other sources are noted, with discussion of the rationale for their inclusion to be found in the *Special Topics* section at the end of the *Response Guidelines*.

The hazardous materials safety officer shall be trained to meet all competencies for the first responder at the awareness, operational, and technician levels and the competencies in this section. They also shall receive any additional training to meet applicable DOT, EPA, OSHA and other appropriate state, local or provincial occupational health and safety regulatory requirements.

Response Training Considerations

Awareness

Operations
Core
Mission-Specific

Hazardous Materials Technician

Specialist Employee

Hazardous Materials Specialist

Incident Commander

Hazardous Materials Officer

Safety Officer

BLS Responder

ALS Responder

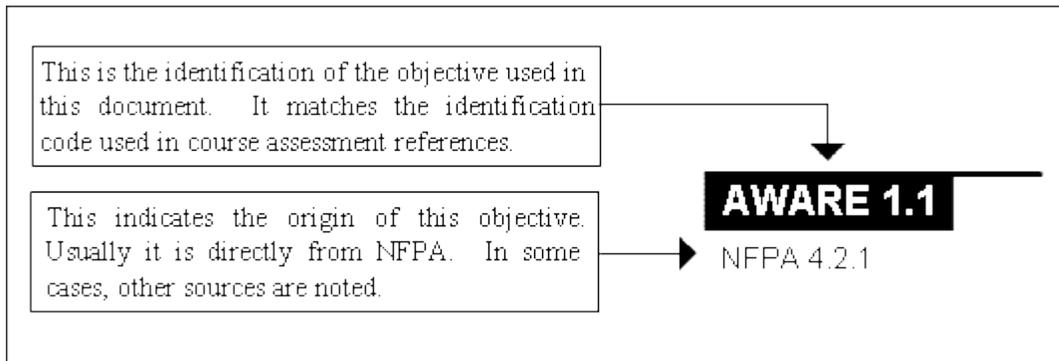
Hospital First Receiver

Appendix A: Related Standards

Appendix B: NIMS/ICS

Appendix C: Special Topics

Objective Identification Legend



OSHA References

References to OSHA are cited in the following objectives, where applicable, according to the following nomenclature:

OSHA 29 CFR 1910.120(q)(3)(vii-viii) = OSHA S.O. – A to C

Safety Officer at Hazardous Materials Incidents

S.O. 1. - Analyzing the Incident

S.O. - 1.1.

NFPA 11.2.1

Determining the Magnitude of the Problem in Terms of Safety

Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall observe a scene, review and evaluate hazard and response information as it pertains to the safety of all persons within the hazardous materials branch/group.

S.O. - 1.1.1.

NFPA 11.2.1.1
OSHA S.O.-A

The hazardous materials safety officer shall explain the basic toxicological principles relative to assessment and treatment of personnel exposed to hazardous materials/WMD, including the following:

- Acute and delayed toxicity
- Dose-response
- Routes of exposure to toxic materials
- Synergistic effects

S.O. - 1.1.2.

NFPA 11.2.1.2
OSHA S.O.-A

The hazardous materials safety officer shall identify at least three conditions where the hazards from flammability would require chemical protective clothing with thermal protection.

S.O. - 1.1.3.

NFPA 11.2.1.3
OSHA S.O.-A

The hazardous materials safety officer shall identify at least three conditions where personnel would not be allowed to enter the hot zone.

S.O. - 1.1.4.

NFPA 11.2.1.4
OSHA S.O.-A

Given the names of five hazardous materials/WMD and at least three reference sources, the hazardous materials safety officer identify the physical and chemical properties and their potential impact on the safety of personnel at an incident involving each of the materials/agents.

S.O. - 1.1.5.

NFPA 11.2.1.5
OSHA S.O.-A

Given the names of five hazardous materials and at least three reference sources, identify the health concerns and their potential impact on the safety and health of personnel at an incident involving each of the materials.

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S.O. - 1.1.6.

NFPA 11.2.1.6
OSHA S.O.-A

Given the names of five hazardous materials and a description of their containers, hazardous materials safety officer shall identify five hazards or physical conditions that would impact the safety of personnel at an incident involving each of the materials.

S.O. 2. - Planning the Response

S.O. - 2.1.

NFPA 11.3.1
OSHA S.O.-A

Identifying the Safety Precautions for Potential Action Options

Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall assist the hazardous materials officer in developing a site safety and control plan to respond within the capabilities of available response personnel, personal protective equipment, and control equipment.

S.O. - 2.1.1.

NFPA 11.3.1(1)
OSHA S.O.-A

Identify specific safety precautions to observe while mitigating each of the hazards or conditions identified.

S.O. - 2.1.2.

NFPA 11.3.1(2)
OSHA S.O.-A

Identify safety precautions associated with search and rescue missions at hazardous materials/WMD incidents.

S.O. - 2.2.

NFPA 11.3.2.1
OSHA S.O.-A,C

Providing Recommendations Regarding Safety Considerations

Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall provide the incident safety officer, hazardous materials officer, and incident commander with observation-based recommendations regarding considerations for the safety of on-site personnel.

S.O. - 2.2.1.

NFPA 11.3.2.2
OSHA S.O.-A,C

The hazardous materials safety officer shall develop recommendations for the incident commander regarding safety considerations of the hazards and risks for each of the hazardous materials/WMD and containers identified.

S.O. - 2.3.

NFPA 11.3.3
OSHA S.O.-A

Assisting in the Development of Site Safety and Control Plan for Inclusion in the Incident Action Plan

Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall assist the incident safety officer and hazardous materials officer in the development of the site safety and control plan for inclusion in the incident action plan.

<p>S.O. - 2.3.1. NFPA 11.3.3(a) OSHA S.O.-A</p>	<p>Identify the importance and list five benefits of pre-emergency planning relating to specific sites.</p>
<p>S.O. - 2.3.2. NFPA 11.3.3(b) OSHA S.O.-A</p>	<p>Identify and name five hazards and precautions to be observed when approaching a hazardous materials/WMD incident.</p>
<p>S.O. - 2.3.3. NFPA 11.3.3(c) OSHA S.O.-A</p>	<p>List the elements of safety considerations.</p>
<p>S.O. - 2.3.4. NFPA 11.3.3(d) OSHA S.O.-A</p>	<p>Given a pre-incident plan involving one of the hazardous materials/WMD and containers, develop safety considerations for the incident.</p>
<p>S.O. - 2.3.5. NFPA 11.3.4 OSHA S.O.-A</p>	<p>Providing Recommendations Regarding Safety and Reviewing the Plan of Action Given a proposed plan of action for an incident involving one of the hazardous materials/WMD and containers, identify to the incident safety officer, hazardous materials officer, and incident commander the safety precautions for the incident action plan.</p>
<p>S.O. - 2.3.6. NFPA 11.3.4(a) OSHA S.O.-A</p>	<p>Ensure that the safety considerations in the proposed incident action plan are consistent with the emergency response plan and/or the organization's standard operating procedures.</p>
<p>S.O. - 2.3.7. NFPA 11.3.4(b) OSHA S.O.-A</p>	<p>Make recommendations to the incident commander on the safety considerations in the proposed incident action plan.</p>
<p>S.O. - 2.4. NFPA 11.3.5 OSHA S.O.-A</p>	<p>Reviewing Selection of Personal Protective Equipment Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall demonstrate the ability to review the selection of personal protective equipment required for a given action option.</p>
<p>S.O. - 2.4.1. NFPA 11.3.5(a) OSHA S.O.-A</p>	<p>Identify five safety considerations for personnel working in personal protective equipment.</p>

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S.O. - 2.4.2.

NFPA 11.3.5(b)
OSHA S.O.-A

Given the names of five different hazardous materials/WMD and a chemical compatibility chart for chemical-protective clothing, identify the chemical-protective clothing that would provide protection from the identified hazards to the wearer for each of the five substances.

S.O. - 2.4.3.

NFPA 11.3.5(c)
OSHA S.O.-A

Given the names of five different hazardous materials, identify personal protective equipment options for specified response options.

S.O. - 2.4.4.

NFPA 11.3.5(d)
OSHA S.O.-A

Identify the recommended for donning, doffing, and using all personal protective equipment provided by the authority having jurisdiction for use in hazardous materials/WMD response activities.

S.O. - 2.5.

NFPA 11.3.6
OSHA S.O.-A

Reviewing the Proposed Decontamination Plan

Given site-specific decontamination procedures by the hazardous materials officer or incident commander for a scenario involving a simulated hazardous materials/WMD incident, review the plan to identify safety considerations prior to implementation of the incident action plan.

S.O. - 2.6.

NFPA 11.3.7
OSHA S.O.-A

Ensuring Provision of Proper Emergency Medical Services

Given a scenario involving a hazardous materials/WMD incident, the hazardous materials safety officer shall review the Emergency Medical Services procedures to ensure that response personnel are provided medical care.

S.O. - 2.6.1.

NFPA 11.3.7(a)
OSHA S.O.-A

Identify the elements required in an Emergency Medical Services Plan.

S.O. - 2.6.2.

NFPA 11.3.7(b)
OSHA S.O.-A

Identify the importance of an on-site medical monitoring program.

S.O. - 2.6.3.

NFPA 11.3.7(c)
OSHA S.O.-A

Identify the resources for the transportation and care of the injured personnel exposed to hazardous materials/WMD.

S.O. 3. - Implementing the Planned Response

S.O. - 3.1.

Performing the Duties of the Hazardous Materials Safety Officer

NFPA 11.4.1
OSHA S.O.-A,B,C

Given a scenario involving hazardous materials/WMD incidents, the hazardous materials safety officer shall perform the duties of the position in a manner consistent with the emergency response plan and/or standard operating procedures.

S.O. - 3.1.1.

NFPA 11.4.1(a)
OSHA S.O.-A,B,C

Identify the duties of the hazardous materials safety officer as defined in the emergency response plan and/or standard operating procedures.

S.O. - 3.1.2.

NFPA 11.4.1(b)
OSHA S.O.-A,B,C

Demonstrate proper performance of the duties of the hazardous materials safety officer as defined in the emergency response plan and/or standard operating procedures.

S.O. - 3.2.

Monitoring Safety of Response Personnel

NFPA 11.4.2
OSHA S.O.-A,B

Given scenarios involving a hazardous materials/WMD incident, the hazardous materials safety officer shall ensure that personnel perform their tasks in a safe manner by identifying the safety considerations for the control functions identified in the site safety and control plan.

S.O. - 3.2.1.

NFPA 11.4.2(1)
OSHA S.O.-A,B

Identify the safe operating practices that are required to be followed at a hazardous materials/WMD incident as stated in the emergency response plan and/or standard operating procedures.

S.O. - 3.2.2.

NFPA 11.4.2(2)
OSHA S.O.-A,B

Identify how the following factors influence heat and cold stress for hazardous materials response personnel:

- Activity levels
- Duration of entry
- Environmental factors
- Hydration
- Level of personal protective equipment
- Physical fitness

S.O. - 3.2.3.

NFPA 11.4.2(3)
OSHA S.O.-A,B

Identify the methods that will minimize the potential harm from heat and cold stress.

S.O. - 3.2.4.

NFPA 11.4.2(4)
OSHA S.O.-A,B

Identify the safety considerations that will minimize the psychological and physical stresses on personnel working in personal protective equipment.

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S.O. - 3.2.5.

NFPA 11.4.2(5)
OSHA S.O.-A,B

Describe five conditions where it would be prudent to withdraw from a hazardous materials/WMD incident.

S.O. - 3.3.

NFPA 11.4.3(1)
OSHA S.O.-B,C

Conducting Safety Briefings

Given a scenario involving a hazardous materials/WMD incident and site safety and control plan, the hazardous materials safety officer shall conduct safety briefings for personnel performing the functions identified in the incident action plan.

S.O. - 3.3.1.

NFPA 11.4.3(2)
OSHA S.O.-B,C

The hazardous materials safety officer shall be able to demonstrate the procedure for conducting a safety briefing to personnel for an incident involving one of the hazardous materials/WMD and its container identified, as specified by the emergency response plan and/or standard operating procedures.

S.O. - 3.4.

NFPA 11.4.4
OSHA S.O.-B,C

Implementing and Enforcing Safety Considerations

Given a scenario involving a hazardous materials/WMD incident and site safety and control plan, the hazardous materials safety officer shall assist the incident commander, the incident safety officer, and the hazardous materials officer in implementing and enforcing the safety considerations

S.O. - 3.4.1.

NFPA 11.4.4(1)
OSHA S.O.-B,C

Identify whether the boundaries of the established control zones are clearly marked, consistent with the safety considerations, and are being maintained.

S.O. - 3.4.2.

NFPA 11.4.4(2)
OSHA S.O.-B,C

Identify whether the on-site medical monitoring that are required by the authority having jurisdiction is being performed.

S.O. - 3.4.3.

NFPA 11.4.4(3)
OSHA S.O.-B,C

Given an entry team, a backup team, and a decontamination team wearing personal protective clothing and equipment, identify that each team is properly protected and prepared to safely perform its assigned tasks.

S.O. - 3.4.3.1.

NFPA 11.4.4(3)(a)
OSHA S.O.-B,C

Identify whether the selection of clothing and equipment is consistent with the site safety and control plan.

S.O. - 3.4.3.2.

NFPA 11.4.4(3)(b)
OSHA S.O.-B,C

Identify whether each team has examined the clothing for barrier integrity and the equipment to ensure correct working order.

<p>S.O. - 3.4.3.3. NFPA 11.4.4(3)(c) OSHA S.O.-B,C</p>	<p>Identify whether protective clothing and equipment have been donned in accordance with the organization's standard operating procedures and the manufacturer's recommendations.</p>
<p>S.O. - 3.4.4. NFPA 11.4.4(4) OSHA S.O.-B,C</p>	<p>Identify whether each person entering the hot zone has a specific task assignment, understands the assignment, is properly trained to perform the assigned task(s), and is working with a designated partner at all times during the assignment.</p>
<p>S.O. - 3.4.5. NFPA 11.4.4(5) OSHA S.O.-B,C</p>	<p>Identify whether a backup team is prepared at all times for immediate entry into the hot zone during entry team operations.</p>
<p>S.O. - 3.4.6. NFPA 11.4.4(6) OSHA S.O.-B,C</p>	<p>Identify whether the decontamination process specified in the safety considerations is in place before any entry into the hot zone.</p>
<p>S.O. - 3.4.7. NFPA 11.4.4(7) OSHA S.O.-B,C</p>	<p>Identify that each person exiting the hot zone and each tool or piece of equipment is decontaminated in accordance with the safety considerations and the degree of hazardous materials/WMD exposure.</p>
<p>S.O. - 3.4.8. NFPA 11.4.4(8) OSHA S.O.-B,C</p>	<p>Demonstrate the proper procedure for recording the names of the individuals exiting the hot zone, as specified in the local emergency response plan and the organization's standard operating procedures.</p>
<p>S.O. - 3.4.9. NFPA 11.4.4(9) OSHA S.O.-B,C</p>	<p>Identify three safety considerations that can minimize secondary contamination.</p>
<p>S.O. - 3.5. NFPA 11.4.5 OSHA S.O.-B,C</p>	<p>Maintaining Communications Given a scenario involving a hazardous materials/WMD incident and the site safety and control plan, the hazardous materials safety officer shall maintain routine and emergency communications within the incident command structure at all times during the incident.</p>
<p>S.O. - 3.5.1. NFPA 11.4.5(1) OSHA S.O.-B,C</p>	<p>Identify three types of communications systems used at hazardous materials/WMD incident sites.</p>

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S.O. - 3.5.2.

NFPA 11.4.5(2)
OSHA S.O.-B,C

Identify whether each person assigned to work in the hot zone understands the emergency alerting and response procedures specified in the safety considerations prior to entry into the hot zone.

S.O. - 3.6.

NFPA 11.4.6.1
OSHA S.O.-B,C

Monitoring Status Reports

Given a simulated hazardous materials/WMD incident and site safety and control plan, the hazardous materials safety officer monitor routine and emergency communications within the incident command structure at all times during the incident.

S.O. - 3.6.1.

NFPA 11.4.6.2
OSHA S.O.-B,C

The hazardous materials safety officer shall insure that entry team members regularly communicate the status of their work assignment to the hazardous materials officer.

S.O. - 3.7.

NFPA 11.4.7
OSHA S.O.-B,C

Implementing Exposure Monitoring

Given a scenario involving a hazardous materials/WMD incident and the site safety and control plan, the hazardous materials safety officer shall assist the incident commander, the incident safety officer, and the hazardous materials officer in implementing exposure monitoring.

S.O. - 3.8.

NFPA 11.4.8
OSHA S.O.-B,C

Verifying Exposure Monitoring

The hazardous materials safety officer shall identify that exposure monitoring (personnel and environment), as specified in the emergency response plan and/or standard operating procedures and site safety and control plan considerations, is performed.

S.O. 4. - Evaluating Progress

S.O. - 4.1.

NFPA 11.5.1

Identifying Deviations from Safety Considerations or Other Dangerous Situations

Given scenarios involving hazardous materials/WMD incidents, and given deviations from the site safety and control plan for activities in both the hot and warm zones and dangerous conditions, the hazardous materials safety officer shall take such corrective actions as are necessary to ensure the safety and health of persons in the hot and warm zones.

S.O. - 4.1.1.

NFPA 11.5.1(1)

Identify those actions that deviate from the site safety and control plan or otherwise violate accepted safe operating practices, organizational policies, or applicable occupational safety and health laws, regulations, codes, standards, or guidelines.

<p>S.O. - 4.1.2. NFPA 11.5.1(2)</p>	<p>Identify dangerous conditions that develop or are identified during work in the hot or warm zones that threaten the safety or health of persons in those zones.</p>
<p>S.O. - 4.1.3. NFPA 11.5.1(3)</p>	<p>Identify the signs and symptoms of psychological and physical stresses on personnel wearing personal protective equipment.</p>
<p>S.O. - 4.2. NFPA 11.5.2 OSHA S.O.-B</p>	<p>Taking Corrective Actions Given scenarios involving hazardous materials/WMD incidents, and given deviations from the site safety and control plan for activities in both the hot and warm zones and dangerous conditions, the hazardous materials safety officer shall take such corrective actions as are necessary to ensure the safety and health of persons in the hot and warm zones.</p>
<p>S.O. - 4.2.1. NFPA 11.5.2(1) OSHA S.O.-B</p>	<p>Send emergency communications to, and receive emergency communications from, the incident safety officer, entry team personnel, the hazardous materials officer, and others as appropriate regarding safe working practices and conditions:</p>
<p>S.O. - 4.2.1.1. NFPA 11.5.2(1)(a) OSHA S.O.-B</p>	<p>Given a hazardous situation or condition that has developed or been identified following initial hot zone entry, demonstrate the application of the emergency alerting procedures specified in the site safety and control plan to communicate the hazard and emergency response information to the affected personnel.</p>
<p>S.O. - 4.2.1.2. NFPA 11.5.2(1)(b) OSHA S.O.-B</p>	<p>Given a demonstrated emergency alert via hand signal by a member of the entry team operating within the hot zone, identify the meaning of that signal as specified in the site safety and control plan.</p>
<p>S.O. - 4.2.2. NFPA 11.5.2(2) OSHA S.O.-B</p>	<p>Identify the procedures to alter, suspend, or terminate any activity that can be judged to be unsafe, as specified in the emergency response plan and/or standard operating procedures.</p>
<p>S.O. - 4.2.3. NFPA 11.5.2(3) OSHA S.O.-B</p>	<p>Demonstrate the procedure for notifying the appropriate individual of the unsafe action and for directing alternative safe actions, in accordance with the safety considerations and the organization's standard operating procedures.</p>
<p>S.O. - 4.2.4. NFPA 11.5.2(4) OSHA S.O.-B</p>	<p>Demonstrate the procedure for suspending or terminating an action that could result in an imminent hazard condition, in accordance with the site safety and control plan and the standard operating procedures.</p>

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S.O. 5. - Terminating the Incident

S.O. - 5.1.

NFPA 11.6.1
OSHA S.O.-C

Providing Reports and Documentation

Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall complete and submit the reports, documentation, and follow-up required of the hazardous materials safety officer.

S.O. - 5.1.1.

NFPA 11.6.1(1)
OSHA S.O.-C

Identify the safety reports and supporting documentation required by the local emergency response plan and/or standard operating procedures.

S.O. - 5.1.2.

NFPA 11.6.1(2)
OSHA S.O.-C

Demonstrate completion of the safety reports required by the emergency response plan and/or standard operating procedures.

S.O. - 5.1.3.

NFPA 11.6.1(3)
OSHA S.O.-C

Describe the importance of personnel exposure records.

S.O. - 5.2.

NFPA 11.6.2
OSHA S.O.-C

Debriefing of Hazardous Materials Branch/Group Personnel

Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall debrief hazardous materials branch/group personnel regarding site-specific occupational safety and health issues.

S.O. - 5.2.1.

NFPA 11.6.2(1)
OSHA S.O.-C

The hazardous materials safety officer shall be able to identify five health and safety topics to be addressed in an incident debriefing.

S.O. - 5.2.2.

NFPA 11.6.2(2)
OSHA S.O.-C

The hazardous materials safety officer shall be able to demonstrate the proper procedure for debriefing hazardous materials branch/group personnel regarding site-specific occupational safety and health areas of concern, as specified in the site safety and control plan, emergency response plan, and the organization's standard operating procedures.

S.O. - 5.3.

NFPA 11.6.3
OSHA S.O.-B,C

Assisting in the Incident Critique

Given scenarios involving hazardous materials/WMD incidents and the site safety and control plan, the hazardous materials safety officer shall provide safety and health-related critical observations of the activities that were performed in the hot and warm zones during the incident.

S.O. - 5.4.

NFPA 11.6.4(1) – (6)
OSHA S.O.-B,C

Information to be Presented

Given the site safety and control plan and hazardous materials safety officer’s report for a scenario involving a hazardous materials/WMD incident, the hazardous materials safety officer shall demonstrate the procedure for verbally presenting the following information in accordance with the emergency response plan and/or standard operating procedures:

- Safety and health-related critical observations of the activities that were performed in the hot and warm zones during the incident.
- Recorded violations of the site safety and control plan or generally accepted safe operating practices, organizational policies, or applicable occupational safety and health laws, regulations, codes, standards, or guidelines.
- Injuries or deaths that occurred as a result of reasonably unforeseen dangerous conditions that developed during the incident.
- Injuries or deaths that occurred as a result of violations of the safety considerations or generally accepted safe operating practices, organizational policies, or applicable occupational safety and health laws, regulations, codes, standards, or guidelines.
- The proper course of action(s) that would likely have prevented the injuries or deaths that occurred as a result of the safety violations identified.
- The proper course of action(s) that would likely have prevented the injuries or deaths that occurred as a result of the safety violations identified.
- Deficiencies or weaknesses in the site safety and control plan, local emergency response plan, and organizational standard operating procedures that were noted during or following the incident.

Response Training Considerations
Awareness
Core
Mission-Specific
Operations
Hazardous Materials Technician
Specialist Employee
Hazardous Materials Specialist
Incident Commander
Hazardous Materials Officer
Safety Officer
BLS Responder
ALS Responder
Hospital First Receiver
Appendix A: Related Standards
Appendix B: NIMS/ICS
Appendix C: Special Topics