

Hazardous Materials and Terrorist Incident Response Curriculum Guidelines

Specialist Employees

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Specific

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Introduction

Specialist employees shall be trained to the awareness level relative to their area of specialization and shall be trained to those additional competency levels identified in this section. Furthermore, specialist employees shall receive training to meet any applicable Federal (DOT, OSHA, EPA) or local occupational health and safety regulatory agency requirements.

Definition

Specialist employees are defined by OSHA 1910.120(q)(5) as persons who, in the course of their regular job duties, work with and are trained in the handling of specific hazardous substances or chemical-carrying containers and are also prepared to provide advice or assistance within their area of expertise to an incident commander of the hazardous materials team at a hazardous materials incident. Advice and assistance may include gathering, recording, and analyzing information as well as guidance regarding hazards and response options. Assistance also may include working as a technical adviser in the warm and hot zones, if the specialist employee is qualified to do so safely. These specialist functions are addressed somewhat differently in the National Fire Protection Association Standard 472, as Specialist Employee C and Specialist Employee B.

Specialist Employees C are persons having training or educationally acquired expertise in a product, a container, a chemical process, or some procedure of importance to the mitigation of a hazardous materials incident. Specialist Employees C may be asked to gather, record, and analyze information. They may serve as consultants and technical advisers to the incident commander or the hazardous materials team, or they may arrange for the provision of such assistance as necessary and related to their area of expertise. They are not expected to work in either the hot or warm zones of an incident area.

Specialist Employees B meet the competencies of Specialist Employees C and in addition are qualified to assist the response in the warm and hot zones of an incident area and are qualified to provide information on personal protective equipment, decontamination methods, and response evaluation.

Training Audience

Persons training under this provision shall include those titled specialist employees under Title 29 of the Code of Federal Regulations and those titled Specialist Employees C and Specialist Employees B using NFPA 472 nomenclature. They may be individual consultants or representatives of organizations that provide technical assistance related to their area of specialization at hazardous materials operations. The knowledge these specialists possess may have been acquired through site-specific hazardous substance training programs; military; public service, or commercial facilities; or educational institutions.

Methodology Recommendations

Typically, specialist employees are responsible for maintaining current technical knowledge in their areas of expertise as part of their normal job responsibilities. Therefore, additional training should focus on applying their technical knowledge to emergency situations. Because specialist

employees will have diverse job responsibilities and work schedules, much instruction should be in short, classroom modules or perhaps independent study, with an emphasis on analyzing simulated incidents using existing professional technical expertise and knowledge. For specialist employees who may work in the warm or hot zone, hands-on training to competency in using personal protective clothing is essential. To learn and practice advisory and assistance roles in the incident command system, it also is recommended that local response personnel and area hazardous materials teams work with specialist employees in periodic field exercises.

Specialist employees annually shall receive refresher training of sufficient content and duration or shall demonstrate continued competency in their area of specialization to the level of their expected involvement. Refresher training should focus on hazardous materials incident scenario analysis and practice working as a subordinate and adviser to the response command structure and hazardous materials teams in field exercises simulating emergencies. For specialist employees who will work in warm and hot zones, there should be annual retesting of response skills.

Federal Requirements for Specialist Employee Training

OSHA establishes the following training requirements for specialist employees. Length of training and method of testing are not specified, but employers are required to ensure that employees demonstrate competency in the skills defined.

SPECIALIST EMPLOYEES

Employees who, in the course of their regular job duties, work with and are trained in the hazards of specific hazardous substances, and who will be called upon to provide technical advice or assistance at a hazardous substance release incident to the individual in charge, shall receive training or demonstrate competency in the area of their specialization annually.

Required training for specialist employees can be translated directly into the following sample objectives:

OSHA 29 CFR 1910.120(Q)(5)

OSHA SPEMP-1	Given a simulated incident involving hazardous materials within the specialist employee's area of technical expertise, provide technical advice or assistance within the incident command structure regarding assessing the hazards of the substance present and potential magnitude of the incident.
OSHA SPEMP-2	Given a simulated incident involving hazardous materials within the specialist employee's area of technical expertise, provide technical advice within the incident command structure regarding potential response options.

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OSHA SPEMP-3

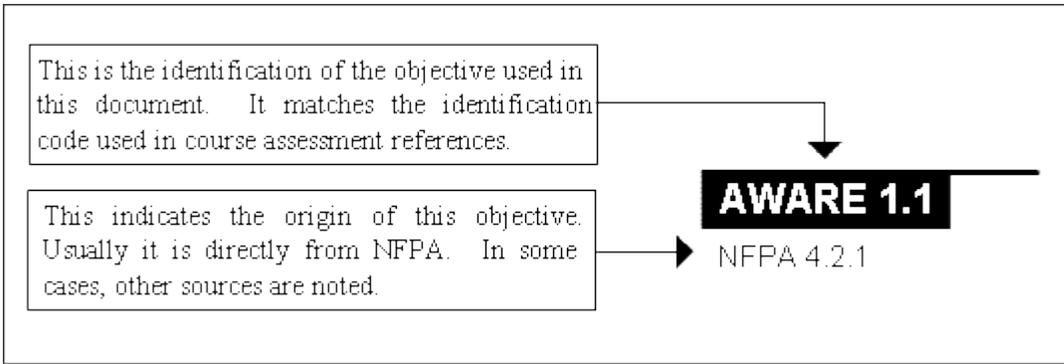
Given a simulated incident involving hazardous materials within the specialist employee's area of technical expertise, provide technical assistance under the incident command structure for control, confinement and containment operations and for incident termination and evaluation activities.

Summary: Specialist Employees

Audience:	Very broad. Any persons with existing job expertise in the hazards of specific chemicals or containers, who may be called upon to provide assistance during a hazmat emergency.
Pre-Req:	1st Responder Awareness Training Advanced technical expertise in specific hazardous chemicals or containers
Training:	<ul style="list-style-type: none">• Classroom, and simulator/field instruction with emphasis on participation in incident response scenarios. Hands-on where appropriate.• Competencies:<ul style="list-style-type: none">• Ability to perform in depth hazard and risk assessment within area of expertise• Ability to recommend response plan options, protective equipment and decontamination requirements, and to assist evaluation• Additional competencies for those specialist employees whose expertise and assistance may be required in the warm or hot zone:<ul style="list-style-type: none">• Ability to perform specialized control, containment and/or confinement techniques• Ability to select and use specialized personal protective equipment
Refresher:	<ul style="list-style-type: none">• Practice providing hazard analysis and response advice during simulated emergencies.• For those specialist employees who may provide assistance in the warm or hot zone.• Competency retesting of response skills and use of personal protective equipment.

Recommended Training Objectives

Objective Identification Legend



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Specialist Employee C

Specialist employee C is that person who responds to emergencies involving hazardous materials/WMD and/or containers within the organization's area of specialization. Consistent with the emergency response plan and/or standard operating procedures, the specialist employee C can be called upon to gather and record information, provide technical advice, and/or arrange for technical assistance.

Specialist employee C does not enter the hot or warm zone at an emergency.

SPEC(C) 1. - General

SPEC(C) - 1.1.

Analyzing the Incident

NFPA 9.2.1.2.2(1)
OSHA SpEMP-1

Assist the incident commander in analyzing the magnitude of an emergency involving hazardous materials/WMD or containers for hazardous materials/WMD.

SPEC(C) - 1.1.1.

Provide information on the hazards and harmful effects of specific hazardous materials/WMD.

NFPA 9.2.1.2.2(1)a
OSHA SpEMP-1

SPEC(C) - 1.1.2.

Provide information on the characteristics of specific containers for hazardous materials/WMD.

NFPA 9.2.1.2.2(1)b
OSHA SpEMP-1

SPEC(C) - 1.2.

Planning the Response

NFPA 9.2.1.2.2(2)
OSHA SpEMP-2

Assist the incident commander in planning a response to an emergency involving hazardous materials/WMD or containers for hazardous materials/WMD by providing information on the potential response options for hazardous materials/WMD or containers for hazardous materials/WMD.

SPEC(C) 2. - Analyzing the Incident

SPEC(C) - 2.1.

Providing Information on the Hazards and Harmful Effects of Specific Hazardous Materials/WMD

NFPA 9.2.2.1
OSHA SpEMP-1

Given a specific chemical(s) used in the organization's area of specialization and the corresponding MSDS or other applicable resource, the specialist employee C shall advise the incident commander of the chemical's hazards and harmful effects and shall complete the following tasks:

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SPEC(C) - 2.1.1.

NFPA 9.2.2.1(1)
OSHA SpEMP-1

Identify the following hazard information from the MSDS or other resource:

- Physical and chemical properties
- Physical hazards of the chemical (including fire and explosion hazards)
- Health hazards of the chemical
- Signs and symptoms of exposure
- Routes of entry
- Permissible exposure limits
- Reactivity hazards
- Environmental concerns

SPEC(C) - 2.1.2.

NFPA 9.2.2.1(2)
OSHA SpEMP-1

Identify how to contact CHEMTREC/CANUTEC/SETIQ, and local, state, and federal authorities.

SPEC(C) - 2.1.3.

NFPA 9.2.2.1(3)
OSHA SpEMP-1

Identify the resources available from CHEMTREC/CANUTEC/SETIQ, and local, state, and federal authorities.

SPEC(C) - 2.1.4.

NFPA 9.2.2.1(4)
OSHA SpEMP-1

Given the emergency response plan and/or standard operating procedures, identify additional resources of hazard information, including a method of contact.

SPEC(C) - 2.2.

NFPA 9.2.2.2
OSHA SpEMP-1

Providing Information on Characteristics of Specific Containers

Given examples containers for hazardous materials/WMD in the organization's area of specialization, the specialist employee C shall advise the incident commander of the characteristics of the containers and shall complete the following tasks:

SPEC(C) - 2.2.1.

NFPA 9.2.2.2(1)
OSHA SpEMP-1

Identify each container by name

SPEC(C) - 2.2.2.

NFPA 9.2.2.2(2)
OSHA SpEMP-1

Identify the markings that differentiate one container from another.

SPEC(C) - 2.2.3.

NFPA 9.2.2.2(3)
OSHA SpEMP-1

Given the emergency response plan and/or standard operating procedures, identify the resources available that can provide information about the characteristics of the container.

SPEC(C) - 2.2.4.

NFPA 9.2.2.2(4)

Identify indicators of possible criminal or terrorist activity, including the following:
Intentional release of hazardous materials
Unexplained bomb/munitions-like material

SPEC(C) 3. - Analyzing the Incident

SPEC(C) - 3.1.

NFPA 9.2.3.1
OSHA SpEMP-2

Providing Information on Potential Response Options for Specific Hazardous Materials/WMD

Given a specific chemical used in their organization's area of specialization and corresponding MSDS or other resource, the specialist employee C shall advise the incident commander of the response information for that chemical and by being able to complete the following tasks:

SPEC(C) - 3.1.1.

NFPA 9.2.3.1(1)
OSHA SpEMP-2

Obtain the following response information:

- Precautions for safe handling, including hygiene practices, protective measures, and procedures for cleanup of spills/leaks
- Applicable emergency response control measures, including personal protective equipment
- Emergency and first aid procedures

SPEC(C) - 3.1.2.

NFPA 9.2.3.1(2)

Relay any suspicions of criminal or terrorist activity to the incident commander.

SPEC(C) - 3.1.3.

NFPA 9.2.3.1(3)

Identify additional resources for obtaining response information.

SPEC(C) - 3.2.

NFPA 9.2.3.1
OSHA SpEMP-2

Providing Information on Potential Response Options for Specific Containers

Given a specific facility or transportation container used in the organization's area of specialization, the specialist employee C shall advise the incident commander of the response information for that chemical by being able to complete the following tasks:

SPEC(C) - 3.2.1.

NFPA 9.2.3.1(1)
OSHA SpEMP-2

Identify safe operating procedures for that container, including acceptable pressures, temperatures, and materials of construction; and potential adverse outcomes resulting from these conditions.

SPEC(C) - 3.2.2.

NFPA 9.2.3.1(2)

Describe safety devices on the container, including emergency shutoff valves, pressure relief devices, and vacuum breakers.

SPEC(C) - 3.2.3.

Identify early signs of container and/or safety device failure.

NFPA 9.2.3.1(3)
OSHA SpEMP-2

SPEC(C) - 3.2.4.

Suggest emergency response procedures.

NFPA 9.2.3.1(3)
OSHA SpEMP-2

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Specialist Employee B

Specialist employee B is that person who, in the course of regular job duties, works with or is trained in the hazards of specific chemicals or containers within the individual's area of specialization. Because of the employee's education, training, or work experience, the specialist employee B can be called upon to respond to incidents involving these chemicals or containers.

The specialist employee B can be used to gather and record information, provide technical advice, and provide technical assistance (including work within the hot zone) at the incident consistent with the emergency response plan and/or standard operating procedures.

SPEC(B) 1. - General

SPEC(B) - 1.1.

Analyzing the Incident

NFPA 9.3.1.2.2(1)
OSHA SpEMP-1

Assist the incident commander in analyzing the magnitude of an incident involving hazardous materials/WMD or containers for hazardous materials/WMD.

SPEC(B) - 1.1.1.

Provide and interpret information on the hazards and harmful effects.

NFPA 9.3.1.2.2(1)(a)
OSHA SpEMP-1

SPEC(B) - 1.1.2.

Provide and interpret information on the characteristics of specific containers.

NFPA 9.3.1.2.2(1)(b)
OSHA SpEMP-1

SPEC(B) - 1.1.3.

Identify the responsibility to provide information on concentrations of hazardous materials/WMD from exposure monitoring, dispersion modeling, or any other predictive method.

NFPA 9.3.1.2.2(1)(c)
OSHA SpEMP-1

SPEC(B) - 1.2.

Planning the Response

NFPA 9.3.1.2.2(2)
OSHA SpEMP-2

Assist the incident commander in planning a response to an incident involving hazardous materials/WMD or containers for hazardous materials/WMD.

SPEC(B) - 1.2.1.

Provide information on the potential response options and their consequences for specific hazardous materials/WMD or containers for hazardous materials/WMD.

NFPA 9.3.1.2.2(2)a
OSHA SpEMP-2

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SPEC(B) - 1.2.2.

Provide information on the personal protective equipment requirements for a specific chemical.

NFPA 9.3.1.2.2(2)b
OSHA SpEMP-2

SPEC(B) - 1.2.3.

Provide information on the decontamination methods for a specific chemical.

NFPA 9.3.1.2.2(2)c
OSHA SpEMP-2

SPEC(B) - 1.2.4.

Provide information on the federal/provincial regulations that relate to the handling and disposal of a specific chemical.

NFPA 9.3.1.2.2(2)d
OSHA SpEMP-1,2,3

SPEC(B) - 1.2.5.

Develop an incident action plan (within the capabilities of the available resources), including site safety and control plan, for handling hazardous materials/WMD or containers for hazardous materials/WMD consistent with the emergency response plan and/or standard operating procedures.

NFPA 9.3.1.2.2(2)e
OSHA SpEMP-2,3

SPEC(B) - 1.3.

Implementing the Planned Response

Implement the planned response, as developed with the incident commander, for hazardous materials/WMD or containers for hazardous materials/WMD, consistent with the emergency response plan and/or standard operating procedures and within the capabilities of the available resources.

NFPA 9.3.1.2.2(3)
OSHA SpEMP-3

SPEC(B) - 1.3.1.

Perform response options specified in the incident action plan, as agreed upon with the incident commander and consistent with the emergency response plan and/or standard operating procedures (within the capabilities of the available resources).

NFPA 9.3.1.2.2(3)(a)
OSHA SpEMP-3

SPEC(B) - 1.3.2.

Don, work in, and doff personal protective equipment needed to implement the response options.

NFPA 9.3.1.2.2(3)(b)
OSHA SpEMP-3

SPEC(B) - 1.4.

Evaluating Progress

Assist the incident commander to evaluate the results of implementing the planned response.

NFPA 9.3.1.2.2(4)
OSHA SpEMP-2,3

SPEC(B) - 1.4.1.

Provide feedback on the effectiveness of the response options taken

NFPA 9.3.1.2.2(4)(a)
OSHA SpEMP-2,3

SPEC(B) - 1.4.2.

Provide reporting and subsequent documentation of the incident involving hazardous materials/WMD as required.

NFPA 9.3.1.2.2(4)(b)
OSHA SpEMP-2,3

SPEC(B) 2. - Analyzing the Incident

SPEC(B) - 2.1.

NFPA 9.3.2.1
OSHA SpEMP-1

Providing and Interpreting Information on Hazards of Specific Hazardous Materials/WMD

Given a specific chemical within the individual's area of specialization and a corresponding MSDS or other resource, the specialist employee B shall advise the incident commander of the chemical's hazards and harmful effects of specific hazardous materials/WMD and the potential consequences based on the incident and shall meet the following requirements:

SPEC(B) - 2.1.1.

NFPA 9.3.2.1(1)
OSHA SpEMP

Given a specific chemical, identify and interpret the following hazard information:

- Physical and chemical properties
- Physical hazards of the chemical (including fire and explosion hazards)
- Health hazards of the chemical
- Signs and symptoms of exposure
- Routes of entry
- Permissible exposure limits
- Reactivity hazards
- Environmental concerns

SPEC(B) - 2.1.2.

NFPA 9.3.2.1(2)
OSHA SpEMP-1

Given examples of specific hazardous materials/WMD and the necessary resources, predict the potential behavior of the hazardous materials/WMD based on the damage found, including the consequences of that behavior.

SPEC(B) - 2.1.3.

NFPA 9.3.2.1(3)
OSHA SpEMP-1

Identify the general types of hazard information available from the other resources identified in their organization's emergency response plan and/or standard operating procedures.

SPEC(B) - 2.2.

NFPA 9.3.2.2
OSHA SpEMP-1

Providing Information on Characteristics of Specific Containers

Given a container for specific hazardous materials/WMD, the specialist employee B shall advise the incident commander of the characteristics and potential behavior of that container and shall meet the following requirements:

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SPEC(B) - 2.2.1.

NFPA 9.3.2.2(1)
OSHA SpEMP-1

Given examples of containers for specific hazardous materials/WMD, identify the purpose and operation of the closures found on those containers.

SPEC(B) - 2.2.2.

NFPA 9.3.2.2(2)
OSHA SpEMP-1

Given a chemical container, list the types of damage that could occur.

SPEC(B) - 2.2.3.

NFPA 9.3.2.2(3)
OSHA SpEMP-1

Given examples of containers for specific hazardous materials/WMD and the necessary resources, predict the potential behavior of the containers and the consequences, based on the damage found.

SPEC(B) - 2.2.4.

NFPA 9.3.2.2(4)
OSHA SpEMP-1

Given the emergency response plan and/or standard operating procedures, identify resources (including a method of contact) for knowledge in the design, construction, and damage assessment of containers for hazardous materials/WMD.

SPEC(B) - 2.3.

NFPA 9.3.2.3.1
OSHA SpEMP-1

Providing Information on Concentrations of Hazardous Materials/WMD

Given a chemical and the applicable monitoring equipment provided by the organization for that chemical or the available predictive capabilities (e.g., dispersion modeling, exposure modeling), the specialist employee B shall advise the incident commander of the concentrations of the released chemical and the implications of that information to the incident.

SPEC(B) - 2.3.1.

NFPA 9.3.2.3.2(1)
OSHA SpEMP-1

Identify the applicable monitoring equipment.

SPEC(B) - 2.3.2.

NFPA 9.3.2.3.2(2)
OSHA SpEMP-1

Use the monitoring equipment provided by the organization to determine the actual concentrations of a specific chemical

SPEC(B) - 2.3.3.

NFPA 9.3.2.3.2(3)
OSHA SpEMP-1

Given information on the concentrations of a chemical, interpret the significance of that concentration information to the incident relative to the hazards and harmful effects of the chemical.

SPEC(B) - 2.3.4.

NFPA 9.3.2.3.2(4)
OSHA SpEMP-1

Demonstrate field calibration and testing procedures, as necessary, for the monitoring equipment provided by the organization.

SPEC(B) - 2.3.5.

NFPA 9.3.2.3.2(5)
OSHA SpEMP-1

Given the emergency response plan and/or standard operating procedures, identify the resources (including a method of contact) capable of providing monitoring equipment, dispersion modeling, or monitoring services.

SPEC(B) 3. - Planning the Response

SPEC(B) - 3.1.

NFPA 9.3.3.1
OSHA SpEMP-2

Providing Information on Potential Response Options and Consequences for Specific Hazardous Materials/WMD

Given specific hazardous materials/WMD or containers within the employee's individual area of specialization and the associated resources, the specialist employee B shall advise the incident commander of the potential response options and their consequences and shall complete the following tasks:

SPEC(B) - 3.1.1.

NFPA 9.3.3.1(1)(a)
OSHA SpEMP-2

Given a specific chemical and an corresponding MSDS, identify and interpret the precautions for safe handling, including hygiene practices, protective measures, and procedures for cleanup of spills or leaks

SPEC(B) - 3.1.2.

NFPA 9.3.3.1(1)(b)
OSHA SpEMP-2

Applicable control measures, including personal protective equipment

SPEC(B) - 3.1.3.

NFPA 9.3.3.1(1)(c)
OSHA SpEMP-2

Emergency and first-aid procedures

SPEC(B) - 3.1.4.

NFPA 9.3.3.1(2)
OSHA SpEMP-2

Given the emergency response plan and/or standard operating procedures, identify additional resources for interpreting the hazards and applicable response information for a hazardous material/WMD.

SPEC(B) - 3.1.5.

NFPA 9.3.3.1(3)
OSHA SpEMP-2

Describe the advantages and limitations of the potential response options for a specific chemical.

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SPEC(B) - 3.1.6.

NFPA 9.3.3.1(4)
OSHA SpEMP-2

Given the emergency response plan and/or standard operating procedures, identify resources (including a method of contact) capable of the following:

- Repairing containers for hazardous materials
- Removing the contents of containers for hazardous materials
- Cleanup and disposal of hazardous materials/WMD or containers for hazardous materials/WMD

SPEC(B) - 3.2.

NFPA 9.3.3.2
OSHA SpEMP-3

Providing Information on Personal Protective Equipment Requirements

Given specific hazardous materials/WMD or containers for hazardous materials/WMD within the employee's individual area of specialization and the associated resources, the specialist employee B shall advise the incident commander of the personal protective equipment necessary for various response options and shall meet the following requirements:

SPEC(B) - 3.2.1.

NFPA 9.3.3.2(1)
OSHA SpEMP-3

Given a specific chemical and a corresponding MSDS, identify personal protective equipment, including the materials of construction that will be compatible with that chemical.

SPEC(B) - 3.2.2.

NFPA 9.3.3.2(2)
OSHA SpEMP-3

Given the emergency response plan and/or standard operating procedures, identify other resources (including a method of contact) capable of identifying the personal protective equipment that is compatible with a specific chemical.

SPEC(B) - 3.2.3.

NFPA 9.3.3.2(3)
OSHA SpEMP-3

Given an incident involving a specific chemical and the response options for that problem, determine whether the personal protective equipment provided by the organization is appropriate for the options presented.

SPEC(B) - 3.3.

NFPA 9-3.3.3
OSHA SpEMP-3

Providing Information on Decontamination Methods

Given a specific chemical within the employee's individual area of specialization and the available resources, the specialist employee B shall identify the technical decontamination process for various response options and shall complete the following tasks:

SPEC(B) - 3.3.1.

NFPA 9-3.3.3(1)
OSHA SpEMP-3

Given a specific chemical and a corresponding MSDS and/or other chemical-specific resource, identify the potential methods for removing or neutralizing that chemical.

SPEC(B) - 3.3.2.

NFPA 9-3.3.3(2)
OSHA SpEMP-3

Given a specific chemical and a corresponding MSDS or other chemical-specific resource, identify the circumstances under which disposal of contaminated equipment would be necessary.

SPEC(B) - 3.3.3.

NFPA 9-3.3.3(3)
OSHA SpEMP-3

Given the emergency response plan and/or standard operating procedures, identify resources (including a method of contact) capable of identifying potential decontamination methods.

SPEC(B) - 3.4.

NFPA 9-3.3.4
OSHA SpEMP-2

Providing Information on Handling and Disposal Regulations

Given a specific chemical within the employee's individual area of specialization and the available resources, the specialist employee B shall advise the incident commander of the federal or provincial regulations that relate to the handling, transportation, and disposal of that chemical and shall complete the following tasks:

SPEC(B) - 3.4.1.

NFPA 9-3.3.4(1)
OSHA SpEMP-2

Given a specific chemical and a corresponding MSDS or other resource, identify federal or provincial regulations that apply to the handling, transportation, and disposal of that chemical.

SPEC(B) - 3.4.2.

NFPA 9-3.3.4(2)
OSHA SpEMP-2

Given a specific chemical and a corresponding MSDS or other resource, identify the agencies (including a method of contact) responsible for compliance with the federal or provincial regulations that apply to the handling, transportation, and disposal of a specific chemical.

SPEC(B) - 3.4.3.

NFPA 9-3.3.4(3)
OSHA SpEMP-2

Given the emergency response plan and/or standard operating procedures, identify resources for information pertaining to federal or provincial regulations relative to the handling and disposal of a specific chemical.

SPEC(B) - 3.5.

NFPA 9-3.3.5
OSHA SpEMP-2

Developing an Incident Action Plan

Given a scenario involving hazardous materials/WMD or containers used in the employee's individual area of specialization, the specialist employee B shall (in conjunction with the incident commander) develop an incident action plan, consistent with the emergency response plan and/or standard operating procedures, and within the capabilities of the available resources, for handling hazardous materials/WMD containers in that incident and shall complete the following tasks:

SPEC(B) - 3.5.1.

NFPA 9-3.3.5(1)
OSHA SpEMP-2

Given the emergency response plan and/or standard operating procedures, identify the process for development of an incident action plan, including roles and responsibilities under the Incident Command System site safety and control plan.

SPEC(B) - 3.5.2.

NFPA 9-3.3.5(2)
OSHA SpEMP-2

Include a site safety and control plan in the incident action plan.

SPEC(B) 4. - Implementing the Planned Response

SPEC(B) - 4.1.

Performing Response Options Specified in the Incident Action Plan

NFPA 9.3.4.1
OSHA SpEMP-3

Given an assignment by the incident commander in the employee's individual area of specialization, the specialist employee B shall perform the assigned actions consistent with the emergency response plan and/or standard operating procedures and shall complete the following tasks:

SPEC(B) - 4.1.1.

Perform assigned tasks consistent with the emergency response plan and/or standard operating procedures and the available personnel, tools, and equipment (including personal protective equipment), including the following:

NFPA 9.3.4.1(1)
OSHA SpEMP-3

- Confinement activities
- Containment activities
- Product removal activities

SPEC(B) - 4.1.2.

Identify factors that can affect an individual's ability to perform the assigned tasks.

NFPA 9.3.4.1(2)
OSHA SpEMP-1

SPEC(B) - 4.2.

Using Personal Protective Equipment

NFPA 9.3.4.2
OSHA SpEMP-3

Given an assignment within the employee's individual area of specialization that is consistent with the emergency response plan and/or standard operating procedures, the specialist employee B shall be able to complete the following tasks:

SPEC(B) - 4.2.1.

Don, work in, and doff the correct respiratory protection and protective clothing for the assigned tasks.

NFPA 9.3.4.2(1)
OSHA SpEMP-3

SPEC(B) - 4.2.2.

Identify the safety considerations for personnel wearing personal protective equipment, including the following:

NFPA 9.3.4.2(2)
OSHA SpEMP-3

- Buddy system
- Backup personnel
- Symptoms of heat and cold stress
- Limitations of personnel working in personal protective equipment
- Indications of material degradation of chemical-protective clothing
- Physical and psychological stresses on the wearer
- Emergency procedures and hand signals

Response
Training
Considerations

Awareness

Core

Mission-
Specific

Operations

Hazardous
Materials
Technician

Specialist
Employees

Hazardous
Materials
Specialists

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

SPEC(B) - 4.2.3.

NFPA 9.3.4.2(3)
OSHA SpEMP-3

Identify the procedures for cleaning, sanitizing, and inspecting personal protective equipment provided by the organization.

SPEC(B) 5. - Evaluating Progress

SPEC(B) - 5.1.

NFPA 9.3.5.1
OSHA SpEMP-3

Providing an Evaluation of the Effectiveness of Selected Response Options

Given an incident involving specific hazardous materials/WMD or containers for hazardous materials/WMD within the employee's individual area of specialization, the specialist employee B shall advise the incident commander of the effectiveness of the selected response options and shall complete the following tasks:

SPEC(B) - 5.1.1.

NFPA 9.3.5.1(1)
OSHA SpEMP-3

Identify the criteria for evaluating whether or not the selected response options are effective in accomplishing the objectives.

SPEC(B) - 5.1.2.

NFPA 9.3.5.1(2)
OSHA SpEMP-3

Identify the circumstances when it would be prudent to withdraw from a chemical incident.

SPEC(B) - 5.2.

NFPA 9.3.5.2
OSHA SpEMP-1,2,3

Reporting and Documenting the Incident

Given a scenario involving hazardous materials/WMD or containers for hazardous materials/WMD used in the employee's individual area of specialization, the specialist employee B shall complete the reporting and subsequent documentation requirements consistent with the emergency response plan and/or standard operating procedures and shall complete the following tasks:

SPEC(B) - 5.2.1.

NFPA 9.3.5.2(1)
OSHA SpEMP-1,2

Identify the importance of documentation (including training records, exposure records, incident reports, and critique reports) for an incident involving hazardous materials/WMD.

SPEC(B) - 5.2.2.

NFPA 9.3.5.2(1)
OSHA SpEMP-1,2

Identify the importance of documentation (including training records, exposure records, incident reports, and critique reports) for an incident involving hazardous materials/WMD.

SPEC(B) - 5.2.3.

NFPA 9.3.5.2(2)
OSHA SpEMP-1,2

Identify the steps used in keeping an activity log and exposure records.

SPEC(B) - 5.2.4.	Identify the requirements for compiling incident reports.
NFPA 9.3.5.2(3) OSHA SpEMP-1,2	
SPEC(B) - 5.2.5.	Identify the requirements for compiling hot zone entry and exit logs.
NFPA 9.3.5.2(4) OSHA SpEMP-2,3	
SPEC(B) - 5.2.6.	Identify the requirements for compiling personal protective equipment logs.
NFPA 9.3.5.2(5) OSHA SpEMP-2,3	
SPEC(B) - 5.2.7.	Identify the requirements for filing documents and maintaining records.
NFPA 9.3.5.2(6) OSHA SpEMP-2,3	
SPEC(B) - 5.2.8.	Identify resources (including a method of contact) knowledgeable on the federal/provincial reporting requirements for hazardous materials/WMD incidents.
NFPA 9.3.5.2(7) OSHA SpEMP-2,3	

Response Training Considerations
Awareness
Core
Mission-Specific
Operations
Hazardous Materials Technician
Specialist Employees
Hazardous Materials Specialists
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

Specialist Employee A

Specialist employee A is a person who is specifically trained to handle incidents involving chemicals or containers for chemicals used in the organization's area of specialization. Consistent with the emergency response plan and/or standard operating procedures, the specialist employee A is able to analyze an incident involving chemicals within his or her organization's area of specialization.

The specialist employee A can then plan a response to that incident, implement the planned response within the capabilities of the resources available, and evaluate the progress of the planned response.

(Reference: NFPA 472 2006, Section 9.1(3))

These persons are specifically trained to handle incidents involving chemicals or containers for chemicals used in their organization's area of specialization. Consistent with the organization's emergency response plan and standard operating procedures, the specialist employee A shall be able to analyze an incident involving chemicals within their organization's area of specialization, plan a response to that incident, implement the planned response within the capabilities of the resources available, and evaluate the progress of the planned response.

(Reference: NFPA 472 2003, Chapter 8)

The specialist employee A shall be trained to meet the competencies at the specialist employee C level (see *HMEP Objectives SPEC(C)-1.1 – SPEC(C)-3.2.3, as well as NFPA 472 Chapter 10, Section 10.2*) and the hazardous materials technician level (see *HMEP Hazardous Materials Technician, as well as NFPA 472, Chapter 6*) relative to the hazardous materials/WMD and containers used in the organization's area of specialization.

(Reference: NFPA 472 2006, Section 10.4.1.1)

SPEC(A) 1. - General

SPEC(A) - 1.1.

Analyzing the Incident

NFPA 9.4.1.2.2(1)
OSHA HMSPEC-B,E,

Analyze an incident involving hazardous materials/WMD and containers for hazardous materials/WMD used in the organization's area of specialization to determine the magnitude of the incident by completing the following tasks:

SPEC(A) - 1.1.1.

NFPA 9.4.1.2.2(1)a
OSHA HMSPEC-B,E,I

Survey an incident involving hazardous materials/WMD and containers for hazardous materials/WMD including the following:
Identify the containers involved.
Identify or classify unknown materials.
Verify the identity of the hazardous materials/WMD.

Response
Training
Considerations

Awareness

Core
Operations
Mission-Specific

Hazardous
Materials
Technician

Specialist
Employees

Hazardous
Materials
Specialists

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

SPEC(A) - 1.1.2.

NFPA 9.4.1.2.2(1)b
OSHA HMSPEC-B,E,I

Collect and interpret hazard and response information from printed resources, technical resources, computer databases, and monitoring equipment for hazardous materials/WMD.

SPEC(A) - 1.1.3.

NFPA 9.4.1.2.2(1)c
OSHA HMSPEC-E

Determine the extent of damage to containers of hazardous materials/WMD.

SPEC(A) - 1.1.4.

NFPA 9.4.1.2.2(1)d
OSHA HMSPEC-B,E,I

Predict the likely behavior of the hazardous materials/WMD and containers for hazardous materials/WMD.

SPEC(A) - 1.1.5.

NFPA 9.4.1.2.2(1)e
OSHA HMSPEC-B,E,I

Estimate the potential outcomes of an incident involving hazardous materials/WMD and containers for hazardous materials/WMD.

SPEC(A) - 1.2.

NFPA 9.4.1.2.2(2)
OSHA HMSPEC-A,F,H

Planning the Response

Plan a response (within the capabilities of available resources) to an incident involving hazardous materials/WMD and containers for hazardous materials/WMD used in the organization's area of specialization by completing the following tasks:

SPEC(A) - 1.2.1.

NFPA 9.4.1.2.2(2)a
OSHA HMSPEC-A,F,H

Identify the response objectives for an incident involving hazardous materials/WMD and containers for hazardous materials/WMD.

SPEC(A) - 1.2.2.

NFPA 9.4.1.2.2(2)b
OSHA HMSPEC-D

Identify the potential response options for each response objective for an incident involving hazardous materials/WMD and containers for hazardous materials/WMD.

SPEC(A) - 1.2.3.

NFPA 9.4.1.2.2(2)c
OSHA HMSPEC-D

Select the personal protective equipment required for a given response option for an incident involving hazardous materials/WMD and containers for hazardous materials/WMD.

SPEC(A) - 1.2.4.

NFPA 9.4.1.2.2(2)d
OSHA HMSPEC-G

Select the technical decontamination process for an incident involving hazardous materials/WMD and containers for hazardous materials/WMD.

SPEC(A) - 1.2.5.

NFPA 9.4.1.2.2(2)e
OSHA HMSPEC-A,F,H

Develop an incident action plan (within the capabilities of the available resources), including site safety and control plan, for handling an incident involving hazardous materials/WMD and containers for hazardous materials/WMD consistent with the emergency response plan and/or standard operating procedures.

SPEC(A) - 1.3.

NFPA 9.4.1.2.2(3)
OSHA HMSPEC-F

Implementing the Planned Response

Operating under the Incident Command System, implement the planned response (as developed with the incident commander) to an incident involving hazardous materials/WMD and containers for hazardous materials/WMD used in the organization's area of specialization consistent with the emergency response plan and/or standard operating procedures by completing the following tasks:

SPEC(A) - 1.3.1.

NFPA 9.4.1.2.2(3)a
OSHA HMSPEC-D

Don, work in, and doff correct personal protective equipment for use with hazardous materials/WMD

SPEC(A) - 1.3.2.

NFPA 9.4.1.2.2(3)b
OSHA HMSPEC-F

Perform containment, control, and product transfer functions, as agreed upon with the incident commander, for hazardous materials/WMD and containers for hazardous materials/WMD.

SPEC(A) 2. - Analyzing, Planning, Implementing and Evaluating

SPEC(A) - 2.1.

NFPA 9.4.1.2.2(4)
OSHA HMSPEC-A,F,H

Analyzing, Planning, Implementing and Evaluating

The specialist employee A shall demonstrate competencies at the specialist employee C level (Section 10.2) and hazardous materials technician level (Chapter 8) relative to the hazardous materials/WMD and containers used in the organization's area of specialization.