

# Hazardous Materials and Terrorist Incident Response Curriculum Guidelines

## NFPA 472 Core Competencies for Operations Level Responders

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

## Introduction

Operations level responders as defined in NFPA 472 shall be trained to meet all competencies of this chapter. Operations level (NFPA 472) responders also shall receive additional training to meet applicable governmental occupational health and safety regulations.

Operations level (NFPA 472) competencies are broken into the following categories: (a) Core competencies, required of all responders on the scene, no matter what their function; and (b) Mission- or agent-specific competencies as assigned by the authority having jurisdiction

Mission-specific operations level responders who are expected to perform additional missions beyond the core competencies in this chapter shall be trained to meet those mission-specific competencies, as found in the following chapter, "Mission-Specific Operations".

## Definition

Operations Level (NFPA 472) Responders are those persons who respond to hazardous materials/weapons of mass destruction (WMD) incidents for the purpose of protecting nearby persons, the environment, or property from the effects of the release; however, these persons can have additional competencies that are specific to their response mission, expected tasks, and equipment and training as determined by the authority having jurisdiction (AHJ).

## Training Audience

Responders at the operations level (NFPA 472) are typically those persons who are the first to arrive at the scene of a hazardous materials incident. They may be employed by law enforcement, public service, fire or emergency services, or a variety of private organizations. Generally, they are not members of a hazardous materials response team.

## Methodology Recommendations

Operations level (NFPA 472) training is best conducted in a classroom environment, with opportunities for small- and large-group exercises either in the classroom or as a field exercise in conjunction with the training. Training typically ranges from 16 to 24 hours, depending upon training environment conditions and specific training audience needs. Lectures with small-group student activities are appropriate for much of the material. However, incident scene organization and command drill and practice will require large-group simulated incidents that can be best conducted in a simulator or as a field exercise.

Refresher training should include (1) competency retesting of all response skills, (2) technical information updates, and (3) critique of incident scene decision-making using simulated emergencies.

## Summary: Core Competencies for Operations Level Responders

<b>Audience:</b>	All personnel who respond to haz mat/WMD incidents
<b>Pre-Req:</b>	Awareness Level Training
<b>Training:</b>	16-24 hours in classroom, with optional additional use of field exercise area. Competencies include analyzing a hazmat/WMD incident, planning an initial response, implementing a planned response, and evaluating progress.
<b>Refresher:</b>	8 hour annual refresher training should include retesting of response cognitive skills, technical updates to hazards and to response protocols, and incident scene decision-making practice using simulated emergencies.

## Relationship of OSHA Operations to NFPA 472 Core Operations

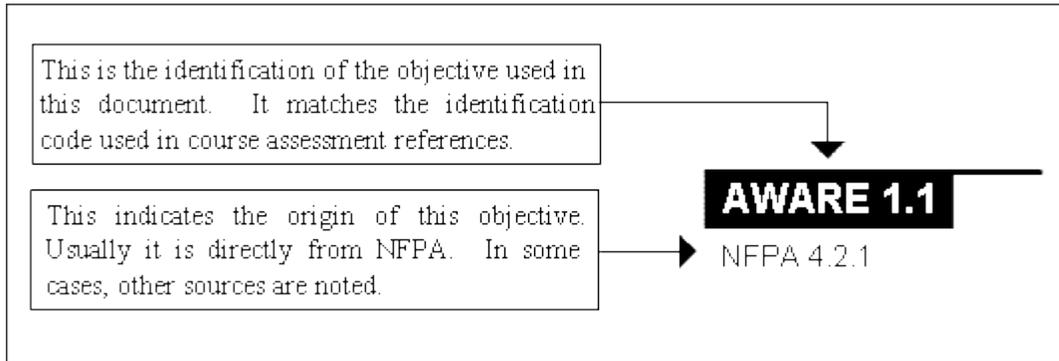
Under 29 CFR 1910.120 (q) (6) (ii), OSHA defines operations level responder competencies differently than NFPA 472. Most OSHA Operations level competencies relate closely to NFPA Core Competencies for Operations Level Responders, but the ability to perform basic control, containment and confinement techniques under OSHA are found in NFPA 472 under the Mission-Specific Competencies for Operations Level Responders (the following chapter in these Guidelines). OSHA Operations Level Competencies are discussed in the preceding chapter of these guidelines, including training recommendations and the translation of that required standard into six principle objectives. The crosswalk described in the recommended training objectives in this section relates individual NFPA 472 objectives to OSHA objectives and references the coding of the six OSHA objectives as explained in the preceding chapter of these guidelines. In addition, because the recommended competencies recognize the responsibility of the operations level responder to establish command using an incident command system at the beginning of the emergency, several recommended objectives relate to OSHA requirements for the incident commander in addition to OSHA requirements for responder operations. To assist in assessing course compliance with OSHA 1910.120(q), the relationships between these objectives and the OSHA requirements are noted, as depicted in the legend below.

## Recommended Training Objectives

The following training objectives are recommended for training operations level responders to core competencies. The primary source for this material is NFPA 472, Chapter 5: “Core Competencies for Operations Level Responders”. Training objectives from other sources are so noted, with discussion of the rationale for their inclusion to be found in the “Special Topics” section at the end of the *Response Guidelines*.

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## Objective Identification Legend



## OPS-CORE 1. - Analyzing the Incident

### OPS-CORE - 1.1.

NFPA 5.2.1  
OSHA OPS-A  
OSHA AWARE-B

#### Surveying the Hazardous Materials/WMD Incidents

Given scenarios involving hazardous materials/WMD incidents, the operations level responder shall survey the incident to identify the containers and materials involved, determine whether hazardous materials/WMD have been released, and evaluate the surrounding conditions.

### OPS-CORE - 1.1.1.

NFPA 5.2.1.1  
OSHA OPS-A  
OSHA AWARE-C

Given three examples each of liquid, gas, and solid hazardous materials or WMD, including various hazard classes, operations level personnel shall identify the general shapes of containers in which the hazardous materials/WMD are typically found.

### OPS-CORE - 1.1.1.1.

NFPA 5.2.1.1.1  
OSHA OPS-A  
OSHA AWARE-C

Given examples of the following tank cars, identify each tank car by type, as follows:

1. Cryogenic liquid tank cars
2. Nonpressure tank cars (general service or low pressure cars)
3. Pressure tank cars

### OPS-CORE - 1.1.1.2.

NFPA 5.2.1.1.2  
OSHA OPS-A  
OSHA AWARE-C

Given examples of the following intermodal tanks, identify each intermodal tank by type, as follows:

1. Nonpressure intermodal tanks
2. Pressure intermodal tanks
  - a. Specialized intermodal tanks, including the following:
  - b. Cryogenic intermodal tanks
  - c. Tube modules

<p><b>OPS-CORE - 1.1.1.3.</b></p> <p>NFPA 5.2.1.1.3 OSHA OPS-A OSHA AWARE-C</p>	<p>Given examples of the following cargo tanks, identify each cargo tank by type, as follows:</p> <ol style="list-style-type: none"> <li>1. Compressed gas tube trailers</li> <li>2. Corrosive liquid tanks</li> <li>3. Cryogenic liquid tanks</li> <li>4. Dry bulk cargo tanks</li> <li>5. High pressure tanks</li> <li>6. Low pressure chemical tanks</li> <li>7. Nonpressure liquid tanks</li> </ol>
<p><b>OPS-CORE - 1.1.1.4.</b></p> <p>NFPA 5.2.1.1.4 OSHA OPS-A OSHA AWARE-C</p>	<p>Given examples of the following storage tanks, identify each tank by type, as follows:</p> <ol style="list-style-type: none"> <li>1. Cryogenic liquid tank</li> <li>2. Nonpressure tank</li> <li>3. Pressure tank</li> </ol>
<p><b>OPS-CORE - 1.1.1.5.</b></p> <p>NFPA 5.2.1.1.5 OSHA OPS-A OSHA AWARE-C</p>	<p>Given examples of the following nonbulk packaging, identify each package by type, as follows:</p> <ol style="list-style-type: none"> <li>1. Bags</li> <li>2. Carboys</li> <li>3. Cylinders</li> <li>4. Drums</li> <li>5. Dewars flask (cryogenic liquids)</li> </ol>
<p><b>OPS-CORE - 1.1.1.6.</b></p> <p>NFPA 5.2.1.1.6 OSHA OPS-A</p>	<p>Given examples of the following radioactive material packages, identify the characteristics of each container/package by type, as follows:</p> <ol style="list-style-type: none"> <li>1. Excepted</li> <li>2. Industrial</li> <li>3. Type A</li> <li>4. Type B</li> <li>5. Type C</li> </ol>
<p><b>OPS-CORE - 1.1.2.</b></p> <p>NFPA 5.2.1.2 OSHA OPS-A</p>	<p>Given examples of containers, identify the markings that differentiate one container from another.</p>
<p><b>OPS-CORE - 1.1.2.1.</b></p> <p>NFPA 5.2.1.2.1 OSHA OPS-A</p>	<p>Given examples of the following marked transport vehicles and their corresponding shipping papers, identify the vehicle or tank identification marking:</p> <ol style="list-style-type: none"> <li>1. Highway transport vehicles, including cargo tanks</li> <li>2. Intermodal equipment including tank containers</li> <li>3. Rail transport vehicles, including tank cars</li> </ol>
<p><b>OPS-CORE - 1.1.2.2.</b></p> <p>NFPA 5.2.1.2.2 OSHA OPS-A</p>	<p>Given examples of facility containers, identify the markings indicating container size, product contained, and/or site identification numbers.</p>

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**OPS-CORE -  
1.1.3.**

NFPA 5.2.1.3  
OSHA OPS-A  
OSHAWARE-E

Given examples of hazardous materials incidents, identify the name(s) of the hazardous material(s).

**OPS-CORE -  
1.1.3.1.**

NFPA 5.2.1.3.1  
OSHA OPS-A  
OSHAWARE-E

Identify the following information on a pipeline marker:

1. Emergency telephone number
2. Owner
3. Product

**OPS-CORE -  
1.1.3.2.**

NFPA 5.2.1.3.2  
OSHA OPS-A  
OSHAWARE-E

Given a pesticide label, identify each of the following pieces of information, then match the piece of information to its significance in surveying the hazardous materials incident:

1. Active ingredient
2. Hazard statement
3. Name of pesticide
4. Pest control product (PCP) number (in Canada)
5. Precautionary statement
6. Signal word

**OPS-CORE -  
1.1.3.3.**

NFPA 5.2.1.3.3  
OSHA OPS-A

Given a label for a radioactive material, identify the type or category of label, contents, activity, transport index, and criticality safety index as applicable.

**OPS-CORE -  
1.1.4.**

NFPA 5.2.1.4  
OSHA OPS-A

Identify and list the surrounding conditions that should be noted when a hazardous materials/WMD incident is surveyed.

**OPS-CORE -  
1.1.5.**

NFPA 5.2.1.5  
OSHA OPS-A

Give examples of ways to verify information obtained from the survey of a hazardous materials/WMD incident.

**OPS-CORE -  
1.1.6.**

NFPA 5.2.1.6  
OSHA OPS-A

The operations level responder shall identify at least three additional hazards that could be associated with an incident involving terrorist or criminal activities.

<b>OPS-CORE - 1.2.</b>	<b>Collecting Hazard and Response Information</b>
NFPA 5.2.2 OSHA OPS-A	Given scenarios involving hazardous materials/WMD, the operations level responder shall collect hazard and response information using MSDS, CHEMTREC/CANUTEC/SETIQ, governmental authorities, and shipper/manufacturer.
<b>OPS-CORE - 1.2.1.</b>	Match the definitions associated with the UN/DOT hazard classes and divisions of hazardous materials/WMD, including refrigerated liquefied gases and cryogenic liquids, with the class or division.
NFPA 5.2.2(1) OSHA OPS-A OSHA AWARE-E	
<b>OPS-CORE - 1.2.2.</b>	Identify two ways to obtain an MSDS in an emergency.
NFPA 5.2.2(2) OSHA OPS-A	
<b>OPS-CORE - 1.2.3.</b>	Using an MSDS for a specified material, identify the following hazard and response information:
NFPA 5.2.2(3) OSHA OPS-A,B,C,D,F OSHA AWARE-A OSHA I.C.-C.4	<ol style="list-style-type: none"> <li>1. Physical and chemical characteristics</li> <li>2. Physical hazards of the material</li> <li>3. Health hazards of the material</li> <li>4. Signs and symptoms of exposure</li> <li>5. Routes of entry</li> <li>6. Permissible exposure limits</li> <li>7. Responsible party contact</li> <li>8. Precautions for safe handling (including hygiene practices, protective measures, procedures for cleanup of spills or leaks)</li> <li>9. Applicable control measures including personal protective equipment</li> <li>10. Emergency and first-aid procedures</li> </ol>
<b>OPS-CORE - 1.2.4.</b>	Identify the following:
NFPA 5.2.2(4) OSHA OPS-A OSHA AWARE-E	<ol style="list-style-type: none"> <li>1. Type of assistance provided by CHEMTREC/CANUTEC/SETIQ, and governmental authorities</li> <li>2. Procedure for contacting CHEMTREC/CANUTEC/SETIQ, and governmental authorities</li> <li>3. Information to be furnished to CHEMTREC/CANUTEC/SETIQ, and governmental authorities</li> </ol>
<b>OPS-CORE - 1.2.5.</b>	Identify two methods of contacting the manufacturer or shipper to obtain hazard and response information.
NFPA 5.2.2(5) OSHA OPS-A OSHA AWARE-E	

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**OPS-CORE -  
1.2.6.**

NFPA 5.2.2(6)  
OSHA OPS-A  
OSHA AWARE-E  
OSHA I.C.-C.4

Identify the type of assistance provided by governmental authorities with respect to criminal or terrorist activities involving the release or potential release of hazardous materials/WMD.

**OPS-CORE -  
1.2.7.**

NFPA 5.2.2(7)  
OSHA OPS-A  
OSHA AWARE-E  
OSHA I.C.-C.4

Identify the procedure for contacting local, state, and federal authorities as specified in the local emergency response plan and/or standard operating procedures.

**OPS-CORE -  
1.2.8.**

NFPA 5.2.2(8)  
OSHA OPS-A,B,C,D,F  
OSHA AWARE-A  
OSHA I.C.-C.4

Describe the properties and characteristics of the following:

1. Alpha radiation
2. Beta radiation
3. Gamma rays
4. Neutron radiation

**OPS-CORE - 1.3.**

NFPA 5.2.3  
OSHA OPS-A

**Predicting the Likely Behavior of a Material and its Container**

Given scenarios involving hazardous materials/WMD incidents, each with a single hazardous material/WMD, the operations level responder shall predict the likely behavior of the material/agent and its container.

**OPS-CORE -  
1.3.1.**

NFPA 5.2.3(1)  
OSHA OPS-A,C

Interpret the hazard and response information obtained from the current edition of the Emergency Response Guidebook; MSDS; CHEMTREC/CANUTEC/SETIQ; governmental authorities; and shipper/manufacturer contacts

<p><b>OPS-CORE - 1.3.1.1.</b></p>	<p>Match the following chemical and physical properties with their significance and impact on the behavior of the container and/or its contents:</p>
<p>NFPA 5.2.3(1)(a) OSHA OPS-A,C</p>	<ul style="list-style-type: none"> <li>• Boiling point</li> <li>• Chemical reactivity</li> <li>• Corrosivity (pH)</li> <li>• Flammable (explosive) range (LEL &amp; UEL)</li> <li>• Flash point</li> <li>• Ignition (autoignition) temperature</li> <li>• Particle Size</li> <li>• Persistence</li> <li>• Physical state (solid, liquid, gas)</li> <li>• Radiation (ionizing and non-ionizing)</li> <li>• Specific gravity</li> <li>• Toxic products of combustion</li> <li>• Vapor density</li> <li>• Vapor pressure</li> <li>• Water solubility</li> </ul>
<p><b>OPS-CORE - 1.3.1.2.</b></p>	<p>Identify the differences between the following terms:</p> <ol style="list-style-type: none"> <li>1. Contamination and secondary contamination</li> <li>2. Exposure and contamination</li> <li>3. Exposure and hazard</li> <li>4. Infectious and contagious</li> <li>5. Acute effects and chronic effects</li> <li>6. Acute exposures and chronic exposures</li> </ol>
<p>NFPA 5.2.3(1)(b) OSHA OPS-A,C</p>	
<p><b>OPS-CORE - 1.3.2.</b></p>	<p>Identify three types of stress that could cause a container system to release its contents.</p>
<p>NFPA 5.2.3(2) OSHA OPS-A</p>	
<p><b>OPS-CORE - 1.3.3.</b></p>	<p>Identify five ways in which containers can breach.</p>
<p>NFPA 5.2.3(3) OSHA OPS-A</p>	
<p><b>OPS-CORE - 1.3.4.</b></p>	<p>Identify four ways in which containers can release their contents.</p>
<p>NFPA 5.2.3(4) OSHA OPS-A</p>	
<p><b>OPS-CORE - 1.3.5.</b></p>	<p>Identify the general testing requirements for "Type A," "Type B," and "Special Form" packaging used for radioactive material transportation. Rad. 1st Resp.</p>
<p>(See Spec Topics)</p>	

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**OPS-CORE -  
1.3.6.**

Rad. 1st Resp.  
(See Spec Topics)

Identify common "industrial radiography" sources and any specialized large-quantity radioactive materials packages commonly transported through the local jurisdiction by their shapes and characteristics.

**OPS-CORE -  
1.3.7.**

NFPA 5.2.3(5)  
OSHA OPS-A

Identify at least four dispersion patterns that can be created upon release of a hazardous material.

**OPS-CORE -  
1.3.8.**

NFPA 5.2.3(6)  
OSHA OPS-A

Identify the time frames for estimating the duration that hazardous materials/WMD will present an exposure risk.

**OPS-CORE -  
1.3.9.**

NFPA 5.2.3(7)  
OSHA OPS-A

Identify the health and physical hazards that could cause harm.

**OPS-CORE -  
1.3.10.**

NFPA 5.2.3(8)  
OSHA OPS-A,C

Identify the health hazards associated with the following terms:

1. Alpha, beta, gamma, and neutron radiation
2. Asphyxiant
3. Carcinogen
4. Convulsant
5. Corrosive
6. Highly toxic
7. Irritant
8. Sensitizer/allergen
9. Target organ effects
10. Toxic

**OPS-CORE -  
1.3.11.**

NFPA 5.2.3(9)  
OSHA OPS-A,C

Given the following, identify the corresponding UN/DOT hazard class and division:

1. Blood agents
2. Biological agents and biological toxins
3. Choking agents
4. Irritants (riot control agents)
5. Nerve agents
6. Radiological materials
7. Vesicants (blister agents)

**OPS-CORE - 1.4.**

NFPA 5.2.4  
OSHA OPS-A

**Estimating the Potential Harm**

Given scenarios involving hazardous materials/WMD incidents, the operations level responder shall estimate the potential harm within the endangered area at each incident.

<b>OPS-CORE - 1.4.1.</b>	Identify a resource for determining the size of an endangered area of a hazardous materials/WMD incident.
NFPA 5.2.4(1) OSHA OPS-A	
<b>OPS-CORE - 1.4.2.</b>	Given the dimensions of the endangered area and the surrounding conditions at a hazardous materials/WMD incident, estimate the number and type of exposures within that endangered area.
NFPA 5.2.4(2) OSHA OPS-A	
<b>OPS-CORE - 1.4.3.</b>	Identify resources available for determining the concentrations of a released hazardous material/WMD within an endangered area.
NFPA 5.2.4(3) OSHA OPS-A	
<b>OPS-CORE - 1.4.4.</b>	Given the concentrations of the released material, identify the factors for determining the extent of physical, health, and safety hazards within the endangered area of a hazardous materials/WMD incident.
NFPA 5.2.4(4) OSHA OPS-A	
<b>OPS-CORE - 1.4.5.</b>	Describe the impact that time, distance, and shielding have on exposure to radioactive materials specific to the expected dose rate.
NFPA 5.2.4(5) OSHA OPS-A	

**OPS-CORE 2. - Planning the Response**

<b>OPS-CORE - 2.1.</b>	<b>Describing Response Objectives</b>
NFPA 5.3.1 OSHA OPS B,D	Given at least two scenarios involving hazardous materials/WMD incidents, the operations level responder shall describe the response objectives for each example.
<b>OPS-CORE - 2.1.1.</b>	Given an analysis of a hazardous materials/WMD incident and the exposures, determine the number of exposures that could be saved with the resources provided by the AHJ.
NFPA 5.3.1(1) OSHA OPS B,D	
<b>OPS-CORE - 2.1.2.</b>	Given an analysis of a hazardous materials/WMD incident, describe the steps for determining response objectives.
NFPA 5.3.1(2) OSHA OPS B,D	

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**OPS-CORE -  
2.1.3.**

NFPA 5.3.1(3)  
OSHA OPS B,D

Describe how to assess the risk to a responder for each hazard class in rescuing injured persons at a hazardous materials/WMD incident.

**OPS-CORE -  
2.1.4.**

NFPA 5.3.1(4)  
OSHA OPS B,D

Assess the potential for secondary attacks/devices at criminal or terrorist events.

**OPS-CORE - 2.2.**

NFPA 5.3.2  
OSHA OPS-B  
OSHA IC-B.1,C.2

**Identifying Action Options**

Given examples of hazardous materials/WMD incidents(facility and transportation), including the name of the hazardous material/WMD involved and the anticipated type of exposure, the operations level responder shall determine whether available personal protective equipment applicable to performing assigned tasks.

**OPS-CORE -  
2.2.1.**

NFPA 5.3.2(1)  
OSHA OPS-B  
OSHA IC-B.1,C.2

Identify the options to accomplish a given response objective

**OPS-CORE -  
2.2.2.**

NFPA 5.3.2(2)  
OSHA OPS-B  
OSHA IC-B.1,C.2

Describe the prioritization of emergency medical care and removal of victims from the hazard area relative to exposure

**OPS-CORE - 2.3.**

NFPA 5.3.3

**Determining suitability of Personal Protective Equipment.**

Given examples of hazardous materials/WMD incidents, including the name of the hazardous material/WMD involved and the anticipated type of exposure, the operations level responder shall determine whether available personal protective equipment is applicable to performing assigned tasks.

**OPS-CORE -  
2.3.1.**

NFPA 5.3.3(1)  
OSH OPS-B  
OSHA IC-B.1,C.2

Identify the respiratory protection required for a given response option.

<p><b>OPS-CORE - 2.3.1.1.</b></p>	<p>Describe the advantages, limitations, uses, and operational components of the following types of respiratory protection at hazardous materials/WMD incidents:</p>
<p>NFPA 5.3.2(1)(a) OSHA OPS-B OSHA IC-B.1,C.2</p>	<ol style="list-style-type: none"> <li>1. Positive pressure self-contained breathing apparatus (SCBA)</li> <li>2. Positive pressure air-line respirators with required escape unit</li> <li>3. Closed circuit SCBA</li> <li>4. Powered air-purifying respirators (PAPR)</li> <li>5. Air-purifying respirators (APR)</li> <li>6. Particulate respirator</li> </ol>
<p><b>OPS-CORE - 2.3.1.2.</b></p>	<p>Identify the required physical capabilities and limitations of personnel working in respiratory protection.</p>
<p>NFPA 5.3.2(1)(b) OSHA OPS-B OSHA IC-B.1,C.2</p>	
<p><b>OPS-CORE - 2.3.2.</b></p>	<p>Identify the personal protective clothing required for a given option.</p>
<p>NFPA 5.3.2(2) OSHA OPS-B OSHA IC-B.1,C.2</p>	
<p><b>OPS-CORE - 2.3.2.1.</b></p>	<p>Identify skin contact hazards encountered at hazardous materials/WMD incidents.</p>
<p>NFPA 5.3.2(2)(a) OSHA OPS-B OSHA IC-B.1,C.2</p>	
<p><b>OPS-CORE - 2.3.2.2.</b></p>	<p>Identify the purpose, advantages, and limitations of the following types of protective clothing at hazardous materials/WMD incidents:</p>
<p>NFPA 5.3.2(2)(b) OSHA OPS-B OSHA IC-B.1,C.2</p>	<ol style="list-style-type: none"> <li>1. Chemical-protective clothing             <ol style="list-style-type: none"> <li>a. Liquid splash–protective clothing</li> <li>b. Vapor-protective clothing</li> </ol> </li> <li>2. High temperature–protective clothing             <ol style="list-style-type: none"> <li>a. Proximity suit</li> <li>b. Entry suits</li> </ol> </li> <li>3. Structural fire-fighting protective clothing</li> </ol>
<p><b>OPS-CORE - 2.4.</b></p>	<p><b>Identifying Decontamination Issues</b></p>
<p>NFPA 5.3.4 OSHA OPS-E,F</p>	<p>Given scenarios involving hazardous materials/WMD incidents, operations level responders shall identify when emergency decontamination is needed.</p>

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**OPS-CORE -  
2.4.1.**

NFPA 5.3.4(1)  
OSHA OPS-A

Identify ways that people, personal protective equipment, apparatus, tools and equipment become contaminated.

**OPS-CORE -  
2.4.2.**

NFPA 5.3.4(2)  
OSHA OPS-A

Describe how the potential for cross contamination determines the need for decontamination.

**OPS-CORE -  
2.4.3.**

NFPA 5.3.4(3)  
OSHA OPS-E,F

Explain the importance and limitations of decontamination procedures at hazardous materials incidents.

**OPS-CORE -  
2.4.4.**

NFPA 5.3.4(4)  
OSHA OPS-A,E,F

Identify the purpose of emergency decontamination procedures at hazardous materials incidents.

**OPS-CORE -  
2.4.5.**

NFPA 5.3.4(5)  
OSHA OPS-A,E,F

Identify the factors that should be considered in emergency decontamination.

**OPS-CORE -  
2.4.6.**

NFPA 5.3.4(6)  
OSHA OPS-A,E,F

Identify the advantages and limitations of emergency decontamination procedures.

**OPS-CORE -  
2.4.7.**

Rad. 1st Resp.  
(See Spec. Topics)

Describe the procedure listed in the local Emergency Response Plan or the organization's Standard Operating Procedures for decontamination of a large number of people exposed to hazardous materials.

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**OPS-CORE 3. - Implementing the Planned Response**

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**OPS-CORE - 3.1.**

NFPA 5.4.1  
OSHA OPS-F  
OSHA I.C.-B,D

**Establishing and Enforcing Scene Control Procedures**

Given two scenarios involving hazardous materials/WMD incidents, the operations level responder shall identify how to establish and enforce scene control including control zones, emergency decontamination, and communications between responders and to the public.

<p><b>OPS-CORE - 3.1.1.</b></p>	<p>Identify the procedures for establishing scene control through control zones.</p>	<p>Response Training Considerations</p>
<p>NFPA 5.4.1(1) OSHA OPS-F OSHA I.C.-B,D</p>	<p>Awareness</p>	<p>Operations Mission-Specific</p>
<p><b>OPS-CORE - 3.1.2.</b></p>	<p>Identify the criteria for determining the locations of the control zones at hazardous materials/WMD incidents.</p>	<p>Hazardous Materials Technician</p>
<p>NFPA 5.4.1(2) OSHA I.C.-B,D</p>	<p><b>OPS-CORE - 3.1.3.</b></p>	<p>Specialist Employee</p>
<p>Identify the basic techniques for the following protective actions at hazardous materials/WMD incidents:</p> <ol style="list-style-type: none"> <li>1. Evacuation</li> <li>2. Sheltering in-place protection</li> </ol>	<p>NFPA 5.4.1(3) OSHA I.C.-B,D</p>	<p>Hazardous Materials Specialist</p>
<p><b>OPS-CORE - 3.1.4.</b></p>	<p>Demonstrate the ability to perform emergency decontamination.</p>	<p>Incident Commander</p>
<p>NFPA 5.4.1(4) OSHA OPS-E</p>	<p><b>OPS-CORE - 3.1.5.</b></p>	<p>Hazardous Materials Officer</p>
<p>Identify the items to be considered in a safety briefing prior to allowing personnel to work at the following:</p> <ol style="list-style-type: none"> <li>1. Hazardous materials incidents</li> <li>2. Hazardous materials/WMD incidents involving criminal activities</li> </ol>	<p>NFPA 5.4.1(5) OSHA OPS-F OSHA I.C.-B.1  (See Special Topics: Terrorism)</p>	<p>Safety Officer</p>
<p><b>OPS-CORE - 3.1.6.</b></p>	<p>Identify the procedures for insuring coordinated communication between responders and to the public.</p>	<p>BLS Responder</p>
<p>NFPA 5.4.1(6) OSHA OPS-E</p>	<p><b>OPS-CORE - 3.2.</b></p>	<p>ALS Responder</p>
<p><b>Preserving Evidence</b></p>	<p>NFPA 5.4.2</p>	<p>Hospital First Receiver</p>
<p>Given two scenarios involving hazardous materials/WMD incidents, the operations level responder shall describe the process to preserve evidence as listed in the emergency response plan and/or standard operating procedures.</p>	<p><b>OPS-CORE - 3.3.</b></p>	<p>Appendix A: Related Standards</p>
<p><b>Initiating the Incident Command System</b></p>	<p>NFPA 5.4.3 OSHA I.C.-A,A.2</p>	<p>Appendix B: NIMS/ICS</p>
<p>Given scenarios involving hazardous materials/WMD incidents, the operations level responder shall initiate the incident command system specified in the emergency response plan and/or standard operating procedures.</p>	<p>RESPONSE 15</p>	<p>Appendix C: Special Topics</p>

**OPS-CORE -  
3.3.1.**

NFPA 5.4.3(1)  
OSHA OPS-F  
OSHA I.C.-D

Identify the role of the operations level responder during hazardous materials/WMD incidents as specified in the emergency response plan and/or standard operating procedures.

**OPS-CORE -  
3.3.2.**

NFPA 5.4.3(2)  
OSHA I.C.-D

Identify the levels of hazardous materials/WMD incidents as defined in the emergency response plan.

**OPS-CORE -  
3.3.3.**

NFPA 5.4.3(3)  
OSHA I.C.-  
A,A.1,A.2,B,D

Identify the purpose, need, benefits, and elements of the incident command system (ICS) for hazardous materials/WMD incidents.

**OPS-CORE -  
3.3.4.**

NFPA 5.4.3(4)  
OSHA I.C.-A.3.C.1

Identify the duties and responsibilities of the following functions within the incident management system

1. Incident safety officer
2. Hazardous materials branch/group

**OPS-CORE -  
3.3.5.**

NFPA 5.4.3(5)  
OSHA I.C.-A,B,D

Identify the considerations for determining the location of the command post for a hazardous materials/WMD incident.

**OPS-CORE -  
3.3.6.**

NFPA 5.4.3(6)  
OSHA I.C.-A,B,D

Identify the procedures for requesting additional resources at a hazardous materials/WMD incident.

**OPS-CORE -  
3.3.7.**

NFPA 5.4.3(7)  
OSHA I.C.-A.3.C.1

Describe the role and response objectives of other agencies that respond to hazardous materials/WMD incidents.

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**OPS-CORE - 3.4.**

NFPA 5.4.4  
OSHA OPS-B

**Using Personal Protective Equipment**

The operations level responder shall describe considerations for the use of personal protective equipment provided by the AHJ.

<p><b>OPS-CORE - 3.4.1.</b></p>	<p>Identify the importance of the buddy system.</p>
<p>NFPA 5.4.4(1) OSHA I.C.-C.5</p>	
<p><b>OPS-CORE - 3.4.2.</b></p>	<p>Identify the importance of the backup personnel.</p>
<p>NFPA 5.4.4(2) OSHA I.C.-C.2</p>	
<p><b>OPS-CORE - 3.4.3.</b></p>	<p>Identify the safety precautions to be observed when approaching and working at hazardous materials/WMD incidents.</p>
<p>NFPA 5.4.4(3) OSHA OPS-F</p>	
<p><b>OPS-CORE - 3.4.4.</b></p>	<p>Identify the signs and symptoms of heat and cold stress and procedures for their control.</p>
<p>NFPA 5.4.4(4) OSHA OPS-F</p>	
<p><b>OPS-CORE - 3.4.5.</b></p>	<p>Identify the capabilities and limitations of personnel working in the personal protective equipment as provided by the AHJ.</p>
<p>NFPA 5.4.4(5) OSHA I.C.-C</p>	
<p><b>OPS-CORE - 3.4.6.</b></p>	<p>Identify the procedures for cleaning, disinfecting, and inspecting personal protective equipment provided by the AHJ.</p>
<p>NFPA 5.4.4(6) OSHA OPS-C</p>	
<p><b>OPS-CORE - 3.4.7.</b></p>	<p>Describe the maintenance, testing, inspection, and storage procedures for personal protective equipment provided by the AHJ according to the manufacturer's specifications and recommendations.</p>
<p>NFPA 5.4.4(7) OSHA 29 CFR 1910.134</p>	

**OPS-CORE 4. - Evaluating Progress**

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

**OPS-CORE - 4.1.**

**Evaluating the Status of the Planned Response**

NFPA 5.5.1  
OSHA OPS-D

Given two scenarios involving hazardous materials/WMD incidents, including the incident action plan, the operations level responder shall evaluate the status of the actions taken in accomplishing the response objectives.

**OPS-CORE -  
4.1.1.**

Identify the considerations for evaluating whether actions taken were effective in accomplishing the objectives.

NFPA 5.5.1(1)  
OSHA OPS-A,D  
OSHA I.C.-A,D

**OPS-CORE -  
4.1.2.**

Describe the circumstances under which it would be prudent to withdraw from a hazardous materials/WMD incident.

NFPA 5.5.1(2)  
OSHA OPS-A,D  
OSHA I.C.-A,D

**OPS-CORE - 4.2.**

**Communicating the Status of the Planned Response**

NFPA 5.2.2  
OSHA OPS-D

Given two scenarios involving hazardous materials/WMD incidents, including the incident action plan, the operations level responder shall communicate the status of the planned response through the normal chain of command.

**OPS-CORE -  
4.2.1.**

Identify the methods for communicating the status of the planned response through the normal chain of command.

NFPA 5.2.2(1)  
OSHA OPS-D

**OPS-CORE -  
4.2.2.**

Identify the methods for immediate notification of the incident commander and other response personnel about critical emergency conditions at the incident.

NFPA 5.2.2(2)  
OSHA OPS-A,D