

Attachment 5

NFPA Required Task List

NFPA 472 and 1072

Competencies and Job Performance Requirements (JPR) of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents at the Technicians Level

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| 7.2 Analyzing the Incident | | |
| <p>7.2.1 Detection, Monitoring, and Sampling - Classify hazardous materials/WMD and verify the presence and concentrations of hazardous materials through detection, monitoring, and sampling at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with released identified and unidentified hazardous materials; an assignment in an incident action plan (IAP); policies and procedures; approved resources; detection and monitoring equipment; and personal protective equipment (PPE), so that PPE is selected and used; hazardous materials/WMD are classified by their basic hazard categories; the presence of hazardous materials is verified; the concentrations of hazardous materials in the atmosphere are determined; signs of exposure in victims and responders are recognized and identified; samples of solids, liquids, and gases are collected; results of detection and monitoring equipment are read, interpreted, recorded, and communicated; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; personnel using the detection, monitoring, and sampling equipment, as well as the equipment, are decontaminated; detection, monitoring, and sampling equipment is maintained according to manufacturers' recommendations; and detection, monitoring, and sampling operations are reported and documented.</p> | 7.2.1 | <p>Surveying Hazardous Materials/WMD Incidents</p> <p>(1) Identify the container by name, specification and typical contents by name, hazard class and capacity.</p> <p>(2) Classify hazardous materials/WMD involved, verify the presence of hazardous materials and concentration of hazardous materials through detection, monitoring, and sampling by completing the requirements of 7.2.1.1 through 7.2.1.1.9.</p> |
| | 7.2.1.1 | <p>Identify Containers and Contents</p> |
| | 7.2.1.1.1 | (1) Identify each container by name and specification and identify the typical contents by name and hazard class. |
| | 7.2.1.1.2 | (1) Identify railroad car container by name and specification and identify the typical contents by name and hazard class. |
| | 7.2.1.1.3 | (1) Identify intermodal tanks by name and specification and identify the typical contents by name and hazard class. |
| | 7.2.1.1.4 | (1) Identify cargo tanks by name and specification and identify the typical contents by name and hazard class. |
| | 7.2.1.1.5 | (1) Identify facility storage tanks by name and identify the typical contents by name and hazard class. |
| | 7.2.1.1.6 | (1) Identify nonbulk packaging by name, identify the typical contents by name and hazard class. |
| | 7.2.1.1.7 | (1) Identify radioactive materials container/packages by name and identify the typical contents by name. |
| | 7.2.1.1.8 | (1) Identify intermediate bulk container (IBC) and ton container packaging by name and identify the typical contents by name and hazard class. |
| | 7.2.1.1.9 | (1) Identify the approximate capacity of facility and transportation containers. |
| | 7.2.1.1.10 | (1) Identify the capacity (by weight or volume) by using markings and other available resources for transportation vehicles, cargo tanks, tank cars, and tank containers. |
| 7.2.1.1.11 | (1) Identify the capacity (by weight or volume) by using markings and other available resources for facility containers, cryogenic liquid tanks, non-pressure tanks, and pressure tanks. | |

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| <p>7.2.1 Detection, Monitoring, and Sampling - Classify hazardous materials/WMD and verify the presence and concentrations of hazardous materials through detection, monitoring, and sampling at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with released identified and unidentified hazardous materials; an assignment in an incident action plan (IAP); policies and procedures; approved resources; detection and monitoring equipment; and personal protective equipment (PPE), so that PPE is selected and used; hazardous materials/WMD are classified by their basic hazard categories; the presence of hazardous materials is verified; the concentrations of hazardous materials in the atmosphere are determined; signs of exposure in victims and responders are recognized and identified; samples of solids, liquids, and gases are collected; results of detection and monitoring equipment are read, interpreted, recorded, and communicated; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; personnel using the detection, monitoring, and sampling equipment, as well as the equipment, are decontaminated; detection, monitoring, and sampling equipment is maintained according to manufacturers' recommendations; and detection, monitoring, and sampling operations are reported and documented.</p> | <p>7.2.1.2</p> | <p>Detection, Monitoring, and Sampling</p> <ol style="list-style-type: none"> (1) Through detection, monitoring, and sampling, classify hazardous materials/WMD by the basic categories; verify the presence of hazardous material; determine the concentration of hazardous material in the atmosphere; collect samples of solids, liquids, and gases; and read, interpret, record, and communicate the results of detection and monitoring equipment. (2) Select equipment for detection, monitoring, and sampling solids, liquids, and gases suitable for the hazardous materials/WMD present at the incident within the capabilities and competencies of available personnel, approved resources including detection, monitoring, and sampling equipment, and PPE in accordance with the AHJ's policies and procedures. (3) Identify the basic hazard categories and their definitions. (Biological, Corrosivity, Explosivity, Radioactivity, Reactivity, Flammability, Oxygen Concentration, Thermal, and Toxicity). (4) Describe monitoring technologies. (5) Describe the types of detection and monitoring equipment including colorimetric, electrochemical cells, flammable gas/LEL, noncontact thermal detection device, oxygen concentration, photoionization detector (PID), biological detection, and radiation detection and monitoring. (6) Describe the process for classifying basic hazard categories of identified solid and liquid materials and unidentified contaminants in the atmosphere. (7) Describe the following processes for radioactive materials, Determine radioactive dose rate from radioactive material labels; determine back ground rate, and dose; determine if a radioactive materials container is leaking/breached by comparing meter readings to the Transportation Index (IT). (8) Describe the process for monitoring lighter-than air gases and vapors, heavier than-air gases and vapors, and vapors in a confined area, and heavier-than air gases vapors in an unconfined area. (9) Describe the methods for collecting samples of solids, liquids, and gases. (10) Describe the procedures for reading, interpreting, recording, and communicating test results of detection and monitoring equipment. (11) Describe the field maintenance and testing procedures for detection and monitoring equipment. (12) Describe the procedures for decontaminating detection, monitoring, and sampling equipment according to manufacturer's recommendations or AHJ policies and procedures. (13) Describe the procedures for maintaining detection monitoring, and sampling equipment according to manufactures' specifications or local policies and procedures. (14) Using selected detection and monitoring equipment, conduct detection, monitoring and sampling tasks while following safety procedures, avoiding or minimizing hazards, and protecting exposures and personnel. (15) Field test the detection, monitoring, and sampling equipment to be used according the manufacturers' specification and local policies and procedures. (Functional, Calibration, and other required tests). (16) Classify hazardous materials by basic hazard categories. (17) Verify the presence of hazardous materials. (18) Determine the concentration of hazardous materials in the atmosphere. (19) Collect samples of solids, liquids, and gases. (20) Monitor, read, interpret, record, and communicate readings from the equipment. (21) Decontaminate detection, monitoring, and sampling equipment. (22) Report and document detection, monitoring, and sampling activities. |

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| <p>7.2.2 Hazard and Response Information Collection and Interpretation - Collection and interpret hazard and response information at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, policies and procedures, approved references sources, and approved tools and equipment, so that hazard and response information is collected, interpreted, and communicated.</p> | <p>7.2.2</p> | <p>Collecting and Interpreting Hazard and Response Information (1) Interpret, and communicate hazard and response information not available from the current edition of the ERG or an SDS and shall meet the requirements of 7.2.2.1 through 7.2.2.5.</p> |
| | <p>7.2.2.1</p> | <p>(1) Identify and explain the types, advantages, and limitations of hazard and response information available from given resources.</p> |
| | <p>7.2.2.2</p> | <p>(1) Describe the hazard and response terms including chemical and physical properties, radiation, exposure; the significance in the risk analysis process; and application of hazard and response for given term.</p> |
| | <p>7.2.2.3</p> | <p>(1) Identify the signs and symptoms, and target organ effects of exposure to hazardous materials/WMD.</p> |
| | <p>7.2.2.4</p> | <p>(1) Identify hazardous and response information to be communicated.</p> |
| | <p>7.2.2.5</p> | <p>(1) Collect and interpret hazardous response information.</p> |
| <p>7.2.3 Assessing Container Condition – Assess the condition of a container and its closures at a hazardous materials/WMD incident, given an incident involving hazardous materials/WMD; an assignment in an IAP; policies and procedures; the scope of the incident; identity of material(s) involved and their hazards, including results of detection, monitoring, and sampling; a container with required markings; and approved resources and PPE, so that PPE is selected and used; the container and its closures are inspected; the type of damage to the container and closures is identified; the type of stress on the container is identified; the level of risk associated with container and closure damage and stress is identified; safety procedures are followed; hazards are avoided or minimized; personnel, tools, and equipment are decontaminated; and a description of the condition of the container and its closures is communicated.</p> | <p>7.2.3</p> | <p>Describing the Condition of the Container Involved in the Incident (1) Identify the container and its closures, identify the damage to the container and its closures, identify the stress(es) on the container, describe the level of risk associated with the damage and stress (es), and communicate this information by completing the related requirements of 7.2.3.1 through 7.2.3.3.</p> |
| | <p>7.2.3.1</p> | <p>(1) Identify the basic design and construction features, including closures for bulk, intermediate bulk, and nonbulk containers; facilities containers; radioactive materials containers; and piping and pipelines.</p> |
| | <p>7.2.3.2</p> | <p>(1) Identify the typical types of damage for bulk, intermediate bulk, and nonbulk containers; facilities containers; radioactive materials containers; and piping and pipelines and the level of risk associated with the damage.</p> |
| | <p>7.2.3.3</p> | <p>(1) Assess the condition of the container and its contents following safety procedures, avoiding and minimizing hazards, and protecting exposures and protecting exposures and personnel. (2) Identify the type of damage to the container and its closer and level of risk associated with the damage. (3) Identify the stress(es) on container. (4) Communicate the result of the assessment.</p> |

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| <p>7.2.4 Predicting Behavior - Predict the behavior of the hazardous materials/WMD involved in a hazardous materials/WMD incident, given an incident involving multiple hazardous materials/WMD; an assignment in an IAP; policies and procedures; physical and chemical properties of the materials involved; results of detection, monitoring, and sampling; condition of containers (damage and stress); surrounding conditions; and approved reference sources, so that the behavior of each hazardous materials/WMD container and its content is identified, the reactivity issues and hazards of the combined materials are identified, and a description of the combined materials are identified, and a description of the likely behavior of the hazards is communicated.</p> | <p>7.2.4</p> | <p>Predicting Likely Behavior of Materials and Their Containers Where Multiple Materials Are Involved</p> <ol style="list-style-type: none"> (1) Identify the likely behavior of the hazardous material/WMD involved, identify the reactivity issues and hazards of the combined materials, and communicate a description of the likely behavior. (2) Identify resources that indicate the reactivity issues of mixing various hazardous materials/WMD. (3) Identify the impact of fire and safety features on the behavior of the products during an incident at a bulk liquid facility and explain the significance in the analysis process. (4) Identify the impact of fire and safety features on the behavior of the products during an incident at a bulk gas facility and explain the significance in the analysis process. |
| <p>7.2.5 Estimating Outcomes - Estimate the potential outcomes at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP policies and procedures, the likely behavior of the container and its contents, and approved resources and equipment, so that the concentrations of materials within the endangered area are measured or predicted; physical, health, and safety hazards within the endangered area are identified; areas of potential harm in the endangered area are identified; and potential outcomes within the endangered area are identified: and potential outcomes are communicated.</p> | <p>7.2.5</p> | <p>Estimating the Likely Size of an Endangered Area</p> <ol style="list-style-type: none"> (1) Use approved resources and equipment; measure and predict concentrations of materials within the endangered area; identify the physical, health, and safety hazards within the endangered area; identify the areas of potential harm in the endangered area; identify the area of potential harm in the endangered area; estimate the potential outcomes within the endangered area; and communicate the potential outcomes. |
| | <p>7.2.5.1</p> | <ol style="list-style-type: none"> (1) Identify resources for dispersion pattern prediction and modeling, including computers, monitoring equipment, or specialists in the field. |
| | <p>7.2.5.2</p> | <ol style="list-style-type: none"> (1) Identify the methods for measuring and predicting concentrations of materials within the endangered area to determine public protective response option and the areas to be protected. |
| | <p>7.2.5.3</p> | <ol style="list-style-type: none"> (1) Identify the methods for identifying the physical, safety, and health within the endangered area. |
| | <p>7.2.5.4</p> | <ol style="list-style-type: none"> (1) Describe health hazard terms and exposure values and explain the significance in the analysis process. |
| | <p>7.2.5.5</p> | <ol style="list-style-type: none"> (1) Identify methods for determining the areas of potential harm within the endangered area. |
| | <p>7.2.5.6</p> | <ol style="list-style-type: none"> (1) Identify methods for determining the outcomes within endangered area. |
| | <p>7.2.5.7</p> | <ol style="list-style-type: none"> (1) Determine the applicable public protective response options and the areas to be protected. |

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| 7.3 Planning the Response | | |
| <p>7.3.1 Response Objectives and Options – Development and recommend to the incident commander or hazardous materials officer response objectives and action options at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment in an IAP; results of the incident analysis, including incident-related information, life safety risk, environment risk, and property risk; available resources; and policies and procedures, so that response objectives are identified for the incident and action options are identified for each response objective.</p> | 7.3.1 | Identify Response Objective and Options |
| | 7.3.1.1 | <ol style="list-style-type: none"> (1) Develop and recommend to the incident commander (IC) or hazardous materials officer response objectives and options. (2) Describe the considerations for identifying response objectives (defensive, offensive, and nonintervention). (3) Describe the considerations for identifying the possible response options to accomplish a given response objective. |
| <p>7.3.2 Personal Protective Equipment (PPE) Selection - Select the PPE ensemble required for a given response option at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, results of the incident analysis, response objectives and options for the incident analysis, response objectives and options for the incident, approved references, and policies and procedures, so that required PPE is identified for each response option.</p> | 7.3.2 | <p>Selecting Personal Protective Equipment PPE</p> <ol style="list-style-type: none"> (1) Select the PPE required for the specified response option(s). |
| | 7.3.2.1 | <ol style="list-style-type: none"> (1) Identify types of PPE available for response based on NFPA standards and classifications levels, the OSHA/EPA levels or PPE (A, B, C, D) and the advantages of using certified PPE. |
| | 7.3.2.2 | <ol style="list-style-type: none"> (1) Describe the type of PPE available for thermal, radiological, asphyxiating, chemical, etiological, and mechanical. |
| | 7.3.2.3 | <ol style="list-style-type: none"> (1) Identify the factors to be considered in selecting PPE. (2) In selecting chemical-protective clothing (CPC). (3) Significance of degradation, penetration, and permeation on the selection of protective clothing. (4) Indication of material degradation of protective clothing. (5) Different designs of liquid splash-protective ensembles and vapor-protective ensembles and their advantages and disadvantages. (6) Types, advantages, and disadvantages of cooling measures used for personnel who are wearing PPE. |
| | 7.3.2.4 | <ol style="list-style-type: none"> (1) Identify the effects of physiological and psychological stresses on users of PPE. |
| | 7.3.2.5 | <ol style="list-style-type: none"> (1) Identify the process for inspecting, testing, and maintenance of PPE. |

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| <p>7.3.3 Decontamination Method Selection – Select the decontamination method for a given response option at a hazardous materials/WMD incident, given response option at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, results of the incident analysis, response objectives and options for the incident, available resources, and policies and procedures, so that a decontamination method to minimize the hazards for each response option is identified and the equipment required to implement the decontamination method is identified.</p> | <p>7.3.3</p> | <p>Selecting Decontamination Procedures</p> <ol style="list-style-type: none"> (1) Select the decontamination procedure for a given response action, the equipment required to implement procedure. (2) Describe the application, advantages, and limitations for each decontamination method. (3) Identify reference sources for determining applicable decontamination methods and identify how to access those resources in a hazardous materials/WMD incident. (4) Identify equipment required to implement each of the decontamination methods. |
| <p>7.3.4 Action Plan Development – Develop a plan of action for a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, results of the incident analysis, response objectives and options for the given incident, available resources, and policies and procedures, so that the task and resources required to meet the response objectives are identified, specified response objectives and response options are addressed, plan is consistent with the emergency response plan and policies and procedures, and plan is within the capability of available personnel, PPE, and control equipment.</p> | <p>7.3.4</p> | <p>Developing a Plan of Action</p> <ol style="list-style-type: none"> (1) Prepare an action including site safety and a control plan, safety briefing materials, and pre-entry activities; identify atmospheric and physical safety hazards when incident involved a confined space; and preserve evidence and take public safety samples at the incident consistent with the AHJ policies and procedures and within the capability of available personnel, PPE and response equipment for the incident. (2) Identify the components of an IAP and subplans. (3) Identify the components of a safety briefing. (4) Identify pre-entry activities to be performed. (5) Identify the components of a site safety and control plan. (6) Identify safety considerations to be included. |
| | <p>7.3.4.1</p> | <p>(1) Describe the difference between control, confinement, containment, and extinguishment.</p> |
| | <p>7.3.4.2</p> | <p>(1) Describe the purpose of, procedures for, required tools and equipment for, and safety precautions for following techniques for hazardous materials/WMD (product) control.</p> |
| | <p>7.3.4.3</p> | <p>(1) Describe the atmospheric physical safety hazards associated with hazardous materials/WMD incidents involving confined spaces.</p> |
| | <p>7.3.4.4</p> | <p>(1) Identify the procedures, equipment, and safety precautions for preserving and collecting legal evidence at hazardous materials/WMD incidents.</p> |

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| 7.4 Implementing the Planned Response | | |
| <p>7.4.1 Performing Assigned IMS/ICS Duties – Perform assigned hazardous materials branch or group functions within the incident command system (ICS) at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment in an IAP; results of the incident analysis; policies and procedures, including an emergency response plan and standard operating procedures; the IAP; and approved resources, so that the assigned functions within the hazardous materials branch or group are completed.</p> | 7.4.1 | <p>Performing Incident Command Duties</p> <ol style="list-style-type: none"> (1) Demonstrate the duties of an assigned function in the hazardous materials group within the incident command system and shall identify the role of the hazardous material technician during hazardous materials/WMD incidents. (2) Identify the various positions in the hazardous materials group within the incident command system (ICS) and describe the main functions. (3) Identify the role of the hazardous materials technician during hazardous materials/WMD incidents. |
| <p>7.4.2 Personal Protective Equipment Use - Don, work in and doff PPE at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, policies and procedures, results of the incident analysis, response objectives and options for the incident, and PPE ensembles as identified in the IAP, so that PPE is selected, inspected, donned, worked in decontaminated, and doffed; safety procedures are followed; hazards are avoided or minimized; equipment is maintained and stored properly; and the use of PPE is reported and documented.</p> | 7.4.2 | <p>Using Personal Protective Equipment (PPE)</p> <ol style="list-style-type: none"> (1) Inspect, don, work in, go through decontamination while wearing, and doff PPE provided by the AHJ. (2) Describe safety for personnel wearing PPE, including buddy systems, backup systems, accountability systems, safety briefings and evacuations/escape procedures. (3) Inspect, don, work in, and doff PPE provided by the AHJ. (4) Go through the process of being decontaminated (emergency and technical) while wearing PPE. (5) Maintain and store PPE following instructions provided by the manufacturer. |

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| <p>7.4.3 Performing Control Functions</p> <p>7.4.3.1 Product Control – Perform product control techniques at a hazardous materials/WMD incident, given a hazardous materials/WMD incident with release of product, an assignment in an IAP, results of the incident analysis, policies and procedures for product control, response objectives and options for the incident, and approved tools, equipment, control agents, and PPE, so that an approved product control technique is selected and implemented; the product is controlled; approved PPE is selected and used; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; personnel, victims, tools, and equipment used are decontaminated; tools and equipment are inspected and maintained; and product control operations are reported and documented.</p> | 7.4.3 | <p>Performing Product Control Techniques</p> <p>(1) Confine/contain the release from bulk or nonbulk pressure containers/closures, nonbulk liquid containers/closures, and bulk liquid containers/ closures, following safety procedures, protecting exposures and personnel, and avoiding or minimizing hazards.</p> | |
| | 7.4.3.1 | <p>Product Control</p> <p>(1) Perform the control techniques while following safety procedures, protecting exposures and personnel and avoiding on minimizing hazards.</p> <p>(2) Identify and implement product control techniques to confine released hazardous materials/WMD.</p> <p>(3) Identify the application and purpose of, advantages and limitations of, procedures for, required tools and equipment for, and safety precautions for each of the control techniques for confining released materials.</p> <p>(4) Identify the procedures for controlling releases from the packaging/flammable liquid and flammable gas releases using techniques, including hose handling, nozzle patterns, and attach operations.</p> <p>(5) Identify the characteristics, applicability, and use of Class B foam or agents, the required equipment for application of the foam or agent to control the spill or fire by application of the foam(s) or agent(s).</p> | |
| <p>7.4.3 Performing Control Functions</p> <p>7.4.3.2 Controlling Container Leaks – Control leaks from containers and their closures at a hazardous materials/WMD incident, given three scenarios, including (1) a leak from a bulk or nonbulk pressure container or its closures, (2) a leak from a nonbulk liquid container or it closures, and (3) a leak from a bulk liquid container or it closures; an assignment in an IAP; results of the incident analysis; policies and procedures for controlling leaks from containers and/or their closures; and approved tools, equipment, and PPE, so that an approved product control technique is selected and used; approved PPE is selected and used; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; hazard monitoring is completed; leaks are controlled (confined or contained); emergency responders, tools, and equipment used are decontaminated; tools and equipment are inspected and maintained; and product control operation are reported and documented.</p> | 7.4.3.2 | <p>Controlling Leaks from Containers</p> <p>(1) Control leaks from the containers and their closures, monitoring for hazards as necessary, while following safety procedures, protecting exposures and personnel, and avoiding or minimizing hazards.</p> <p>(2) Identify the product control techniques to contain leaking hazardous materials/WMD.</p> <p>(3) Identify types of containers, the closures, and ways the containers and closures develop leaks.</p> <p>(4) Operate remote control/emergency shutoff devices to reduce or stop the flow of hazardous material from MC-306/DOT-406, MC-407/DOT-407, and MC-331 cargo tanks, and intermodal tanks containing flammable liquids or gasses or fixed facility containers.</p> <p>(5) Given the fitting on a pressure container and using tools and equipment provided by the AHJ, contain the leaks.</p> | |
| | 7.4.3.2.2 | <p>(1) Given a 55-gallon drum and applicable tools and materials, contain a bung leak, chime leak, forklift puncture, and nail puncture.</p> | |

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| <p>7.4.3 Performing Control Functions</p> <p>7.4.3.3 Overpacking Nonbulk Radioactive Materials Containers - Over pack damaged or leaking nonbulk and radioactive materials containers at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment in an IAP; results of the incident analysis; a loaded damaged or leaking container; a suitable overpack container; policies and procedures; and approved tools, equipment, and PPE, so that an approved overpack technique is selected; the damaged or leaking container is placed into a suitable overpack and the overpack is closed, marked, and labeled; approved PPE is selected and used; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; emergency responders, tool, and equipment are decontaminated; tools and equipment are inspected and maintained; and product control operations are reported and documented.</p> | <p>7.4.3.3</p> | <p>Overpacking Nonbulk and Radioactive Materials Containers</p> |
| | <p>7.4.3.3.1</p> | <p>(1) Place the damaged or leaking nonbulk or radioactive container is placed into a suitable overpack and the overpack is closed, marked and labeled while following all safety procedure, protecting exposures, and personnel, and avoiding on minimizing hazards.</p> <p>(2) Identify ways nonbulk and radioactive materials containers are damaged.</p> <p>(3) Identify hazards associated with overpacking damaged or leaking nonbulk and radioactive containers.</p> <p>(4) Identify methods for overpacking damaged or leaking nonbulk and radioactive materials containers including tools and equipment required.</p> <p>(5) Identify markings and labels required for overpacking containers.</p> <p>(6) Identify methods for decontaminating tools and equipment used for overpacking damaged or leaking nonbulk and radioactive materials containers.</p> <p>(7) Identify equipment and maintenance procedures.</p> |
| | <p>7.4.3.3.2</p> | <p>(1) Overpack a 55-gallon drum and demonstrate the ability to place the 55-gallon drum in the overpack drum using the rolling slide-in method, slide-in method and slip-over method.</p> |
| | <p>7.4.3 Performing Control Functions</p> <p>7.4.3.4 Liquid Product Transfer - Transfer liquids from leaking non-pressure containers at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment in an IAP; results of the incident analysis; a leaking non-pressure container and a recovery container; policies and procedures for transferring liquids from leaking non-pressure containers; and approved tools, equipment, and PPE, so that an approved product transfer method is selected and used; approved PPE is selected and used; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; hazard monitoring is completed; the containers are bonded and grounded; product is transferred to the recovery container; emergency responders, tools, and equipment maintained; and product control operations are reported and documented.</p> | <p>7.4.3.4</p> |
| <p>7.4.3.4.1</p> | | <p>(1) Monitor for hazards, ground and bond the containers, transfer the liquid product from the leaking container to recovery container, suppress vapors as necessary, decontaminate tools and equipment, and inspect and maintain tools and equipment.</p> <p>(2) Select a compatible recovery container.</p> <p>(3) Monitor hazards.</p> <p>(4) Transfer liquid products.</p> <p>(5) Grounding and bonding the containers.</p> <p>(6) Perform vapor suppression.</p> <p>(7) Select the required tools and equipment and their proper use transferring liquid product.</p> <p>(8) Decontaminate tolls and equipment.</p> <p>(9) Inspect and maintain tools and equipment for transferring liquid product.</p> <p>(10) Identify the maintenance and inspection procedures for the tools and equipment provided for the control of hazardous materials release according to the manufacturer’s specifications and recommendations and AHJ policies and procedures.</p> <p>(11) Identify three considerations for assessing a leak of spill inside a confined space without entering the area.</p> |
| <p>7.4.3.4.2</p> | | <p>(1) Identify the maintenance and inspection procedures for the tools and equipment provided for the control of hazardous materials releases according to the manufacture’s specifications and recommendations.</p> |

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| 7.4.4 Decontamination | 7.4.4.1 Mass Decontamination – Perform mass decontamination for ambulatory and non-ambulatory victims at a hazardous materials/WMD incident, given a hazardous materials/WMD incident requiring mass decontamination; an assignment in an IAP; results of the incident analysis; policies and procedures; and approved PPE, tools, and equipment, so that PPE is selected and used a mass decontamination procedure is selected, set up, implemented; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; personnel, tools and equipment are decontaminated; and mass decontamination operations are reported and documented. | 7.4.3.4.3 | (1) Identify three considerations for assessing a leak or spill inside a confined space without entering the area. |
| | | 7.4.4 | Performing Decontamination Operations Identified in the Incident Action Plan (1) Implement, evaluate the effectiveness of, and terminate the following decontamination operations as assigned. (2) Technical decontamination operations in support of entry operations. (3) Technical decontamination operations involving ambulatory and non-ambulatory victims. (4) Mass decontamination operations involving ambulatory and non-ambulatory victims. |
| 7.4.4 Decontamination | 7.4.4.2 Technical Decontamination – Establish and implement technical decontamination in support of entry operations and for ambulatory and non-ambulatory victims at a hazardous materials/WMD incident, given a hazardous materials/WMD incident requiring technical decontamination; an assignment in an IAP; results of the incident analysis; policies and procedures; and approved PPE, tools, and equipment, so that approved PPE is selected and used; a technical decontamination procedure is selected, set up, implemented, evaluated, and terminated; victims are decontaminated; safety procedures are followed; hazards are avoided or minimized; if contaminated, personnel, tools; and equipment are decontaminated; and all reports and documentation of technical decontamination operations are completed. | | |

| NFPA 1072 JPR | NFPA 472 Chapter | Competencies |
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| 7.5 Evaluating Progress | | |
| <p>7.5 Evaluating and Reporting Progress – Evaluate and report the progress of assigned tasks at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, current incident conditions, response options and actions taken, and approved communication equipment, so that the actual behavior of material and container is compared to that predicted, the effectiveness of response options and actions in accomplishing response objectives is determined, modifications to the response options and actions are made, and the results are communicated.</p> | <p>7.5.1</p> | <p>Evaluating the Effectiveness of the Control Functions</p> <ol style="list-style-type: none"> (1) Compare the actual behavior of the material and container to that predicted, determine the effectiveness of response options and actions in accomplishing response objectives, make modifications to the response options and actions as necessary, and communicate the results by completing the following requirements. (2) Identify procedures for evaluating whether the response option and action are effective in accomplishing the response objective. (3) Identify resources for identifying improving, static, or deteriorating conditions. (4) Identify approved communication procedures and communication equipment. (5) Identify the process for modifying response options and actions. |
| | <p>7.5.2</p> | <p>Evaluating the Effectiveness of the Decontamination Process</p> <ol style="list-style-type: none"> (1) Evaluate the effectiveness of any decontamination procedures identified in the incident action plan. |
| 7.6 Terminating the Incident | | |
| <p>7.6 Terminating the Incident – Terminating a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment in an IAP, policies and procedures, operational observations or responses operations (incident information), and approved forms for documentation and reporting, so that assistance in scheduled incident debriefings and critiques is provided, and incident operations are reported and documented.</p> | <p>7.6.1</p> | <p>Assisting in the Debriefing and Incident</p> <ol style="list-style-type: none"> (1) Communicate operational observations (incident information) at debriefings and critiques and complete, forward, and file required reports, records, and supporting documents. (2) Describe the purpose, regulatory issues, elements, and procedures for conducting debriefings and critiques. (3) Describe documentation and reporting requirements according to the AHJ. (4) Identify approved forms and procedures for completing required reports, records, and supporting documentation. Describe the importance of and procedures for filing documents and maintaining records. |