pennsylvania
EMERGENCY MANAGEMENT AGENCY

Attachment 4

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 Operations Level

NFPA 1072 JPR	NFPA 472 Chapter	Competencies
		5.2 Analyzing the Incident
5.2 Identify Potential Hazards - Identify the scope of the problem at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, and approved reference sources, so that container types, materials, location of any release, and surrounding conditions are identified, hazard information is collected, the potential behavior of a material and its container is identified, and the potential hazards, harm, and outcomes associated with that behavior are identified.	**5.2.1**	**Surveying Hazardous Materials/WMD Incidents** (1) Collect information about the incident to identify the containers, the materials involved, the surrounding conditions, and whether hazardous materials/WMD have been released by completing the requirements of 5.2.1.1 through 5.2.1.6.
	5.2.1.1	(1) Identify each pressure container by type.
	5.2.1.1.1	(1) Identify each cryogenic container by type.
	5.2.1.1.2	(1) Identify each liquids-holding container by type.
	5.2.1.1.3	(1) Identify each solids-holding container by type.
	5.2.1.1.4	(1) Identify each mixed load container by type.
	5.2.1.1.5	(1) Identify the characteristics of each container by type.
	5.2.1.1.6	(1) Identify the characteristics of each radioactive material container/package by type.
	5.2.1.1.7	(1) Identify the characteristics of each container or package by type for radioactive material.
	5.2.1.2	(1) Identify the markings that differentiate one container from another.
	5.2.1.2.1	(1) Based on marked transportation vehicles and their corresponding shipping papers, identify markings used for identifying the specific transport vehicles.
	5.2.1.2.2	(1) For facility storage tanks, identify the markings indicating container size, product contained, and/or site identification numbers.
	5.2.1.3	(1) Identify the name(s) of the hazardous material(s) in 5.2.1.3.1 through 5.2.1.3.3.
	5.2.1.3.1	(1) Identify the emergency telephone number, owner, and product as applicable on a pipeline marker.
	5.2.1.3.2	(1) On a pesticide label, identify the active ingredient, hazard statement, name of pesticide, and pest control product.
	5.2.1.3.3	(1) On a radioactive materials label, identify the type or category of label, contents, activity, transport index, and criticality safety index as applicable.
	5.2.1.4	(1) Identify and list the surrounding conditions that should be noted when surveying a hazardous materials/WMD incident.
	5.2.1.5	(1) Describe ways to verify information obtained from the survey of a hazardous materials/WMD incident.
	5.2.1.6	(1) Identify at least three additional hazards that could be associated with an incident involving terrorist or criminal activities.
	5.2.1.6.1	(1) Identify at least four types of locations that could be targets for criminal terrorist activity using hazardous materials/WMD.
	5.2.1.6.2	(1) Describe the difference between a chemical and a biological incident.
	5.2.1.6.3	(1) Identify at least four indicators of possible criminal or terrorist activity involving chemical agents.

NFPA 1072 JPR	NFPA 472 Chapter	Competencies
5.2 Identify Potential Hazards - Identify the scope of the problem at a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, and approved reference sources, so that container types, materials, location of any release, and surrounding conditions are identified, hazard information is collected, the potential behavior of a material and its container is identified, and the potential hazards, harm, and outcomes associated with that behavior are identified.	**5.2.1.6.4**	(1) Identify at least four indicators of possible criminal or terrorist activity involving biological agents.
	5.2.1.6.5	(1) Identify at least four indicators of possible criminal or terrorist activity involving radiological agents.
	5.2.1.6.6	(1) Identify at least four indicators of possible criminal or terrorist activity involving illicit laboratories (e.g., clandestine laboratories, weapons lab, explosive lab, or biological lab).
	5.2.1.6.7	(1) Identify at least four indicators of possible criminal or terrorist activity involving explosives.
	5.2.1.6.8	(1) Identify at least four indicators of secondary devices.
	5.2.1.6.9	(1) Identify at least four specific actions necessary when an incident in suspected to involve criminal or terrorist activity.
	5.2.1.7	(1) Describe ways in which emergency responders are exposed to toxic products of combustion.
	5.2.2	**Collecting Hazard and Response Information** (1) Collect hazard and response information from SDS, CHEMTREC/CANUTEC/SETIQ, governmental authorities, manufacturers, shippers, and carriers by completing the following requirements. (2) Match the definitions associated with the hazard classes and divisions of hazardous materials/WMD with the designated class or division. (3) Identify two ways to obtain an SDS in an emergency. (4) Using an SDS for a specified material, identify the hazard and response information. (5) Identify type of assistance provided by, procedure for contacting, and information to be provided to CHEMTREC/CANUTEC/SETIQ and governmental authorities. (6) Identify two methods of contacting the manufacturers or shippers and carriers (highway, rail, marine, air, and pipeline) to obtain hazard and response information. (7) 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.
	5.2.3	**Predicting the Likely Behavior of a Material and Its Container** (1) Describe the likely behavior of the material or agent and its container for a single hazardous material/WMD. (2) Use the hazard and response information obtained from the current edition of the ERG, SDS, CHEMTREC/CANUTE/ SETIQ, governmental authorities, and manufactures, shippers, and carrier contacts; Match the chemical and physical properties with their significance and impact on the behavior of the container and its contents. (3) Identify the differences between, *Contamination* and *secondary contamination, Exposure* and *contamination, Exposure* and *hazard, Infectious* and *contagious, Acute effects* and *chronic effects and Acute exposures* and *chronic exposures.* (4) Identify three types of stress that can cause a container system to release its contents. (5) Identify five ways in which containers can breach. (6) Identify five ways in which containers can release their contents. (7) Identify seven dispersion patterns that can be created upon release of a hazardous material. (8) Identify the three time frames for estimating the duration that hazardous materials/WMD will present an exposure risk. (9) Identify the health and physical hazards that could cause harm.
	5.2.4	**Estimating Potential Harm** (1) Describe the potential harm within the endangered area at each incident. (2) Identify a resource for determining the size of an endangered area of a hazardous materials/WMD incident. (3) Given the dimensions of the endangered area and the surrounding conditions at a hazardous materials/WMD incident, describe the number and type of exposures within that endangered area. (4) Identify resources available for determining the concentrations of a released hazardous materials/WMD within an endangered area. (5) Given the concentrations of the released material, describe the factors for determining the extent of physical, health, and safety hazards within the endangered area of a hazardous materials/WMD incident. (6) Describe the impact that time, distance, and shielding have on exposure to radioactive materials specific to the expected dose rate. (7) Describe the potential for secondary threats and devices at criminal or terrorist events.

NFPA 1072 JPR	NFPA 472 Chapter	Competencies
5.3 Planning the Response		
5.3 Identify Action Options – Identify the action options for a hazardous material, WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, approved reference sources, and the scope of the problem, so that response objectives, safety precautions, suitability of approved personal protective equipment (PPE) available, and emergency decontamination needs are identified.	**5.3.1**	**Describing Response Objectives** (1) Describe the response objectives. (2) Describe the number of exposures that could be saved with the resources provided by the AHJ. (3) Describe the steps for determining response objectives. (4) Describe how to assess the risk to a responder for each hazard class in rescuing injured persons at a hazardous materials/WMD incident.
	5.3.2	**Identifying Action Options** (1) Identify the options for each response objective and meet the requirements for hazardous materials/WMD incidents (facility and transportation). (2) Identify the options to accomplish a given response objective. (3) Describe the prioritization of emergency medical care and removal of victims from the hazard area relative to exposure and contamination concerns.
	5.3.3	**Determining Suitability of Personal Protective Equipment (PPE)** (1) Given examples of hazardous materials/WMD incidents, including the names of the hazardous materials/WMD involved and the anticipated type of exposure, the operations level responders shall determine whether available PPE is applicable to performing assigned tasks by completing the following requirements. (2) Identify the respiratory protection required for a given response option. (3) Describe the advantages, limitations, uses, and operational components of the four different types of respiratory protection at a hazardous materials/WMD incidents. (4) Identify the required physical capabilities and limitations of personnel working in respiratory protection. (5) Identify the personal protective clothing required for a given option. (6) Identify skin contact hazards encountered at hazardous materials/WMD incidents. (7) Identify the purpose, advantages, and limitations for different types of protective clothing at hazardous materials/WMD incidents.
5.5 Emergency Decontamination – Perform emergency decontamination at a hazardous materials/WMD incident, given a hazardous materials/WMD incident that requires emergency decontamination; an assignment; scope of the problem; policies and procedures; and approved tools, equipment, and PPE for emergency decontamination, so that equipment, and PPE for emergency decontamination, so that emergency decontamination needs are identified, approved PPE is selected and used, exposures and personnel are protected, safety procedures are followed, hazards are avoided or minimized, emergency decontamination is set up and implemented, and victims and responders are decontaminated.	**5.3.4**	**Identifying Emergency Decontamination Issues** (1) Identify when emergency decontamination is needed. (2) Identify ways that people, PPE, apparatus, tools, and equipment become contaminated. (3) Describe how the potential for secondary contamination determines the need for emergency decontamination. (4) Explain the importance, differences, and limitations of emergency/field expedient, gross, technical and mass decontamination procedures at hazardous materials incidents. (5) Identify the purpose of emergency decontamination procedures at hazardous materials Incidents.

NFPA 1072 JPR	NFPA 472 Chapter	Competencies
5.4 Implementing the Planned Response		
5.4 Action Plan Implementation – Perform assigned task at a hazardous materials/WMD incident, given a hazardous materials/WMD incident; an assignment with limited potential of contact with hazardous materials/WMD, policies and procedures, the scope of the problem, approved tools, equipment, and PPE, so that protective actions and scene control are established and maintained on-scene incident command is described, evidence is preserved, approved PPE is selected and used in the proper manner; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; assignments are completed; and gross decontamination of personnel, tools and equipment, and PPE is conducted in the field.	**5.4.1**	**Establishing Scene Control** (1) Explain how to establish and maintain scene control, including control zones and emergency decontamination, and communications between responders and to the public. (2) Identify the procedures for establishing scene control through control zones. (3) Identify the criteria for determining the locations of the control zones at hazardous materials/WMD incidents. (4) Identify the basic techniques for, evacuation and shelter-in-place, protective actions at hazardous materials/WMD incidents. (5) Perform emergency decontamination while preventing spread of contamination and avoiding hazards while using PPE. (6) Identify the items to be considered in a safety briefing prior to allowing personnel to work at a hazardous materials incident or a hazardous materials/WMD incident involving criminal activities. (7) Identify the procedures for ensuring coordinated communication between responders and to the public.
	5.4.2	**Preserving Evidence** (1) Describe the process to preserve evidence as listed in the emergency response plan and/or standard operating procedures.
	5.4.3	**Initiating the Incident Command System** (1) Implement the incident command system as required by the AHJ. (2) 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. (3) Identify the levels of hazardous materials/WMD incidents as defined in the emergency response plan. (4) Identify the purpose, need, benefits, and elements of the incident command system for hazardous materials/WMD incidents. (5) Identify the duties and responsibilities of the incident safety office and the hazardous materials branch group within the incident management system. (6) Identify the considerations for determining the location of the incident command post for a hazardous materials/WMD incident. (7) Identify the procedures for requesting additional resources at a hazardous materials/WMD incident. (8) Describe the role and response objectives of other agencies that respond to hazardous materials/WMD incidents.
	5.4.4	**Using Personal Protective Equipment (PPE)** (1) Describe considerations for the use of personal protective equipment provided by the AHJ. (2) Identify the importance of the buddy system. (3) Identify the importance of the backup personnel. (4) Identify the safety precautions to be observed when approaching and working at hazardous materials/WMD incidents. (5) Identify the signs and symptoms of heat and cold stress and procedures for their control. (6) Identify the capabilities and limitations of personnel working in the PPE provided by the AHJ. (7) Identify the procedures for cleaning, disinfecting, and inspecting personal protective equipment provided by the AHJ. (8) Maintain and store PPE following the instructions provided by the manufacturer on the care, use, and maintenance of the protective ensemble elements.

NFPA 1072 JPR	NFPA 472 Chapter	Competencies
		5.5 Evaluating Progress
5.6 Progress Evaluation and Reporting – Evaluate and report the progress of the assigned tasks for a hazardous materials/WMD incident, given a hazardous materials/WMD incident, an assignment, policies and procedures, status of assignment task, and approved communication tool is evaluated and communicated to the supervisor, who can adjust the IAP as needed.	**5.5.1**	**Evaluating the Status of Planned Response** (1) Determine the effectiveness of the actions taken in accomplishing the response objectives. (2) Identify the factors to be evaluated to determine if actions taken were effective in accomplishing the objectives. (3) Describe the circumstances under which it would be prudent to withdraw from a hazardous materials/WMD incident.
	5.5.2	**Communicating the Status of Planned Response** (1) Report the status of the planned response through the normal chain of command. (2) Identify the procedures for reporting the status of the planned response through the normal chain of command. (3) Identify the methods for immediate notification of the incident commander and other response personnel about critical emergency conditions at the incident.