

State of Oregon  
Department of Public Safety Standards and Training

**NFPA 472 Standard for Competence of Responders to  
Hazardous Materials/Weapons of Mass Destruction  
SAFETY OFFICER  
Task Book**

Task Book Assigned To:	
Name	DPSST Fire Service #
Agency Name	Date Initiated
Signature of Agency Head or Training Officer	Date Completed

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Department of Public Safety Standards and Training  
4190 Aumsville Hwy SE.  
Salem, Oregon 97317  
(503) 378-2100

Additional copies of this document may be downloaded from the DPSST web site:  
<http://oregon.gov/DPSST/FC/index.shtml>

NEW 1/2010

Task Book Qualification Record Books (Task Book) have been developed for various certification levels within the Oregon Department of Public Safety Standards and Training (DPSST) system. Each Task Book lists the job performance requirements (JPRs) for the specific certification level in a format that allows a candidate to be trained and evaluated during three (3) sequential sessions. Successful performance of all tasks, as observed and recorded by a qualified and approved evaluator will result in the candidate's eligibility for DPSST certification.

To become certified at a specific level, the applicant must successfully complete the job performance requirements in sequence. Before a job performance evaluation can be taken, all requisite knowledge and skills must be satisfied. In addition, all relative task book evaluations must be checked off by the evaluator. When all prescribed requirements have been met, an application for Certification will be forwarded to DPSST. All certificates are mailed to the Training Officer at his/her Fire Service Agency.

**NOTE TO FIRE SERVICE AGENCIES:** These JPRs serve as general guidelines. As such they are not intended to replace specific sequences of apparatus or equipment operation that may be outlined by manufacturer specifications. At all times, standard operating procedures of the Fire Service Agency in which the evaluation is being conducted will govern. Fire Service Agencies should have available for evaluators a copy of manufacturer specifications and the Fire Service Agencies standard operational guidelines.

The JPRs covered in this Task Book meet or exceed all NFPA published standards for this certification level at the time of this publication. Mention of NFPA and its standards do not, and are not intended as adoption of—or reference to—NFPA standards. For more information on the complete job performance requirements and data, see the individual DPSST Task Book for that certification level.

### **Oregon Administrative Rule 259-009-0062**

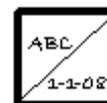
#### **Fire Service Personnel Certification**

(D) Task books must be monitored by a Field Training Officer approved by the Department. The Field Training Officer must be certified at or above the level being monitored and have at least five (5) years inspection experience. The Department may approve other Field Training Officers with equivalent training, education and experience as determined by designated Department staff.

#### **HOW TO EVALUATE PERFORMANCE:**

Each JPR has one corresponding box to the right in which to confirm a candidate's success. The evaluator shall indicate successful passing by the candidate of each JPR by initialing and dating (see example).

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



# TASK BOOK QUALIFICATION RECORD

FOR THE CERTIFICATION LEVEL OF

## SAFETY OFFICER

Prior to becoming certified in this position, the NFPA 472 Hazardous Materials/WMD Safety Officer candidate must successfully complete the following Job Performance Requirements (JPR) or competencies. The evaluator must initial and date the appropriate box to indicate successful completion. For each JPR or competency, there are requisite knowledge and skill requirements. The evaluator must initial and date in the box provided to indicate the meeting of those requirements before the candidate may proceed.

### Goal and Expectations

The goal of the competencies at this level is to provide the hazardous materials safety officer with the knowledge and skills to evaluate a hazardous materials/WMD incident for safety and ensure that recognized safe operational practices are followed and to perform the tasks safely.

When responding to hazardous materials/WMD incidents, the hazardous materials safety officer must be able to perform the following tasks safely and effectively:

### 11.1 General.

#### 11.1.1\* Introduction.

**11.1.1.1** The hazardous materials safety officer (NIMS: Assistant Safety Officer — Hazardous Material) shall be that person who works within an incident management system (IMS) (specifically, the hazardous material branch/group) to ensure that recognized hazardous materials/WMD safe practices are followed at hazardous materials/ WMD incidents.

**11.1.1.2** The hazardous materials safety officer shall be trained to meet all competencies at the awareness level (Chapter 4), all core competencies at the operations level (Chapter 5), all competencies at the technician level (Chapter 7), and all competencies of this chapter.

**11.1.1.3** The hazardous materials safety officer shall receive additional training to meet applicable governmental occupational health and safety regulations.

### 11.1.2 Goal.

**11.1.2.1\*** The goal of the competencies at this level shall be to provide the hazardous materials safety officer with the knowledge and skills to evaluate a hazardous materials/WMD incident for safety and ensure that recognized safe operational practices are followed and to perform the tasks in 11.1.2.2 safely.

**11.1.2.2** When responding to hazardous materials/WMD incidents, the hazardous materials safety officer shall be able to perform the following tasks safely and effectively:

(1) Analyze a hazardous materials/WMD incident to determine the complexity of the problem in terms of safety by observing a scene and reviewing and evaluating hazard and response information as it pertains to the safety of all persons in the hazardous materials branch/group.

(2) Assist in planning a safe response within the capabilities of available response personnel, personal protective equipment, and control equipment by completing the following tasks:

(a) Identify the safety precautions for potential response options.

(b) Provide recommendations regarding the site safety and control plan.

(c) Assist in the development of an incident action plan.

(d) Review the incident action plan and provide recommendations regarding safety.

(e) Review the selection of personal protective equipment required for a given action option.

(f) Review the decontamination plan and procedures.

(g) Ensure that emergency medical services are provided.

(3) Ensure the implementation of a safe response consistent with the incident action plan, the emergency response plan, and/or standard operating procedures by completing the following tasks:

(a) Perform the duties of the hazardous materials safety officer within the incident command system.

(b) Identify safety considerations for personnel performing the control functions identified in the site safety and control plan.

(c) Conduct safety briefings for personnel performing the control functions identified in the site safety and control plan.

(d) Assist in the implementation and enforcement of the site safety and control plan.

(e) Maintain communications within the incident command structure during the incident.

(f) Monitor status reports of activities in the hot and the warm zones.

(g) Ensure the implementation of exposure monitoring (personnel and environment).

(4) Evaluate the progress of the planned response to ensure that the response objectives are being met safely by completing the following tasks:

(a) Identify deviations from the site safety and control plan or other dangerous situations.

(b) Alter, suspend, or terminate any activity that can be judged to be unsafe.

(5) Assist in terminating the incident by completing the following tasks:

(a) Perform the reporting, documentation, and followup required of the hazardous materials safety officer.

(b) Assist in the debriefing of hazardous materials branch/group personnel.

(c) Assist in the incident critique.

## 11.2 Competencies — Analyzing the Incident.

**11.2.1 Determining the Magnitude of the Problem in Terms of Safety.** Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall observe a scene, review and evaluate hazard and response information as it pertains to the safety of all persons within the hazardous materials branch/group, and meet the requirements of 11.2.1.1 through 11.2.1.6.

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

- (1) Acute and chronic toxicity
- (2) Dose response
- (3) Local and systemic effects
- (4) Routes of exposure to toxic materials
- (5) Synergistic effects

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

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

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

**11.2.1.5** Given the names of five hazardous materials/WMD and at least three reference sources, the hazardous materials safety officer shall identify the health concerns and their potential impact on the safety and health of personnel at an incident involving each of the materials or agents.

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

### **11.3 Competencies — Planning the Response.**

**11.3.1\* Identifying the Safety Precautions for Potential Response Options.** Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall assist the hazardous materials officer in developing a site safety and control plan to respond within the capabilities of available response personnel, personal protective equipment, and control equipment and shall complete the following tasks:

(1)\* Identify specific safety precautions to be observed during mitigation of each of the hazards or conditions identified in 11.2.1.6.

(2)\* Identify safety precautions associated with search and rescue missions at hazardous materials/WMD incidents.

### **11.3.2 Providing Recommendations Regarding Safety Considerations.**

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

**11.3.2.2** The hazardous materials safety officer shall develop recommendations for the hazardous materials officer regarding safety considerations of the hazards and risks for each of the hazardous materials/WMD and containers identified in 11.2.1.6.

**11.3.3 Assisting in the Development of a Site Safety and Control Plan for Inclusion in the Incident Action Plan.**

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

(1)\* Identify the importance and list five benefits of pre-emergency planning relating to specific sites.

(2)\* Identify and name five hazards and precautions to be observed when personnel approach a hazardous materials/WMD incident.

(3)\* List the elements of a site safety and control plan.

(4) Given a pre-incident plan and a scenario involving one of the hazardous materials/WMD and containers described in 11.2.1.6, develop safety considerations for the incident.

**11.3.4 Providing Recommendations Regarding Safety and Reviewing the Incident Action Plan.** Given a proposed incident action plan for an incident involving one of the hazardous materials/WMD and containers described in 11.2.1.6, the hazardous materials safety officer shall identify to the incident safety officer, the hazardous materials officer, and the incident commander the safety precautions for the incident action plan and shall complete the following tasks:

(1) Ensure that the site safety and control plan in the proposed incident action plan is consistent with the emergency response plan and/or standard operating procedures.

(2) Make recommendations to the incident commander on the safety considerations in the proposed incident action plan.

**11.3.5 Reviewing Selection of Personal Protective Equipment.** Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall demonstrate the ability to review the selection of personal protective equipment required for a given action option and shall complete the following tasks:

(1) Identify five safety considerations for personnel working in personal protective equipment.

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

(3)\* Given the names of five different hazardous materials/WMD, identify the personal protective equipment options for specified response options.

(4) Identify the recommended methods for donning, doffing, and using all personal protective equipment provided by the AHJ for use in hazardous materials/WMD response activities.

**11.3.6 Reviewing the Proposed Decontamination Procedures.** Given site-specific decontamination procedures by the hazardous materials officer or incident commander for a scenario involving a hazardous materials/WMD incident, the hazardous materials safety officer shall review the procedures to ensure that applicable safety considerations are included prior to implementation of the incident action plan.

**11.3.7 Ensuring Provision of Emergency Medical Services.** Given a scenario involving a hazardous materials/WMD incident, the hazardous materials safety officer shall review the emergency medical services procedures to ensure that response personnel are provided medical care and shall complete the following tasks:

(1)\* Identify the elements required in an emergency medical services plan.

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

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

#### **11.4 Competencies — Implementing the Planned Response.**

**11.4.1 Performing the Duties of the Hazardous Materials Safety Officer.** Given a scenario involving hazardous materials/WMD incidents, the hazardous materials safety officer shall perform the duties of the position in a manner consistent with the emergency response plan and/or standard operating procedures and shall complete the following tasks:

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

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

**11.4.2 Monitoring Safety of Response Personnel.** Given scenarios involving a hazardous materials/WMD incident, the hazardous materials safety officer shall ensure that personnel perform their tasks in a safe manner by identifying the safety considerations for the control functions identified in the site safety and control plan and shall complete the following tasks:

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

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

- (a) Activity levels
- (b) Duration of entry
- (c) Environmental factors
- (d) Hydration
- (e) Level of personal protective equipment
- (f) Physical fitness

(3) Identify the methods that minimize the potential harm from heat and cold stresses.

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

(5) Describe five conditions in which it would be prudent to withdraw from a hazardous materials/WMD incident.

### **11.4.3 Conducting Safety Briefings.**

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

**11.4.3.2** The hazardous materials safety officer shall be able to demonstrate the procedure for conducting a safety briefing to personnel for an incident involving one of the hazardous materials/WMD and its container identified in 11.2.1.6, as specified by the emergency response plan and/or standard operating procedures.

**11.4.4 Implementing and Enforcing the Site Safety and Control Plan.** Given a scenario involving a hazardous materials/WMD incident and site safety and control plan, the hazardous materials safety officer shall assist the incident commander, the incident safety officer, and the hazardous materials officer in implementing and enforcing the safety considerations and shall complete the following tasks:

(1) Identify whether the boundaries of the established control zones are clearly marked, consistent with the site safety and control plan, and are being maintained.

(2) Identify whether the on-site medical monitoring required by the emergency response plan and/or standard operating procedures is being performed.

(3) Given an entry team, a backup team, and a decontamination team working in personal protective clothing and equipment, verify that each team is protected and prepared to safely perform its assigned tasks by completing the following:

(a) Determine whether the selection of clothing and equipment is consistent with the site safety and control plan.

(b) Determine whether each team has examined the clothing for barrier integrity and the equipment to ensure correct working order.

(c) Determine whether protective clothing and equipment have been donned in accordance with the standard operating procedures and the manufacturer's recommendations.

(4) Determine whether each person entering the hot zone has a specific task assignment, understands the assignment, is trained to perform the assigned task(s), and is working with a designated partner at all times during the assignment.

(5) Determine whether a backup team is prepared at all times for immediate entry into the hot zone during entry team operations.

(6) Determine whether the decontamination procedures specified in the site safety and control plan are in place before any entry into the hot zone.

(7) Verify that each person exiting the hot zone and each tool or piece of equipment is decontaminated in accordance with the site safety and control plan and the degree of hazardous materials/WMD contamination.

(8) Demonstrate the procedure for recording the names of the individuals exiting the hot zone, as specified in the emergency response plan and/or standard operating procedures.

(9)\* Identify three safety considerations that can minimize secondary contamination.

**11.4.5 Maintaining Communications.** Given a scenario involving a hazardous materials/WMD incident and the site safety and control plan, the hazardous materials safety officer shall maintain routine and emergency communications within the incident command structure at all times during the incident and shall complete the following tasks:

(1)\* Identify three types of communications systems used at hazardous materials/WMD incident sites.

(2) Verify that each person assigned to work in the hot zone understands the emergency alerting and response procedures specified in the safety considerations prior to entry into the hot zone.

#### **11.4.6 Monitoring Status Reports.**

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

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

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

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

### **11.5 Competencies — Evaluating Progress.**

**11.5.1 Identifying Deviations from Safety Considerations or Other Dangerous Situations.** Given scenarios involving hazardous materials/WMD incidents and given deviations from the site safety and control plan for activities in both the hot and warm zones and dangerous conditions, the hazardous materials safety officer shall evaluate the progress of the planned response to ensure that the response objectives are being met safely and shall complete the following tasks:

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

(2) Identify dangerous conditions that develop or are identified during work in the hot or warm zones that threaten the safety or health of persons in those zones.

(3) Identify the signs and symptoms of psychological and physical stresses on personnel wearing personal protective equipment.

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

(1) Send emergency communications to and receive emergency communications from the incident safety officer, entry team personnel, the hazardous materials officer, and others regarding safe working practices and conditions:

(a)\* Given a hazardous situation or condition that has developed or been identified following initial hot zone entry, demonstrate the application of the emergency alerting procedures specified in the site safety and control plan to communicate the hazard and emergency response information to the affected personnel.

(b) Given a demonstrated emergency alert via hand signal by a member of the entry team operating within the hot zone, identify the meaning of that signal as specified in the site safety and control plan.

(2) Identify the procedures to alter, suspend, or terminate any activity that can be judged to be unsafe, as specified in the emergency response plan and/or standard operating procedures.

(3) Demonstrate the procedure for notifying the appropriate individual of the unsafe action and for directing alternative safe actions, in accordance with the site safety and control plan and standard operating procedures.

(4) Demonstrate the procedure for suspending or terminating an action that could result in an imminent hazard condition, in accordance with the emergency response plan and standard operating procedures.

## 11.6 Competencies — Terminating the Incident.

**11.6.1 Reporting and Documenting the Incident.** Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall complete and submit the reports, documentation, and follow-up required of the hazardous materials safety officer and shall complete the following tasks:

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

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

(3) Describe the importance of personnel exposure records.

**11.6.2 Debriefing of Hazardous Materials Branch/Group Personnel.** Given scenarios involving hazardous materials/WMD incidents, the hazardous materials safety officer shall debrief hazardous materials branch/group personnel regarding site-specific occupational safety and health issues.

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

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

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

(1) Safety and health-related critical observations of the activities that were performed in the hot and warm zones during the incident

(2) Recorded violations of the site safety and control plan or generally accepted safe operating practices, organizational policies, or applicable occupational safety and health laws, regulations, codes, standards, or guidelines

(3) Injuries or deaths that occurred as a result of reasonably unforeseen dangerous conditions that developed during the incident

(4) Injuries or deaths that occurred as a result of violations of the site safety and control plan, generally accepted safe operating practices, organizational policies, or applicable occupational safety and health laws, regulations, codes, standards, or guidelines

(5) The course of action(s) that likely would have prevented the injuries or deaths that occurred as a result of the safety violations identified in 11.6.3.1(4)

(6) Deficiencies or weaknesses in the site safety and control plan, emergency response plan, and standard operating procedures that were noted during or following the incident