



# Indiana Hazardous Materials Team Qualification Program for Mobile Support Units

October 2011

Indiana Alliance of Hazardous Materials  
Responders

and the

Indiana Department of Homeland Security  
CBRNE Section

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## **INTRODUCTION**

This Comprehensive Hazardous Materials Team Qualification Program is provided by a cooperative effort between the Indiana Department of Homeland Security (IDHS), Field Services Division, Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) Section and the Indiana Alliance of Hazardous Materials Responders (IAHMR) for the purpose of being used as a tool by the hazardous materials teams (HMT) in Indiana to determine equipment and training best practices. HMTs should review this Recommended Equipment List (REL) when preparing to develop equipment specifications, purchase orders, creating or updating local master hazardous materials equipment inventory lists, and for reviewing requirements for hazardous materials/ Weapons of Mass Destruction (WMD) chemical-biological response equipment grants. The Typing section should be used to determine training requirements for *the three (3) different levels of competency*. These levels of competency are dependent upon response capabilities and equipment

### NOTES:

It should be noted that as used in this document hazardous materials (hazmat) team and CBRNE team are synonymous. It is understood that hazardous materials teams may routinely respond to incidents involving WMD. *In addition, this document should not be used to determine team personnel training requirements. Individual levels of training should be determined by the level of performance (Type) of team.*

Once you have completed the online portion of the qualification program, contact the Field Services Division of the IDHS at [fieldservices@dhs.in.gov](mailto:fieldservices@dhs.in.gov) to request one of the CBRNE Section specialists to schedule a meeting with you to complete this qualification program. You can expect a minimum of eight (8) hours will be required to complete the on-site portion of this evaluation.

**IT IS STRONGLY SUGGESTED THAT YOU PRINT THIS DOCUMENT AND REFERENCE DOCUMENTS IN THEIR ENTIRITY BEFORE ATTEMPTING TO COMPLETE THE ONLINE PROTION OF THE ASSESSEMENT PROGRAM!**

## **MOBILE SUPPORT UNITS**

A mobile support unit is a temporary response organization that may be formed and then activated by the Indiana Department of Homeland Security under IC 10-14-3-19. Mobile Support Units may be established either by the Governor or the IDHS Executive Director to respond to a disaster, public health emergency, public safety emergency or other event that requires emergency action. A Mobile Support Unit (MSU) may include governmental unit employees, private sector employees, and self-employed or unemployed individuals. Frequently, a mobile support unit is a specialized group such as a HAZMAT or EMS team, and can include firefighters, rescue specialists and paramedics.

Under the provisions of IC 10-14-3-19, the Executive Director of the Indiana Department of Homeland Security has the authority to activate one or more Mobile Support Units (MSU) to respond to a disaster, public health emergency, public safety emergency, or other event that requires emergency action. One or more of your employees may have volunteered to be a member of a mobile support unit to provide fire, law enforcement, hazardous materials, emergency medical or other essential response services. It is this MSU support that provides a mechanism for District Response Task Forces (DRTF) to exist and function.

This hazardous materials team qualification document is designed to enhance MSU organization and performance by establishing standardized hazardous materials response throughout Indiana. It is this standardized approach that assures a requesting jurisdiction that the MSU provided by the State to assist will be a properly qualified, trained and equipped hazmat team. An MSU has certain protections from tort liability under IC 10-14-3-15 and IC 10-14-3-19.

## **PROTECTION FROM TORT LIABILITY**

Issues of tort liability will always depend upon the actual factual circumstances giving rise to a particular injury or damage. The ultimate issue of whether a particular person or entity is liable to an injured party will always depend upon the facts. No general statement or discussion of the subject within a guidance document such as this can possibly anticipate all the circumstances or address all the questions that are involved. The following discussion merely identifies one statute of particular importance to Mobile Support Unit participants.

IC 10-14-3-15 creates a broad grant of immunity for the state and its political subdivisions when “complying with or reasonably attempting to comply with IC 10-14-3, Indiana’s “Emergency Management and Disaster Law.” IC 10-14-3-15 also grants limited immunity to any emergency management worker “complying with or reasonably attempting to comply with IC 10-14-3 or any order or rule adopted under this chapter or under any ordinance related to blackout or other precautionary measures enacted by any political subdivision of the state.” Such an emergency management worker is not liable for the death of or injury to persons or for damage to property as a result of any such activity, except in cases of willful misconduct, gross negligence or bad faith. An individual MSU member is considered an “emergency management worker” for the purposes of the grant of limited immunity provided to such persons in IC 10-14-3-15. Therefore, except in cases of willful misconduct, gross negligence or bad faith, an emergency management worker complying with or reasonably attempting to comply with Indiana Emergency Management Law is not liable for the death of or injury to persons or for damage to property as a result of any such activity. Under the legal doctrine of *respondeat superior*, the employer of an emergency management worker’s liability is derived from the liability of the employee. If the employee is not liable due to the application of the legislative grant of limited immunity, the employer is not liable either.

## **DISCLAIMER**

The IDHS, Field Services Division, CBRNE Section, the Indiana Alliance of Hazardous Materials Responders do not intend to assume any liability for the performance of a Mobile Support Unit in response to a request from an Indiana political subdivision for assistance. Nor is any approval or endorsement of a specific equipment item or tool intended by mention of a model number, brand name, or manufacturer as provided in example notations. These example notations are included in the main body of the equipment list merely for clarification and comparison purposes. This Hazardous Materials Team Qualification Program describes a suggested list of equipment items or tool categories, in an attempt to promote some level of standardization within Indiana HMT's, since any HMT may be included in a Mobile Support Unit. The users of this document are solely responsible for the specific selection and purchase of items to be added to their agency's inventory. This is a reference document only, and should only be used as a guide in an attempt to promote best practices and to promote a level of statewide standardization.

This document is not mandatory. Compliance with any of the suggestions contained herein is strictly voluntary. No local unit of government is required to do anything, by virtue of this document.

This guidance document was never intended to establish a standard of care, minimum standards that a HAZMAT Team must attain, or standard operating procedures that can be used as a basis of asserting liability against any of the participating agencies or entities. To the extent that it touches upon subjects that may be characterized as suggested equipment lists or suggested operating procedures, it merely contains certain statements of best practices. In many cases, the best practices contained within this document strive to exceed and improve upon prevailing standard practices. This guidance document is not intended to be relied on by any other individual, public or private or any agency which is not a hazardous materials team. This guidance document is not intended to be used in a court of law to determine an applicable standard of care under any circumstances.

## **AUTHORITY**

This qualification program is a publication of the IDHS, Field Services Division, CBRNE Section and the Indiana Alliance of Hazardous Materials Responders. This edition of the qualification program becomes effective upon the date of publication, and remains in effect until superseded by the publication of the next updated edition.

## **INTENT**

The sole intent of this guidance is to define and develop human and equipment resources deemed by the State as suitable to fill specific positions on a Hazardous Materials Emergency Response Team that may be included within a Mobile Support Unit formed under IC 10-14-3-19.

Additionally this qualification program is to:

- a. Provide a suggested uniform hazardous materials equipment list:  
Establish a suggested all-encompassing list of equipment that has been found to be consistent with and often utilized by hazardous materials response teams. The equipment items included in this list is predicated upon the evolution of hazardous materials response intervention, and the history of popularity, utility, and need as demonstrated by the maintenance of local agency inventories. This master list would serve as the basis for a sourcing document.
- b. Establish suggested standardized equipment and tool response categories and criteria:  
Create a standardized set of “Categories” and “Sub-Categories”. Equipment will be listed within these categories and sub-categories based upon their function. The function will be described in a criteria paragraph that will accompany each category and sub-category.
- c. Adopt standardized equipment and tool performance descriptions:  
Each individual equipment item will be briefly described in terms of a short use or performance statement. In many cases the description will also include example sizes or nominal dimensions.
- d. Support Hazardous Materials Team Typing equipment needs:  
Consistent with the IDHS, Field Services Division, CBRNE Section and Indiana Alliance of Hazardous Materials Responders, *Hazardous Materials Team Types and Suggested Standards* chart, this list will identify and establish the recommended minimum equipment items needed to meet any one of the three types of hazardous materials teams. This list would also identify other hazardous materials equipment items that could be considered to be included in a local agency’s inventory.
- e. Promote use and adherence to industry accepted performance standards:  
This list, where appropriate, will identify various performance and regulatory standards to which the user (agency having jurisdiction, i.e. the employer and the employee) may wish to adopt, as well as those standards that provide a suggested level of performance of the item, tool, or piece of equipment (i.e. the manufacturer).

## **CONCEPT OF IMPLEMENTATION**

This qualification program will be implemented in three phases.

### ***Phase 1 – Initial Qualification***

Phase one will commence upon the approval of this document by the Indiana Department of Homeland Security Executive Director. Phase one will include an initial Hazardous Materials Hazard Analysis (HMHA) that each individual team shall be responsible for completing. The HMHA pertains to hazardous materials vulnerabilities within each team's response area. The HMHA is a written summary that should include a description of the identifying the hazardous materials team's response jurisdiction (geographical boundaries of response area), the local hazards identified by the hazardous materials team, typical hazardous materials responses performed, and information obtained on the tier 2 facilities within the response jurisdiction. This summary should also include equipment and training needs identified by the team.

The IDHS Field Services Division, CBRNE Section will be responsible for reviewing the results of each individual teams HMHA. This review will provide a better understanding of the status of hazardous materials preparedness in Indiana. This information will be helpful both to the teams themselves and to IDHS. The HMHA will assist IDHS by serving as the basis for identifying critical needs in support of hazardous materials programs. This phase is to be completed by February 28, 2012.

Once completed the HMHA shall be submitted to the IDHS Field Services Division, CBRNE Section at [fieldservices@dhs.in.gov](mailto:fieldservices@dhs.in.gov).

### ***Phase 2 – Hazardous Materials Team Typing and Qualification***

In this phase, Hazardous Materials Teams that volunteer to participate in this program will undergo a detailed evaluation measured by this document. A portion of this evaluation will be completed utilizing a Zoomerang survey. Details on completing this survey are located in Appendix A. As teams are evaluated against the recommendations found in this document, IDHS will determine if a team qualifies to be a Type I, Type II, or Type III Hazardous Materials team for use as a Mobile Support Unit. Teams will be typed in accordance with their capabilities, and deficiencies will be identified. This qualification will also assist with identifying equipment gaps, calibration needs, team program weaknesses, and training needs. These evaluations will be conducted by the IDHS Field Services Division, CBRNE Section by December 31, 2012.

### ***Phase 3 – On-Going Maintenance***

This final phase will be conducted by continuing annual self-qualifications to be conducted by local hazardous materials teams. To assist them the IDHS Field Services Division will conduct random quality assurance audits of participating teams. This phase will continue until December 31, 2013 or until this program guidance is updated.

## LEVELS OF RESPONSE

The development and adoption of this qualification program includes a recommended inventory for each of the three **Types** of hazardous materials teams (**HazMat Type I, HazMat Type II, HazMat Type III**).

As listed on the far right-hand side (top) of the REL are three columns marked “**Type I**”, “**Type II**”, and “**Type III**”. These refer to each of the three types of hazardous materials teams as described in the “*Hazardous Materials Company Types, Company Typing and Standards*” chart. In review, they are as follows:

- A “**Type III**” company is one that: Is appropriately equipped and trained to handle, and can function in all categories, for all *known* industrial chemical hazards, in liquid, aerosol, powder and solid forms. They are not expected to be fully equipped to intervene and handle vapor/gas emergencies, nor incidents involving WMD chemical and biological substances.
- A “**Type II**” company is one that: Meets all “Type III” requirements, and is appropriately equipped and trained to handle, and can function in all categories, for all *unknown* industrial chemical hazards, in liquid, aerosol, powder, solids, and vapor/gasforms. They are not expected to be fully equipped to intervene and handle incidents involving WMD chemical and biological substances.
- A “**Type I**” company is one that: Meets all “Type III” and Type II” requirements, and is appropriately equipped and trained to handle, and can function in *all* categories, for all known and unknown WMD chemical and biological substances.

Items noted as being required for each of the three hazardous materials team types represents a suggested baseline equipment standard. Local jurisdictions may elect to exceed this suggested equipment standard. To further ensure and encourage attempts at uniformity and standardization, additional equipment items are listed in this REL which are not required, and are noted as being optional.

Local jurisdictions may also elect to include specialized equipment not listed in this REL.

## **TRAINING REQUIREMENTS**

IC 22-14-2-7 provides that the Board of Firefighting Personnel Standards and Education certifies firefighting training and education programs, certify instructors, certify fire service personnel and non-fire service personnel who meet the qualifications set by the Board and adopt rules to carry out its responsibilities. These rules have been adopted and are now found at 655 IAC 1-1-1 through 655 IAC 1-4-2.

655 IAC 1-2.1-24 adopts NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, Chapter 4, 2002 edition by reference and makes it a part of the Indiana Administrative Rule establishing minimum training standards for Hazardous Materials First Responder-Awareness.

655 IAC 1-2.1-24.1 adopts NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, Chapter 5, 2002 edition by reference and makes it a part of the Indiana Administrative Rule establishing minimum training standards for Hazardous Materials First Responder-Operations.

655 IAC 1-2.1-24.2 adopts NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, Chapter 6, 2002 edition by reference and makes it a part of the Indiana Administrative Rule establishing minimum training standards for Hazardous Materials First Responder-Technician.

655 IAC 1-2.1-24 adopts NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, Chapter 7, 2002 edition by reference and makes it a part of the Indiana Administrative Rule establishing minimum training standards for Hazardous Materials-Incident Command.

It is noted that the Indiana Alliance of Hazardous Materials Responders and the CBRNE Section of the IDHS recognizes the latest nationally adopted edition of NFPA 472 as the “Standard of Care” to be used by all hazmat teams when developing training criteria. It is further understood that the training section of the IDHS may not be using the latest edition of NFPA 472 as a training standard. This does not negate the need for hazmat teams to use the latest edition.

These training requirements are reflected in the section of this document titled ***Hazardous Materials Team Types Explanation of Components*** in the center area named Criteria. These criteria reflect competencies that each team member should demonstrate. The right-hand column lists the performance requirements for the three levels of operational capability.

## **RECOMMENDED EQUIPMENT LIST – Instructions for Use**

### **Categories:**

This Standardized Equipment List is divided into thirteen (13) main equipment categories. These main categories constitute the template for the Master Table of Contents. Each main category may be further divided into one or more sub-categories. Each category (i.e. Chemical Protective Clothing) and each individual subcategory (i.e. Vapor Protective) includes a descriptive paragraph that explains and defines in more detail the specific criteria that encompasses that category and sub-category. The itemized listing of all equipment or tools is found immediately following a sub-category.

### **Inventory Numbering:**

The listing of all suggested individual items, tools, and equipment that follows a sub-category is given a specific and unique number. This is indicated in a column named “**Inv. #.**” This number will become the unique assigned inventory number for that item within this REL. It should be noticed that the number relates to its category and to its sub-category. Therefore, by referencing a specific tool or item’s REL inventory number, it will be easy to determine what category and what sub-category that tool or item falls under.

### **Requirement:**

In the REL, there is a column marked “**Requirement**”. The term requirement actually refers to suggested equipment. This column is used to indicate the specific requirements that must be met for a particular item or tool (i.e., “One Kit, complete”). It will also indicate the minimum quantity that must be included in a particular Type I, II, or III company inventory (i.e., one for each assigned member). If the item is indicated as being **Suggested (S)** for a specific company type, it must be included in the inventory in an amount not less than that shown in this column. If the item is indicated as being **Optional (Opt)** for a specific company type, it does not need to be included in an inventory, but if the agency desires to include that item voluntarily, the quantity shown should be considered. If the item is indicated as being **Not Applicable (NA)**, maintaining an inventory of this item is not required in order to satisfy that level of Company Type, and therefore is not recommended.

## **OSHA EMPLOYER RECORDKEEPING REQUIREMENTS**

The Authority Having Jurisdiction (AHJ) shall demonstrate proper recordkeeping, including written SOG's, for each of the following requirements from the Occupational Health and Safety Administration (OSHA) 29 CFR:

### **ICS/NIMS Forms and Usage – OSHA 29 CFR 1910.120(q)(3)(i)**

- The senior emergency response official responding to an emergency shall become the individual in charge of a site-specific Incident Command System (ICS)
- All emergency responders and their communications shall be coordinated and controlled through the individual in charge of the ICS assisted by the senior official present for each employer

### **Written Safety and Health Program – OSHA 29 CFR 1910.120(f) and 1910.120 Appendix C (8)**

- An organizational structure
- A comprehensive work plan
- A site-specific safety and health plan which need not repeat the employer's standard operating procedures required in paragraph (b)(1)(ii)(F) of this section
- The safety and health training program
- The medical surveillance program
- The employer's standard operating procedures for safety and health; and
- Any necessary interface between general program and site specific activities
- Assess and monitor workers' health and fitness for employment in hazardous waste operations and during the course of work
- Provide emergency and other treatment as needed
- Keep accurate records for future reference
- Medical records shall be kept for 30-years from date of employment termination

**Written PPE Program – OSHA 29 CFR 1910.120 Appendix C (5)**

- PPE selection based upon site hazards,
- PPE use and limitations of the equipment,
- Work mission duration,
- PPE maintenance and storage,
- PPE decontamination and disposal,
- PPE training and proper fitting,
- PPE donning and doffing procedures,
- PPE inspection procedures prior to, during, and after use,
- Evaluation of the effectiveness of the PPE program, and
- Limitations during temperature extremes, heat stress, and other appropriate medical considerations.
- Totally Encapsulating CPC testing as per manufactures instruction
- Policy statements
- Procedures, and guidelines
- Technical data on equipment, maintenance manuals, relevant regulations, and other essential information should also be collected and maintained

**Written Site Safety and Control Plans – OSHA 29 CFR 1910.120 Appendix C (7)**

- Summary analysis of hazards on the site and a risk analysis of those hazards
- Site map or sketch
- Site work zones (clean zone, transition or decontamination zone, work or hot zone)
- Use of the buddy system
- Site communications

- Command post or command center
- Standard operating procedures and safe work practices
- Medical assistance and triage area
- Hazard monitoring plan (air contaminate monitoring, etc.)
- Decontamination procedures and area
- And any other relevant areas

**Written Emergency Response Plan – OSHA 29 CFR 1910.120(q)(2)**

- Pre-emergency planning
- Personnel roles, lines of authority, and communication
- Emergency recognition and prevention
- Safe distances and places of refuge
- Site security and control
- Evacuation routes and procedures
- Decontamination
- Emergency medical treatment and first aid
- Emergency alerting and response procedures
- Critique of response and follow-up
- PPE and emergency equipment
- Site topography, layout, and prevailing weather conditions
- Procedures for reporting incidents to local, state, and federal governmental agencies
- The emergency response plan shall be a separate section of the Site Safety and Health Plan*

**Monitoring** – OSHA 29 CFR 1910.120(h)(1)(2)(3)

- Initial entry
- Periodic
- Written Respiratory Program – 1910.138
- Written Policy/Procedures for using skilled support personnel – 1910.120(4)
- Annual Competency Testing

## **HAZARDOUS MATERIALS TEAM CAPABILITIES**

This section defines the desired **capabilities** for hazardous materials teams. It should be noted that the listed **capabilities** and **competencies** were not determined by the Indiana Department of Homeland Security, Field Services Division, CBRNE Section and and/or the Indiana Alliance of Hazardous Materials Team Responders. All information contained in this document was taken from the U.S. Department of Homeland Security's Target Capabilities List, OSHA, NFPA or California's FireScope.

### ***Capability Definition***

Weapons of Mass Destruction (WMD) and Hazardous Materials Response and Decontamination are the **capability** to assess and manage the consequences of a hazardous materials release, either accidental or as part of a terrorist attack. It includes testing and identifying all likely hazardous substances onsite; ensuring that responders have protective clothing and equipment; conducting rescue operations to remove affected victims from the hazardous environment; conducting geographical qualification program searches of suspected sources or contamination spreads and establishing isolation perimeters; mitigating the effects of hazardous materials, decontaminating on-site victims, responders, and equipment; coordinating off-site decontamination with relevant agencies, and notifying environmental, health, and law enforcement agencies having jurisdiction for the incident to begin implementation of their standard evidence collection and investigation procedures.

### ***Desired Outcome***

It is optimal for a hazardous materials release to be rapidly identified and mitigated; victims exposed to the hazard are rescued, decontaminated, and treated; the impact of the release is limited; and responders and at-risk populations are effectively protected.

## HAZARDOUS MATERIALS TEAM CAPABILITY – Flow Chart

Activity: <i>Develop and Maintain Plans, Procedures, Programs, and Systems</i>	
Critical Tasks	
Res.B2b 1.1	Develop plans, programs, agreements, and requirements for responding to hazardous material incidents
Res.B2b 1.2	Develop plans, programs, criteria, and protocols for conducting decontamination
Res.B2b 1.3.1	Pre-identify resources (personnel and equipment) to provide rapid initial size- up of hazardous materials incident
Res.B2b 1.4	Assist in developing a communications plan for hazardous materials in emergencies, related to specific hazards, health guidance, educational materials, etc.
Res.B2b 1.5	Ensure plans are in place for self-presenting contaminated victims off-site (e.g., hospitals)
Preparedness Measures	Metric
WMD/HazMat Response and Decontamination plans are based on a formal qualification of risks and vulnerabilities.	Yes/No
Risk analysis is completed for potential hazmat vulnerabilities, including fixed facilities and transportation-related emergencies	Yes/No
Frequency with which Emergency Response Plan is reviewed	Every 12 months
Local Emergency Planning Commission is functional	Yes/No
Frequency with which pre-planned hazards and targets are reviewed and updated	Every 12 months
Plans for pre-identified and equipped hazmat personnel to respond to hazmat incident and provide initial rapid hazmat incident size-up within 30 minutes from notification (<2hrs if regional resource) are in place	Yes/No
Hazmat personnel are equipped and trained for weather prediction and hazard pluming	Yes/No
Redundant hazmat response teams and equipment are available (or accessible through mutual aid agreements) to provide resiliency in the event of a large-scale incident	Yes/No
WMD/HazMat plans address substance identification equipment (e.g. bases, vapors, liquids, solids, biologicals like white powder).	Yes/No
WMD/HazMat plans address personnel needs (e.g. work/rest cycles, medical, psychological, financial assistance, etc.).	Yes/No
WMD/HazMat plans address demobilization (e.g. debrief personnel, repack equipment).	Yes/No
Jurisdiction’s hazmat team(s) has current protocol to coordinate with emergency medical services (EMS) on victim care post-decontamination (identification of substance, administration of antidotes, etc.)	Yes/No
Jurisdiction’s hazmat team(s) has current protocol to coordinate with law enforcement for evidence collection and crime scene control	Yes/No
Emergency response and command vehicles and Incident Command Posts are equipped with Emergency Response Guidebook, NIOSH pocket guidebook, and discipline-related references relevant to the region	Yes/No

<b>Activity: Develop and Maintain Training and Exercise Programs</b>	
<b>Critical Tasks</b>	
Res.B2b 2.1.1	Develop and implement training related to detection and reporting of hazardous material
Res.B2b 2.1.2	Provide appropriate hazmat response training to field staff and managers of State/local programs having involvement in hazmat response
ResB2b 2.2	Develop and implement exercise programs for WMD/hazardous materials response and decontamination
<b>Preparedness Measures</b>	<b>Metric</b>
Percent of police, fire, EMS , first responders (other than those assigned to hazmat responses) that are trained to hazmat awareness level	100%
Percent of first responders assigned to hazmat operations that are trained to hazmat operations level (in accordance with 1910.120 (g) or NFPA 472)	100%
Percent of personnel assigned to hazmat technician responsibilities who are trained to the hazmat technician level (in accordance with 1910.120 (g) or NFPA 472)	100%
Percent of personnel assigned to hazmat specialist responsibilities who are trained to the hazmat specialist level (in accordance with 1910.120 (g) or NFPA 472)	100%
Percent of personnel assigned to manage hazmat who are trained to hazmat management level (in accordance with 1910.120 (g), NFPA 471 and NFPA 472) for detection equipment, including flammability, toxicity, radiations, chemical warfare agents (CWAs) and biologicals	100%
Percent of personnel assigned to manage hazmat who are trained to hazmat management level (in accordance with 1910.120 (g), NFPA 471 and NFPA 472) for substance identification equipment, for bases and vapors, liquids, solids and biologicals (white powder)	100%
Hazmat personnel are equipped and trained for weather prediction and hazard pluming	Yes/No
Jurisdiction's hazmat team(s) trains regularly with EMS to ensure proper coordination of victim care post-decontamination (identification of substance, administration of antidotes, etc.)	Yes/No
Jurisdiction's hazmat team(s) trains regularly with law enforcement to ensure proper coordination for evidence collection and crime scene control	Yes/No

<b>Activity: <i>Direct WMD and Hazardous Material Response and Decontamination Tactical Operations</i></b>	
<b>Definition: In response to notification of WMD/hazmat event or contamination, provide management and coordination of hazmat response and decontamination</b>	
<b>Critical Tasks</b>	
Res.B2b 3.1	Receive alert/activation order for WMD and Hazardous Materials Response and Decontamination
Res.B2b 3.2	Establish and implement on-scene management for hazmat material response
Res.B2b 3.2.4	Provide a hazmat technical expertise team for emergency operations for both industry and public
Res.B2b 3.4.7	Implement a hazmat response (e.g., implement plans, programs, agreements, and requirements)
Res.B2b 3.2.7	Coordinate technical, administrative support, personnel, facilities, communications, and information
Res.B2b 3.2.6.2	Provide required Personal Protection Equipment to WMD/hazmat responders in coordination with safety officer
Res.B2b 3.2.5.4	Develop a site safety plan
Res.B2b 3.2.6.1	Observe the scene and review/evaluate hazard and response information as it pertains to the safety of all persons on the scene and responding
Res.B2b 3.2.6	Coordinate with safety officer to ensure the safety of on-scene WMD/hazmat responders
Res.B2b 3.4.7	Coordinate and support decontamination activities on-site
Res.B2b 3.4.7.4	Coordinate with and provide technical guidance to entities performing off-site decontamination
Res.B2b 3.4.7.5	Coordinate with hospitals to develop plans for managing/decontaminating self-presenting contaminated victims
Res.B2b 3.2.8	Coordinate resource management of hazmat equipment, supplies, and personnel
Res.B2b 3.4.7.6	Request decontamination technical assistance resources
Res.B2b 3.2.6.3	Coordinate with safety officer to brief hazmat branch/group personnel on-site-specific occupational safety and health issues involving hazmat/WMD releases
Res.B2b 3.4.7.7	Issue instructions for self-decontamination, where appropriate, expedient and possible
<b>Performance Measures</b>	
Number of loss-time injuries (per deployment) of WMD/hazmat Response and Decontamination personnel during rescue efforts	<1
Time in which tactical plan is developed, based on the incident action plan (IAP), and for implementation by the State, region, and/or local WMD/hazmat Response and Decontamination	Within 2 hours from arrival on scene

<b>Activity: Activate WMD and Hazardous Material Response and Decontamination</b>	
<b>Definition: In response to activation, mobilize and arrive at the incident scene to begin operations.</b>	
<b>Critical Tasks</b>	
Res.B2b 4.1	Initiate WMD/hazmat procedures
Res.B2b 4.2	Assemble personnel and equipment at designated location
Res.B2b 4.3	Transport team (personnel and equipment) to scene
Res.B2b 4.3.1	Conduct initial approach and positioning of responders
Res.B2b 4.3.2	Implement/integrate WMD/hazmat resources into ICS organization
Res.B2b 3.2.5.5	Initiate initial public protective actions (PPA)
<b>Performance Measures</b>	<b>Metric</b>
Team is coordinated/incorporated into ICS upon arrival	Yes/No
Time in which initial hazmat size-up is completed	Within 30 minutes from notification of incident
Time in which regional assets (e.g., Type I hazmat Team or Type III or IV Incident Management team) arrive on scene, if requested by IC	Within 2 hours from asset request
Time in which State assets (e.g., Type I hazmat Team or Type II or III Incident Management team) arrive on scene, if requested by IC	Within 12 hours from asset request
Time in which Federal assets (e.g., Type I hazmat Team or Type I or II Incident Management team) arrive on scene, if requested by IC	Within 24 hours from asset request
Time in which Radiological Emergency Preparedness Program (REPP) Response Teams appropriate for the incident size involving a radiological hazard are deployed	Within 24 hours from asset request
Time in which Radiological Assistance Program (RAP) Teams are deployed	Within 2 hours from asset request

<b>Activity: <i>Identify the Hazard</i></b> <b>Definition: Upon arriving on scene, begin to assess site, sample, identify, and characterize WMD/hazmat and contamination situation, conduct hazard analysis to determine potential consequence and risk, develop plans for safety and hazmat/decontamination operations, and set up hazmat zones.</b>	
<b>Critical Tasks</b>	
Res.B2b 5.1.1	Notify law enforcement for guidance on collection and management of evidence from potential crime scenes
Res.B2b 5.1	Initiate hazmat response
Res.B2b 5.2	Qualification program the incident scene
Res.B2b 5.2.1	Identify hazmat and the extent/scope of the incident
Res.B2b 5.5.3	Analyze weather forecast to conduct hazard zone prediction
Res.B2b 5.2.2	Conduct contamination qualification programs
Res.B2b 5.2.3	Assess hazmat release situation
Res.B2b 5.2.3.1	Conduct oil and hazmat qualification
Res.B2b 5.5.2	Monitor movement of hazardous releases and formulate predictions on dispersion and characteristics over time
Res.B2b 5.5	Characterize consequences and risk
Res.B2b 5.3	Identify and establish perimeter and hazmat zones (hot, warm, cold)
Res.B2b 5.4	Conduct ongoing qualifications and predictions
<b>Performance Measures</b>	
	<b>Metric</b>
Time in which area is isolated and public access is controlled	Within 15 minutes from arrival on scene
Time in which hazardous materials or category involved are identified	Within 30 minutes from arrival on scene

<b>Activity: Assess Hazard and Evaluate Risk</b>	
<b>Definition: Assess the hazards present, evaluate the level of risk to both responders and the public, and develop and Incident Action Plan (IAP) to address the response problem</b>	
<b>Critical Tasks</b>	
Res.B2b 5.5.1	Collect, prioritize, and manage data and information from all sources
Res.B2b 5.5.1.1	Develop incident monitoring and sampling strategy based upon a realistic qualification of operational hazards
Res.B2b 5.5.1.2	Conduct sampling operations
Res.B2b 5.5.1.3	Identify, classify, and verify suspected non-biological WMD/hazmat samples through the use of at least two (preferably three) different instrument technologies
Res.B2b 5.5.2	Use plume dispersion models and other analytical tools to generate ongoing WMD/hazmat dispersion qualifications
Res.B2b 5.5	Implement risk evaluation process that adequately addresses the risk of various actions to both responders and the public
Res.B2b 3.2.5.1	Develop and implement an Incident Action Plan (IAP) specific to WMD/hazmat issues based upon the risk evaluation process
Res.B2b 5.3	Establish and identify visually an isolation perimeter (outer perimeter) to isolate the area and deny entry
Res.B2b 5.3.1	Establish a hot zone (inner perimeter) to identify high hazard area(s) where responders will operate
Res.B2b 5.3.2	Establish other hazard control zones, based upon scope and nature of the event
Res.B2b 5.3.3	Make offensive or defensive reconnaissance operations, as necessary, to gather intelligence on the situation
Res.B2b 5.4	Conduct ongoing qualifications and predictions
<b>Performance Measures</b>	<b>Metric</b>
Time in which preliminary estimate of number of victims exposed to toxic/hazardous material and source identification is obtained	Within 2 hours from arrival on scene
Time in which the at-risk population is identified and protective action recommendations are made	Within 1 hour from arrival on scene
Time in which the WMD/hazmat elements of the overall IAP are developed	Within 1 hour from arrival on scene

<b>Activity: Conduct Rescue Operations</b>	
<b>Definition: Once on-scene and equipped with protective and response equipment, implement rescue operations.</b>	
<b>Critical Tasks</b>	
Res.B2b 6.1	Determine the nature and priority of rescue operations and the numbers involved
Res.B2b 6.1.1	Identify personnel and equipment requirements to initiate rescue operations
Res.B2b 6.2	Implement safe and effective tactics to accomplish rescue operation objectives
Res.B2b 6.2.1	Extricate and rescue victims within the hot zone
Res.B2b 6.2.2	Coordinate rescue efforts with law enforcement to ensure safety of rescuers
Res.B2b 6.3	Implement secondary public protective actions (PPAs)
Res.B2b 6.3.1	Identify personnel and equipment requirements to initiate product/agent control operations
Res.B2b 6.3.2	Implement safe and effective tactics to accomplish product/agent control objectives
Res.B2b 6.3.3	Implement safe and effective tactics to support product/agent control objectives
<b>Performance Measures</b>	
<b>Metric</b>	
Time in which contaminated victims are rescued from contaminated area	Within 2 hours from arrival on scene

<b>Activity: Conduct Mitigation Activities</b>	
<b>Definition: Once on scene and equipped with protective and response equipment, implement operations plan to minimize contamination.</b>	
<b>Critical Tasks</b>	
Res.B2b 7.1.3	Identify appropriate PPE based on suspected hazardous material
Res.B2b 7.1.1	Coordinate with safety officer to monitor responders for exposure to hazmat
Res.B2b 7.1.2	Coordinate with safety officer to monitor and control the operating time of rescuers assigned to the hot zone to minimize rescuer exposure
Res.B2b 7.1	Secure the contamination source and affected areas
Res.B2b 7.2	Monitor and track compliance with containment requirements
<b>Performance Measures</b>	
<b>Metric</b>	
Time in which implementation of initial action plan and objectives is initiated	Within 4 hours from arrival on scene
Time in which hazmat/WMD contamination is contained	Within 12 hours from arrival on scene

**Activity: Conduct Decontamination and Clean-up /Recovery Operations**  
**Definition: Upon arrival on scene and with the requisite equipment, initiate response operations to reduce the level of on-scene contamination, minimize the potential for secondary contamination beyond the incident scene, and ensure an effective transition to clean-up and recovery operations.**

<b>Critical Tasks</b>		
Res.B2b 8.1	Identify assets required for decontamination activities	
Res.B2b 8.2	Identify the type of contaminants, nature of response operations, and the required type/level of decontamination operations	
Res.B2b 8.4.5	Implement plans, procedures, and protocols to ensure on-site individual gross decontamination of persons and household pets affected by the incident	
Res.B2b 8.4.6	Provide a means to allow medical treatment facilities and shelter managers to readily identify people who have received gross decontamination	
Res.B2b 8.3.1	Establish decontamination sites for victims	
Res.B2b 8.4.1	Screen affected persons	
Res.B2b 8.4	Implement emergency decontamination operations	
Res.B2b 8.4.2	Decontaminate victims exposed to chemical, biological, radiological, nuclear, or explosive (CBRNE) materials	
Res.B2b 8.4.7	Implement technical decontamination operations for injured, contaminated victims	
Res.B2b 8.4.7.1	Implement technical decontamination of human remains	
Res.B2b 8.4.8	Implement technical decontamination operations in support of WMD/hazmat entry and response activities	
Res.B2b 8.4.9	Implement decontamination operations to address incident-specific scenarios and requirements	
Res.B2b 8.4.9.1	Decontaminate pets, if resources are available	
Res.B2b 8.5.1	Coordinate livestock decontamination	
Res.B2b 9.2.3	Monitor clean areas within the contamination control line	
Res.B2b 9.2.2	Monitor the exit points for hazmat contaminate movement outside the isolation zone	
Res.B2b 9.2.4	Coordinate with environmental authorities to ensure the appropriate decontamination area clean-up and disposal of waste materials	
Res.B2b 9.2	Decontaminate affected facilities and equipment used for technical decontamination	
Res.B2b 9.4.1	Perform clean-up operations	
Res.B2b 9.4.2	Implement hazmat disposal plan	
<b>Performance Measures</b>		<b>Metric</b>
Victims are provided maximum amount of privacy within site and situational constraints		Yes/No
Percent of victims provided clothing, blankets, and protection from the elements as needed		100%
Time in which technical decontamination of first responders on-site is performed (depending on substance)		Within 2 hours from end of work period
Time in which technical decontamination of off-site victims (e.g., at hospitals and designated decontamination stations) is performed (depending on substance)		Within 2 hours from arrival
Time in which technical decontamination of household pets off-site (e.g., at designated decontamination stations) is performed (depending on substance)		Within 2 hours from arrival
Time in which technical decontamination of human remains is performed		Within 24 hours from end of work period
Time in which technical decontamination of facilities and equipment is performed		Within 24 hours from end of work period

<p><b>Activity: Demobilize WMD and Hazmat Response and Decontamination</b>  <b>Definition: Upon completion of response phase transition to recovery operations, inventory equipment, complete paperwork, pursue rehabilitation, and conduct post-event analysis (e.g., lessons learned) in accordance with incident demobilization plan.</b></p>	
<p><b>Critical Tasks</b></p>	
Res.B2b 10.1.1	Transfer command for emergency response phase to authority having jurisdiction (AHJ) for post-emergency clean-up and recovery operations
Res.B2b 10.1.2	Work through IC/UC to ensure that incident-specific evidence collection and investigation protocols are clearly understood and communicated to all responders
Res.B2b 10.1	Inventory WMD/hazmat equipment cache and restore to service
Res.B2b 10.2	Demobilize WMD/hazmat base of operations
Res.B2b 10.3	Arrange transportation for demobilized WMD/hazmat personnel and equipment
Res.B2b 10.4.1	Implement a formal post-incident analysis process (based upon local procedures)
Res.B2b 10.4	Debrief WMD/hazmat capability personnel
Res.B2b 10.4.2	Conduct an incident critique for incident responders
<p><b>Performance Measures</b></p>	
Time in which equipment cache is re-inventoried and packaged for transport	Within 12 hours from start of demobilization process
Time in which base of operations is returned to original conditions	Within 12 hours from start of demobilization process
Percent of WMD/hazmat Response and Decontamination task force debriefed	100%

## CAPABILITY RELATIONSHIP

Linked Capability	Relationship
On-Site Incident Management	WMD and Hazmat Response and Decontamination integrates itself into the local Incident Command/Unified Command system.
Emergency Public Safety and Security Response	WMD and Hazmat Response and Decontamination relies upon Emergency Public Safety and Security Response assistance to secure WMD/hazmat and decontamination sites, safely divert public from the area, and to provide security support for the WMD/hazmat and decontamination base of operations.
Fire Incident Response Support	WMD and Hazmat Response and Decontamination coordinates with Fire Incident Response Support to decontaminate on-site victims and coordinates with hazmat on tactics to monitor and minimize release of hazardous materials during firefighting operations.
Environmental Health	WMD and Hazmat Response and Decontamination relies upon Environmental Health to monitor environmental public safety from decontamination and other hazmat response operations.
Citizen Evacuation and Shelter-In-Place	WMD and Hazmat Response and Decontamination relies upon Citizen Evacuation assistance to help plan for and implement the protective actions recommended by the IC in consultation with the WMD/hazmat team to both protect and decontaminate evacuees.
Emergency Triage and Pre-Hospital Treatment	WMD and Hazmat Response and Decontamination relies upon Emergency Triage and Pre-Hospital Treatment to transfer care of victims that have been decontaminated from WMD/hazmat.
Fatality Management	WMD and Hazmat Response and Decontamination notifies Fatality Management of location of decontaminated remains encountered from WMD/hazmat exposure.
Laboratory Testing	WMD and Hazmat Response and Decontamination provides Laboratory and Testing with samples for testing.

## **RESOURCE ELEMENT DESCRIPTION**

Resource Elements	Components and Description
Type III Hazmat Entry Team	Per NIMS
Type II Hazmat Entry Team	Per NIMS
Type I Hazmat Entry Team (extrication)	Per NIMS, with capabilities for extrication
Type I Hazmat Entry Team (decontamination)	Per NIMS, with capabilities for decontamination
EPA Radiological Emergency Response Team (RERT)	The (RERT), based in EPA's Office of Radiation and Indoor Air and regional offices, responds to emergencies involving releases of radioactive materials by providing environmental measurement and guidance activities; monitoring, sampling, and laboratory activities; and providing State and local authorities with advice on protecting local residents from exposure to harmful radiation levels.
Federal Radiological Monitoring and Qualification Center (FRMAC)	The Department of Energy (DOE) FRMAC coordinates Federal radiological monitoring and qualification activities with those of State and local agencies.
Hazmat Information/Research Group/Team	Reference/research function performs the compiling and interpretation of technical information related to products, agents, containers, excreta and provides relevant information to the hazmat Branch Director or Group Supervisor.
Hazmat Medical Group/Team	Part of the logistics section for the provision of medical services for response personnel
Hazmat Resources Group/Team	The "resources group" technically would be within the planning section and be termed the resources unit and would reside outside of the hazmat structure. Resources on the scene would be assigned to the staging area manager.
Hazmat Liaison Officer	
Hazmat Specialists	Single resources that will be assigned as needed and defined in 29CFR1910.120

## HAZARDOUS MATERIALS TEAM TYPES – Explanation of Components

The Criteria column explains the overall objective or minimum requirements for each component. The Performance column explains the specific level of minimum performance to be demonstrated by that type of HMT. All performance levels for the Type III HMT are the minimum standard. A Type II HMT must, in addition to the Type III level of performance, meet all Type II performances. A Type I - HMT must, in addition to the Type II and Type III level of performance, meet all Type I performances.

*This section describes functions that the different types of team should be able to perform. i.e. Type I, Type II and Type III.*

Component	Criteria	REL	Type	Required Performance
<b>Field-Testing</b>	The identification of chemical substances using a variety of sources, which may include: Printed and electronic reference resources, material safety data sheets, field testing kits, specific chemical testing kits, chemical testing strips, and data equated from detection devices and air monitoring sources that should assist in identifying associated chemical and physical properties.	1.2	III	Known Chemicals
		1.2	II	Unknown Chemicals
		1.2 and 1.5	I	Known or Suspect WMD (Chem/Bio) Substances
<b>Air Monitoring</b>	The use of electronic devices to detect the presence of known or unknown gases or vapors. The basics begin with the ability to provide the standard confined space readings (oxygen (%); flammable atmosphere (LEL); carbon monoxide (ppm), and hydrogen sulfide (ppm). Advanced detection and monitoring may include instruments that differentiate between two or more flammable vapors, and may directly identify by name a specific flammable or toxic vapor. Identify toxic substances and aromatic hydrocarbons, in parts-per million (ppm) readings. The employment of other instruments such as WMD (Chem / Bio) detection instruments.	2.1	III	Combustible Vapors; Oxygen %; Carbon Monoxide; Hydrogen Sulfide
		2.2 and 2.3	II	Specialty Gas Capability; Toxic vapor detection in ppm; Complex liquid hydrocarbon vapor
		2.4	I	WMD (Chem/Bio) Powder, Liquid, Vapor
<b>Sampling</b>	The three criteria tiers are known chemicals, unknown chemicals, and WMD (Chem / Bio) substances. Standard evidence collection protocols required for each include: Capturing and collection, containerizing and labeling, preparation for transportation, evidence collection and lab analysis.	3.1 and 3.2	III	Known Chemicals
			II	Unknown Chemicals
			I	WMD (Chem/Bio)
<b>Radiation Monitoring / Detection</b>	The application of devices specifically for the detection of radiation sources. This process includes: Being able to differentiate between types of radiation, interpret readings from the device, employ a field monitoring plan to conduct geographical qualification program search of suspect radiological source (s) or contamination spread, ability to conduct whole body hygiene qualification program, insure all members of qualification program teams are equipped with accumulative dose reading instruments (dosimeters).	4.1	III	Beta / Gamma Detection Geographical Qualification program Hygiene Qualification program Dosimetry
		4.1	II	Same as Type III
		4.2	I	Alpha / Radionuclide Detection
<b>Protective Clothing: Ensemble</b>	Chemical protective clothing (CPC) includes complete ensembles (suit, boots, gloves), and may incorporate various configurations (encapsulating, non-encapsulating, jumpsuit, multi-piece) depending upon the level of protection needed. Levels of protection are: Vapor Protective, Flash Fire Vapor Protective, WMD (Chem / Bio) Vapor Protective, Liquid-Splash Protective, and (Chem / Bio) Liquid Splash Protective. All levels of protection must be compliant with NFPA	5.2	III	Liquid Splash Protective
		5.1	II	Vapor Protective Flash Fire Vapor Protective
		5.1	I	WMD (Chem/Bio)

HAZARDOUS MATERIALS TEAM TYPES – Explanation of Components

Component	Criteria	REL	Type	Required Performance
	standards # 1991 and # 1992. Flash fire protection and (Chem / Bio) protection are options within each NFPA standard that can be added to any basic 1991 or 1992 suit.	and 5.2		Vapor Protective WMD (Chem/Bio) Liquid Splash Protective
<b>Protective Clothing:</b> Gloves and Boots	In addition to chemical protective gloves that are part of the CPC ensemble, sufficient inventory of NFPA compliant gloves and boots must be kept for CPC ensemble replacement purposes. Additionally, a variety of specialty gloves shall be considered (Cryogenic, Ultra-High temperatures, and Radiological gloves).	6.1	III	NFPA Compliant Glove and Boot Replacement Inventory
		6.1	II	High-Temperature Protective Gloves; Cryogenic Protective Gloves
		6.1	I	Radiation Protective Gloves
<b>Technical Reference</b>	Access to and use of various databases, chemical substance data depositories, and other guidelines and material safety data sheets, either in print format, electronic format, stand-alone computer programs, or data available via telecommunications. This includes the interpretation of data collected from electronic devices and chemical testing procedures.	7.1; 7.2	III	Printed and Electronic
		7.3	II	Plume Air Modeling; Map Overlays
		7.1; 7.2	I	WMD (Chem/Bio)
<b>Special Capabilities</b>	Additional capabilities that would augment a particular level or type of company, and would provide beneficial assets utilizing specialty equipment. Significant categories that would augment functions are the inclusion of night vision capabilities, heat sensing or heat monitoring equipment, and digital photo and video		III	0
		8.1	II	Heat Sensing, Night Vision, Digital Video
		8.1	I	Digital Video
<b>Intervention</b>	Employment of mechanical means of intervention and control such as plugging, patching, off-loading, and tank stabilization. Environmental means such as absorption, dams, dykes and booms. Chemical means such as neutralization and encapsulation. Intermediate capabilities should include large leak intervention. Advanced capabilities should include ability to intervene and control incidents involving WMD (Chem / Bio) substances.	9.2	III	Diking, Damming, Absorption
		9.1; 9.3	II	Neutralization, Plugging, Patching; Large Leak Intervention
			I	WMD (Chem/Bio) Spill Containment
<b>Decontamination:</b> Primary	Each company type must be capable of providing primary decontamination for members of an entry team. Primary decontamination must be appropriate for the typing level of that team. A Type III company must be capable of providing DECON for known chemical substances for not less than liquid splash contact. Type II company must be capable of providing DECON for unknown chemical substances for not less than vapor threat contact. Type I company must be capable of providing DECON for unknown chemicals as well as WMD (Chem / Bio) liquid and vapor threat contact.	10.1 10.2	III	Known Chemicals
		10.1 10.2	II	Unknown Chemicals
			I	WMD (Chem/Bio)
<b>Communications</b>	Personnel utilizing chemical, vapor or liquid splash protective clothing, shall utilize and maintain communications of sufficient type and quality as to provide for safe communications between the entry team leader, members of the team, and one another. Other communication devices include: Cellular phones. Intermediate and advanced capability should include wireless transmittal for the purpose of verbal, data transfer, and imagery exchange, and access to the Internet.	11.1 11.2	III	In-Suit Comm; Cell Phone
		7.4 11.2	II	Wireless Fax, Copy, Web Access
		7.4 11.2	I	Wireless Fax, Copy, Web Access

Component	Criteria	REL	Type	Required Performance
<b>Respiratory Protection</b>	Self-contained breathing apparatus (SCBA) must be provided for each member of the team. To augment advanced, large scale, and/or long-term intervention activities, utilization of an umbilical air system should be considered. This also can be used to augment breathing air, suit cooling, and work in confined spaces. Air purifying respirators (APR) or powered air purifying respirators (PAPR) certified by NIOSH for (Chem / Bio) threat atmospheres should be considered for advanced capabilities.	12	III	SCBA
		12	II	SCBA
		12.1 12.2	I	SCBA
<b>Personnel: Training &amp; Staffing</b>	All personnel of a Type III company must meet the hazardous materials training requirements for Technician in NFPA 472, 2008 edition. All personnel of a Type II and Type I company must meet the training requirements for Specialist in NFPA 472, 2008 edition. All personnel of a Type I company must further be trained to WMD (Chem / Bio) equivalent in NFPA 472, 2008 edition		III	HMT (80 Hour) 5-personnel
			II	HMS (120 Hour) 5-Personnel
			I	HMS+(16 Hour) Chem/Bio Specialty 7-Personnel

## HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

*I.e. this section list the quantity and a description of each item that the three types of hazmat team are required to have per type. NOTE: This section is quite extensive.*

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>FIELD TESTING and DETECTION</b>					
<b>1.1 Color Change Analysis - Non-Electronic [Sub-Category]</b>					
1.1.1 <b>TEST STRIPS, pH PAPER, Packets:</b> To test acidity or alkalinity of aqueous solutions; ¼" wide x 3" long nominal; Presence is based upon a color change.	1 Pkt		R	R	R
1.1.2 <b>TEST TABS, pH PAPER, Kit:</b> Same as pH PAPER Test Strips, but extra-large, ½ to 1" wide by 6 to 9" long nominal; Presence is based upon a color change.	1 Pkt		Opt	Opt	Opt
1.1.3 <b>TEST STRIPS, OXIDIZER, Packets:</b> Physical or chemical property sensitive; Presence is based upon a color change.	1 Pkt		R	R	R
1.1.4 <b>TEST STRIPS, PEROXIDE, Packets:</b> Physical or chemical property sensitive; Presence is based upon a color change.	1 Pkt		R	R	R
1.1.5 <b>TEST STRIPS, CHEMICAL SPECIFIC, Packets:</b> Additional industrial chemicals test strips, usually sensitive for a specific chemical (i.e. formaldehyde; chlorinated hydrocarbons; organo-phosphate; halogen ion; heavy metals; nitrites; nitrates; cyanides, sulfites, sulfates, etc.) Presence is based upon a color change.	1 Pkt of each		Opt	Opt	Opt
1.1.6 <b>TEST STRIPS, MULTI-ION CLASSIFICATION, Kit:</b> Single large test strips detects for 5 or more ions or compounds simultaneously (typically is a combination of the following: corrosiveness, oxidizer, fluoride ion, halogen ions, organic solvents, sulfite, sulfide, nitrite, nitrate; potassium, lead, arsenic, organo-phosphates – depending on manufacturer); Combination can depend upon type of kit purchased). Based upon color change.	1 Kit		Opt	Opt	Opt
1.1.7 <b>TEST STRIPS, WATER QUICK TEST, Kit:</b> Test strip detects 5 or more common contaminants in water simultaneously (typically chlorine ion, pH, alkalinity, hardness, nitrates, nitrites). Based upon color change.	1 Kit		Opt	Opt	Opt
1.1.8 <b>TEST STRIPS, WATER QUAIITY, Kit:</b> More advanced test kit, in addition to kit above, also tests for bacteria, ammonia, sulfates, free iron, free copper	1 Kit		Opt	Opt	Opt
1.1.9 <b>TEST STRIPS, WMD CHEMICAL, Kit:</b> Military grade detection papers for field testing of liquids only: (i.e. "M-8" paper booklet of 25 sheets, which are also part of the M256A1 Kit, for nerve agents GA, GB, GD, GF VX and blister agents L, H, HD). Strip turns to one of four colors. - Or -(i.e. "3-WAY" adhesive paper booklet of 12 sheets; for some nerve agents, blister agents). Strip turns to one of three colors	1 Pkt		R	N/A	N/A
1.1.10 <b>TEST PAPER, WMD CHEMICAL, Roll:</b> Military grade (i.e. "M-9" paper rolls, for nerve or blister agents). Presence is based upon a single color change, and does not distinguish between nerve agents and blister agents.	1 Pkt		R	N/A	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
1.1.11 <b>TEST PAPER, WMD CHEMICAL, Card:</b> Military M256A1 plastic card test kit (Twelve disposable plastic test cards are part of the M256A1 kit; for nerve [GA, GB, GD, VX], blister [H, HD, CX, L], blood [AC, CK] Presence is based upon color changes)	1 Kit		R	N/A	N/A
1.1.12 <b>TEST CARD, TRAINING ONLY, WMD CHEMICAL:</b> Military M256A1 Training Kit.	1 Kit		R	N/A	N/A
1.1.13 <b>TEST TICKET, NERVE AGENT ONLY, Sensor:</b> Applicable only for some nerve agents, color change based upon detection of organo-phosphate radicals, in air or water.	1 Package or Kit		Opt	N/A	N/A
1.1.14 <b>TEST TICKET, MUSTARD AGENT ONLY, Sensor:</b> Applicable only for mustard agents, color change based upon detection of chlorethyl radical, in air or water.	1 Package or Kit		Opt	N/A	N/A
1.1.15 <b>DETECTION, EXPLOSIVE SUBSTANCE, Kit:</b> Kit contains three aerosol cans, each to test for a specific group of explosives (A – TNT, TNB, DNT, picric acid; B – RDX, nitro, dynamite, PETN, SEMTEX; C – ANFO, black powder, nitrates, gun powder, potassium chlorate). Positive results are based upon color change.	1 Package or Kit		Opt	Opt	N/A

1.2 Qualitative Analysis, Kits - Non-Electronic [Sub-Category]					
1.2.1 <b>INDUSTRIAL CHEMICALS, KNOWN, Qualitative: Test Kit,</b> Qualitative analysis, For testing and detection of known industrial chemicals	1 Kit		N/A	N/A	R
1.2.2 <b>INDUSTRIALCHEMICALS, UNKNOWN, Qualitative: Test Kit,</b> Qualitative analysis, For testing and detection of unknown industrial chemicals, not for biological substances. (Usually the more advanced version of the kits listed in # 1.2.1). If included in inventory, satisfies requirement for 1.2.1.	1 Kit		R	R	Opt
1.2.3 <b>PCB CHEMICALS, Test Kit:</b> Consists of a simple multi-step screening procedure to test for presence of polychlorinated biphenyl contaminated solvents. Range of detection nominally is 20 ppm to 500 ppm, with different kit versions having different ppm ranges. Detection is dependent upon liquid color change.	4 Kits		R	R	R
1.2.4 <b>CHLORINATED HYDROCARBON, Test Kit:</b> Consists of a simple multi-step screening procedure to test for presence of free chlorine ions in solvents. Several different kits available representing different ppm ranges, but nominally range between 200 ppm to 4,000 ppm. Detection is dependent upon liquid color change.	4 Kits	EPA 40 CFR 261	Opt	Opt	Opt
1.2.5 <b>ORGANO-PHOSPHATE, Test Kit:</b> Consists of a simple multi-step screening procedure to test for presence of organo-phosphate radical; Includes special test strips based on color change.	1 Kit		Opt	Opt	Opt
1.2.6 <b>INDUSTRIAL CHEMICALS, WATER CONTAMINATION, , Kit:</b> Qualitative analysis of domestic drinking water, and utility water supplies for contaminant industrial chemicals. Involves numerous different test procedures. Detection is dependent upon liquid color changes.	1 Kit		Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
1.2.7 <b>INDUSTRIAL CHEMICALS, WATER SAMPLE TAKING, Kit:</b> – A kit designed to support water utility company needs to gather large volume samples in preparation for analysis at their laboratories. Kits might be supplied by a local water utility company for use by the local hazmat team.	1 Kit		Opt	Opt	Opt
1.2.8 <b>WMD, WATER TEST, MILITARY, Kit:</b> Qualitative analysis for WMD chemicals in water (i.e. M272 or M273 kit); Sensitive for GA, GB, GD, GF, VX HD, and L to ppb and ppt. Detection is dependent upon liquid color change. <b>(Rev2008)</b>	1 Kit		R	Opt	N/A
1.2.9 <b>WMD CHEMICALS, MILITARY, Test Kit:</b> - Part of the M18A2 or M18A3 or CAD C-2 kit; For detecting nerve (GB, VX); blister (H, HD, HN, HT, L, CX, ED); blood (AC, CK); and choking/vomit (CG, MD). Comprises detection tickets, sampling tubes, reagent chemicals and some colorimetric tubes (i.e. M18A2, M18A3, CAD Kit C-2). <b>(Rev2008)</b>	1 Kit		R	Opt	N/A
1.2.10 <b>WMD CHEMICALS, MICROSCOPY, Kit:</b> Field portable microscope, digital camera; Requires access to internet or by telephone to a prescribed registered laboratory for transmission, and analysis of data. Complements the HazCat® type field test kit described in Sub-Category 1.2.	1 Kit, Complete		Opt	Opt	N/A
1.2.11 <b>WMD CHEMICALS, Reagent Test Kit:</b> Includes kit containing reagent chemicals, and step-by-step procedures to test and screen suspect WMD chemicals by qualitative analysis. Complements the HazCat® type field test kit described in Sub-Category 1.2.	1 Kit, Complete		Opt	Opt	N/A

1.3 Qualitative Analysis, Kits - Electronic [Sub-Category]					
1.3.1 <b>CHROMATOGRAPHY, GAS</b> – Portable chromatograph system complete within a briefcase or attaché case, self-contained computer, database, and display.	1 Complete Kit of any one of the three technologies Described, or  equal or better		R	R	Opt
1.3.2 <b>SPECTROMETRY, MASS or equal</b> – Portable general mass spectrometry system complete within a briefcase or attaché case, self-contained computer, database, and display.					
1.3.3 <b>SPECTROSCOPY, INFRA-RED:</b> Portable identification system including computer, color display, software, 12 volt or 120 volt; Scans unknown with infra-red light and compares fingerprint with information in a database to identify unknown; Varies between 23 lbs to 45 lbs, depending upon manufacturer.					

1.4 Colorimetric Analysis - Non-Electronic [Sub-Category]					
1.4.1 <b>COLORIMETRIC Kit, BASIC</b> – For industrial chemicals spot analysis detection of vapors, gases.	1 Kit, Complete, of		R	R	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
1.4.2 <b>COLORIMETRIC Kit, CHIP</b> – Industrial chemicals spot analysis detection of vapors, gases; Miniaturized colorimetric tubes in a glass or plastic chip, often several chips to a packet. May include or require special bellows pump, electronic reader depending upon sophistication and manufacturer.	any of the three listed				N/A
1.4.3 <b>COLORIMETRIC Kit, MULTI-SENSING</b> – Industrial chemicals spot analysis detection of vapors, gases; Specifically designed to read up to five (5) or more tubes simultaneously (each tube can be different), during one reading qualification program.					N/A
1.4.4 <b>COLORIMETRIC Kit, WMD Special</b> – WMD chemicals spot analysis detection of vapors, gases; Consists of specially selected industrial chemical colorimetric tubes assembled by the manufacturer with special instruction on how to employ for some WMD chemicals detection. Requires more advanced interpolation of the data derived.	1 Kit Complete		R	N/A	N/A
1.4.5 <b>COLORIMETRIC Kit, CLAN LAB</b> – Special kit for spot analysis detection of vapors, gases associated with clandestine drug lab chemicals. Consists of specially selected industrial chemical colorimetric tubes assembled by the manufacturer with special instructions on how to employ.	1 Kit		Opt	Opt	N/A
1.4.6 <b>PUMP, BELLOWS, Electric</b> – A battery powered bellows pump to augment or upgrade hand operated bellows pump; Programmable, with LCD readout.	One		Opt	Opt	N/A

1.5 WMD Biological Detection – Electronic					
1.5.1 <b>NON-AGENT SPECIFIC Biological Detection</b> – A sampling and detection system which will screen for presence of abiological substance based upon fluorescence technologies. Is not agent specific, only gives a “yes” or “no” that a suspect biological agent might be present with reliability of less than 50%. Confirmation and agent identification for more reliable hazard qualification requires further more advanced field testing, or samples sent in for laboratory analysis. Presence of proteins may give false positives.	1 Kit		Opt	Opt	N/A
1.5.2 <b>AGENT SPECIFIC Biological Detection</b> – A sampling and detection system which will verify presence of a biological substance based upon protein fluorescence, or PCR / DNA replication technologies. This system is agent specific. Devices from different manufacturers should be reviewed as each manufacturer may provide a different array of agents that can be detected. Protein fluorescence technology – (Anthrax, SEB, Plague, Tularemia, Ricin, Botulinum, Brucella) - Or - Immuno-assay fluorescence technology, - (Ricin, Botulinum, Anthrax, Small Pox) - Or - DNA replication technology, - (Anthrax, Small Pox, Tularemia, Plague)	1 Stand-Alone Kit or System, or equal or better		R	Opt	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>AIR MONITORING</b>					
<b>2.1 Confined Space Monitoring [Sub-Category]</b>					
2.1.1 <b>CONFINED SPACE OSHA STANDARD Four Gas:</b> Continuous monitoring, independent displays, built-in alarms, minimum of 10 feet of tubing and sampling wand. Referred to as "Four-in-One" Kits: (O2 Presence in Percent; Combustible Vapor in LEL; CO presence; H2S presence)	1 Unit	Intrinsically Safe to UN # 913	R	R	R
2.1.2 <b>CALIBRATION KIT</b> , for Item # 2.1.1: For each of the above that may be in inventory. (May be supplied by manufacturer as part of monitoring device kit).	1 Kit		R	R	R

<b>2.2 Multiple Gas Monitoring, Toxic [Sub-Category]</b>					
2.2.1 <b>TOXIC VAPOR</b> , in ppm: Capable of detecting combustible atmospheres (VOC – Volatile Organic Compounds) and toxic vapors (TIC – Toxic Industrial Compounds); Capable of identifying specific substances; Resistant to damage from chlorinated hydrocarbons; Data downloadable to computer. Not usually suitable for Benzene ring substances.	One Unit		R	R	N/A
2.2.2 <b>AROMATIC HYDROCARBON (Benzene Ring) Monitoring:</b> Device designed to detect aromatic hydrocarbon (ring) substances. If this utility is incorporated into the above device, this criteria is met.	One Unit		R	R	N/A
2.2.3 <b>SIMULTANEOUS MULTI-VAPOR Monitoring:</b> Can differentiate between several combustible vapors or toxic vapors. Not usually suitable for Benzene ring substances.	One Unit		Opt	Opt	N/A
2.2.4 <b>CALIBRATION KITS:</b> For each of the above that may be in inventory.	1 Unit for each kit		R	R	N/A

<b>2.3 Specialty Gas Capability [Sub-Category]</b>					
2.3.1 <b>AMMONIA:</b> Detects Ammonia vapors to ppm, nominal range 0 to 100 ppm.	1- Chip or Colormetric Tube		R	R	N/A
2.3.2 <b>FREONS</b> , Halogenated Hydrocarbons: Halogen derivative refrigerants.	1- Chip or Colormetric Tube		R	R	N/A
2.3.3 <b>HALOGEN GASES:</b> Specifically Chlorine; Other halogen gases optional depending upon local needs. (Rev2008)	1- Chip or Colormetric Tube		R	R	N/A
2.3.4 <b>PHOSPHINE:</b> Continuous Monitoring. (Rev2008)	1- Chip or Colormetric Tube		R	R	N/A
2.3.5 <b>ALDEHYDES:</b> Specifically Formaldehyde	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.6 <b>ARSINE:</b> Specifically Arsenic Trihydride	1- Chip or Colormetric		Opt	Opt	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
	Tube				
2.3.7 <b>CARBON DIOXIDE:</b> Measures to ppm, some also display ambient temperature. Requires calibration kit.	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.8 <b>CARBON MONOXIDE:</b> Measures to ppm.	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.9 <b>CYANIDES:</b> Specifically Hydrogen Cyanide, Cyanogen Chloride.	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.10 <b>ETHYLENE OXIDE:</b>	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.11 <b>HALOGEN ACID VAPORS:</b> Specifically Hydrogen Chloride	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.12 <b>HYDROGEN SULFIDE:</b> Often is incorporated into a CGI/FID or PID instrument designed to meet OSHA Confined Space detection requirements.	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.13 <b>NITRIC OXIDE, NITROGEN DIOXIDE:</b> Nominal 0 to 100 ppm for Nitric Oxide, and nominal 0 to 10 ppm for Nitrogen Dioxide.	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.14 <b>SULFUR DIOXIDE:</b>	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.15 <b>VOLATILE ORGANIC COMPOUNDS (VOC's):</b>	1- Chip or Colormetric Tube		Opt	Opt	N/A
2.3.16 <b>CALIBRATION KITS:</b> Maintenance or Calibration Kit for each of the above devices that may be in inventory, as necessary.	1 Unit		R	R	N/A

2.4 WMD Chemical Dedicated Instruments [Sub-Category]					
2.4.1 <b>NERVE AGENT</b> Detection: This includes GA, GB, GD, GF, VX	Must have capability to monitor and detect for at least one substance in each of these six categories. This may require one to several instruments depending upon the versatility of each instrument.		R	N/A	N/A
2.4.2 <b>BLISTER AGENT – MUSTARDS</b> Detection: This includes H, HD, HN			R	N/A	N/A
2.4.3 <b>BLISTER AGENT – LEWISITE</b> Detection: This includes L HL			R	N/A	N/A
2.4.4 <b>BLOOD AGENTS</b> Detection: This includes AC, HCN, CK, SA. Some specialty industrial detection devices are available.			R	N/A	N/A
2.4.5 <b>CHOKING / VOMITING AGENTS</b> Detection: This includes CG, DP, CL. Some specialty industrial detection devices are available for Chlorine and Hydrogen Chloride.			R	N/A	N/A
2.4.6 <b>INCAPACITATING AGENTS</b> Detection: Specifically Pepper Spray.			R	N/A	N/A
2.4.7 <b>CALIBRATION KITS:</b> Maintenance or Calibration Kit for each of the above devices that may be in inventory, as necessary.				R	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>SAMPLING</b>					
<b>3.1 Substance Capture [Sub-Category]</b>					
3.1.1 <b>BAILERS</b> , Hollow cylindrical tubes with a device on the top to lower or raise the bailer by a cord into a well, and a device, called a check valve, on the bottom to allow water to enter and to stay in the bailer while raising it from the well.	Must have a minimum of 6	EPA Protocol B	R	R	R
3.1.2 <b>PIPETTE, TRANSFER</b> , Plastic, Regular, Bulk: Disposable, plastic, nominal 5 to 8 ml capacity, 15 cm long, some available with "billows" type squeeze end.	Pkg of 100 of either type; or mix or match		R	R	R
3.1.3 <b>PIPETTE, TRANSFER</b> , Plastic, Large, Bulk: Disposable, plastic nominal 20 ml capacity, 30 cm long.	25		R	R	R
3.1.4 <b>PIPETTER SAFETY BULB</b> : Rubber, with adjustable suction valve, re-useable, replacement	1		Opt	Opt	Opt
3.1.5 <b>PIPETTE, TRANSFER</b> , Plunger Style: Polypropylene, capable of sucking or expelling 1 to 12 ml via action of push pull plunger with rubber gasket, graduated markings in 1.0 ml increments, disposable	Pkg 10		Opt	Opt	Opt
3.1.6 <b>FIBERGLASS CLOTH</b> : Cloth of woven fiberglass thread, pliable, for surface swipe samples of contamination; Maintained in EPA sterile 8 oz. jar.	1 sq ft		R	R	R
3.1.7 <b>SPONGE</b> , Sealed, Sterile: For surface swipe sample taking.	2		R	R	R
3.1.8 <b>DRUM SAMPLER</b> : Nominal 43" long plastic handle, with screw-on borosilicate glass bottle of nominal 125 ml capacity, to sample 55 gallon drums or small stationary tanks.	1		Opt	Opt	Opt
3.1.9 <b>TANKER SAMPLER</b> : Same as previous item but with extension or telescopic handle to nominal 8 feet.	1		Opt	Opt	Opt
3.1.10 <b>ENVIRONMENT DIPPER</b> , Telescopic: For grabbing samples in tankers, large tanks, creeks, canals; Usually polyethylene extendable or telescopic handle to nominal 8 – 24 feet, with slip-on 500 ml plastic cup, or 500 ml swivel ladle.	1		R	R	R
3.1.11 <b>TONGS, BEAKER or CRUCIBLE</b> , Metal, PTFE Coated: Chemical resistant stainless steel with tips coated with PTFE, nominal 9 ½" long.	2 - Two of either type, or one of each		R	R	R
3.1.12 <b>TONGS, BEAKER or CRUCIBLE</b> , Metal, Plastic Coated: Chemical resistant stainless steel with tips coated with plastic for handling jars, beakers; nominal 10" long.			R	R	R
3.1.13 <b>TONGS, BEAKER or CRUCIBLE</b> , Metal, Extra-Long: Chemical resistant stainless steel or nickel plated, nominal 18" long.	1		Opt	Opt	Opt
3.1.14 <b>FORCEPS</b> : Steel, Teflon coated or uncoated, or Plastic polypropylene, Nominal length 3 ¾" to 5 ½", with pointed or round tips.	At least two of any kind		R	R	R
3.1.15 <b>FUNNEL</b> : Plastic, Glass or Metal (disposable or reuseable): Small - nominal opening measurement 1 ½" to 2" diameter; Medium - nominal opening measurement 2 ½" to 3 ½"; Large - nominal opening measurement 4" to 6" diameter.	Complement of 3, with at least 1 of each size <small>(Rev 2009)</small>		R	R	R

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
3.1.16 <b>SPATULA, SAMPLING, LARGE</b> , "V" Shape: Plastic or metal, nominal 6" to 11" long x ¾" wide, nominal capacity 15 cc to 36cc.	Total of 5 in any combination		R	R	R
3.1.17 <b>SCOOP, SMALL</b> , Sterile, 2 oz: General purpose polystyrene, nominal 2 ¾" x 4"	1		R	R	R
3.1.18 <b>SCOOP, MEDIUM</b> , Sterile, 4 oz: General purpose polystyrene, nominal 3" x 5"	1		Opt	Opt	Opt
3.1.19 <b>SCOOP, LARGE</b> , Sterile, 8 oz: General purpose polystyrene, nominal 4" x 6 ½"	1		Opt	Opt	Opt
3.1.20 <b>SCOOP, SMALL</b> , Stainless Steel: Nominal bowl size 5" x 2 ½".	1		Opt	Opt	Opt

<b>3.2 Bulk Liquid Transfer – Mechanical [Sub-Category]</b>					
3.2.1 <b>PUMP, SYPHON, DRUM</b> , Heavy Duty, Stainless Steel: For 55 gallon drums; All 316 stainless steel with Teflon piston; Hose 35 to 55 feet length; Rate 16 oz. per stroke nominal.	1 of any of these three pumps listed	FM or UL Listed	R	R	R
3.2.2 <b>PUMP, SYPHON, DRUM</b> , Heavy Duty, High Quality: For 55 gallon drums; PVC construction with Viton gaskets and valves; Polyethylene hose 35 to 55 feet length; Rate 1.3 pints per stroke nominal.		FM or UL Listed	Opt	Opt	Opt
3.2.3 <b>PUMP, ROTARY</b> , Transfer, Metal: Suitable for flammable liquids in 55 gallon drums; Cast iron housing, rubber "O" rings (Viton is recommended for solvents); Aluminum pick-up tube, flame arresting screen and baffle, vacuum breaker, and bung adaptor; Transfers nominal 8 – 10 gallons with 100 revolutions.		FM or UL Listed	Opt	Opt	Opt
3.2.4 <b>PUMP, SYPHON, DRUM</b> , Plastic, Medium Duty: For 55 gallon drums; Polyethylene or better, hose 36" minimum; For use with solvents and some inorganic acids; Fits 2" NPT bung hole of drums; Nominal 7 GPM.	1		Opt	Opt	Opt
3.2.5 <b>PUMP, SYPHON, DRUM</b> , Plastic, Light Duty: For 55 gallon drums; Polyethylene or better, hose 36" minimum; For use with solvents and some inorganic acids; Fits 2" NPT bung hole of drums; Nominal 5 GPM.	1		Opt	Opt	Opt
3.2.6 <b>PUMP, ROTARY</b> , Transfer, Plastic: Suitable for solvents and corrosive liquids in 55 gallon drums; Polypropylene housing, Uses Teflon "O" rings; Transfers nominal 8 – 10 gallons per minute.	1		Opt	Opt	Opt
3.2.7 <b>PUMP, DIAPHRAGM, HAND</b> : Portable hand pump with handle, push-pull diaphragm; Available with screw or QC snap-tight 1 ½" hose connections (2), with nitrile strainer on inlet side; 10' of 1 ½" inlet hose and 20' 1 ½" discharge hose; Unit mountable on sturdy platform; Nominal 15 GPM. Often is included as part of a tool inventory in support of decontamination processes.	1		R	R	R
3.2.8 <b>STINGER, SUCTION PROBE</b> : Usually an "in-house" fabricated aluminum pipe of nominal 4" dia. and 12' long, to assist in transfer of flammable liquid product from an overturned tanker truck; Requires drill, proper size metal cutting 4" dia. drill bit, suction or mechanical pump.	1		Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>3.3 Containerization, Labeling, Documentation [Sub-Category]</b>					
3.3.1 <b>SAMPLE JARS</b> , Sterile, Clear Glass, 16 oz: Short, EPA Class 2000, wide mouth with Teflon lined lids	6	Class 2000 EPA Protocol B	Opt	Opt	Opt
3.3.2 <b>SAMPLE JARS</b> , Sterile, Clear Glass, 8 & 4 oz: Short, EPA Class 2000, wide mouth with Teflon lined lids	Compliment of 12	Class 2000 EPA Protocol B	R	R	R
3.3.3 <b>SAMPLE JARS</b> , Sterile, Amber Glass, 16 oz, EPA Class 2000, wide mouth with Teflon lined lids	2	Class 2000 EPA Protocol B	Opt	Opt	Opt
3.3.4 <b>SAMPLE JARS</b> , Sterile, Amber Glass, 8 & 4 oz: EPA Class 2000, wide mouth with Teflon lined lids	Compliment of 4	Class 2000 EPA Protocol B	R	R	R
3.3.5 <b>SAMPLE JARS</b> , Non-Sterile, Plastic, 8 oz: Ideal for solids or powder samples, polypropylene, with wide mouth screw lids; Not recommended for solvents; Not recommended for evidence or lab analysis collection.	12		Opt	Opt	Opt
3.3.6 <b>SAMPLE JARS</b> , Non-Sterile, Glass, 8 oz: Ideal for corrosive liquids and solvents, glass, with wide mouth screw lids. Not recommended for evidence or lab analysis collection.	12		Opt	Opt	Opt
3.3.7 <b>SAMPLE VIALS</b> , Sterile, Clear Glass, 1.3 oz: Borosilicate glass vials, with closed Teflon lined cap	12	Class 2000 EPA Protocol B	R	R	R
3.3.8 <b>STOPPERS</b> , Conical: Rubber, neoprene, or silicone; Assortment, ranging between sizes #000 to #6 (9 sizes), (12 mm to 30 mm)	Kit of 5 different sizes		R	R	R
3.3.9 <b>BAGS, PLASTIC</b> , Zipper Locking: Small nominal 3" x 3"; Medium nominal 6" x 6"; Large nominal 9" x 9"; Thickness is 3 to 4 mil.	Kit of 24, representing all three sizes		R	R	R
3.3.10 <b>BAGS, EVIDENCE</b> , Tamper-Proof: Clear integrity evidence bags, nominal sizes are 7" x 4", 7" x 9", 12" x 9", with preprinted label, tamper-proof, tear resistant, and self-sealing.	12		R	R	R
3.3.11 <b>LABELS, ORDINARY BLANK</b> : Nominal size to fit on sides of evidence collection jars or evidence bags; Preferably self-adhesive.	Kit of 50 of various sizes		R	R	R
3.3.12 <b>LABELS, NFPA DATA BLANK</b> : Nominal size is 1" x 2 1/2" on vinyl, suitable for small and medium evidence bags, small vials and containers.	Kit of 12 blank	NFPA 704	Opt	Opt	Opt
3.3.13 <b>LABELS, NFPA DATA BLANK</b> : Nominal size is 4" x 6" on vinyl, suitable for medium and large evidence bags, large containers.	Kit of 12 blank	NFPA 704	Opt	Opt	Opt
3.3.14 <b>LABELS, NFPA LABEL ROLL</b> : Nominal size of each label is 1 1/8" x 3 1/8" on vinyl, available in rolls of 500 or more; Suitable for small evidence bags and all glass sample jars.	1 roll	NFPA 704	Opt	Opt	Opt
3.3.15 <b>LABELS, EVIDENCE SEALS</b> : Tamper-proof evidence labels or tape, nominal size is 1 1/4" x 3", may come by the roll of 250 or more; Dye protected, tampering or attempts to remove leave signs of tampering; Suitable for sealing sampling jars and evidence bags, door jams, electrical circuit switches, locks.	1 roll or a minimum of 25 labels		R	R	R

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
3.3.16 <b>PENS, MARKING, PAINT:</b> Permanent marking, broad tip of porous fiber, multiple colors usually of enamel paint; Usually requires shaking to stir up paint.	5, preferability different colors		R	R	R
3.3.17 <b>PENS, MARKING, INDELIBLE:</b> Medium & Fine Point; Permanent marking, Variety of colors.	Kit of 6		R	R	R
3.3.18 <b>CHAIN OF EVIDENCE FORMS:</b>	20		R	R	R
3.3.19 <b>PHOTO, QUALIFICATION and RECONNAISSANCE KIT:</b> Camera – film type or digital technology: Must provide “instant” printed images or printable from on-board computer for analysis by on-scene personnel / Incident Command conducting hazard qualification. (Rev2008)	1 kit of either type as described		R	R	R
3.3.20 <b>PHOTO, QUALIFICATION and RECONNAISSANCE KIT,</b> Digital: Camera (high end 4 megapixel or better) digital which provides “instant” digital images for analysis by onscene personnel / Incident Command conducting hazard qualification, and can be downloaded to computer and printed.			Opt	Opt	N/A

<b>3.4 Transportation [Sub-Category]</b>					
3.4.1 <b>CONTAINER, BIOLOGICAL,</b> Plastic: A complete packaging system consisting of locking screw lid and jars of various capacities (6 ml to 500 ml), reinforcing receptacle, and cardboard box, with labels and instructions; Suitable for low threat infectious, blood, and biological.	1 Complete kit	ICAO Packing #602 for Infectious Substances	R	Opt	N/A
3.4.2 <b>ICE CHEST, Locking Lid:</b> Sturdy plastic, insulated, nominal capacity 2-5 gallon, with lid that securely locks shut.	Availability to 1		Opt	Opt	N/A
3.4.3 <b>CONTAINER, BIOLOGICAL, Pelican Case:</b> Sturdy impact resistant case, for added protection of item described above; Approved for air travel; Nominal total capacity 4 liters; Ideal for high threat infectious diseases, WMD biological, and WMD chemical.	1 Case	ICAO Packing #602 for Infectious Substances	Opt	Opt	N/A
3.4.4 <b>CONTAINER, D.O.T. CERTIFIED, Small:</b> Stainless steel, with six-bolt lid, 6 ½” dia. By 10” tall, approved for air cargo, pressure tested. The 6” dia plastic containers in Item # 3.4.2 (above) fit into this supper strong cask.	1	DOT	Opt	Opt	N/A
3.4.5 <b>CONTAINER, D.O.T. CERTIFIED, Large:</b> Stainless steel, with six-bolt lid, 6 ½” dia. By 22” tall, approved for air cargo, pressure tested. Three 6” dia plastic containers in Item # 3.4.2 (above) fit into this supper strong cask.	1	DOT	Opt	Opt	N/A
3.4.6 <b>CONTAINER, D.O.T. CERTIFIED, Recovery Vessel:</b> Totally encapsulate 100 and 150# compressed gas cylinders, 250 psi. rated. Weighs 350 pounds. Requires DOT exemption certificate.	1	DOT 3A480	Opt	Opt	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>RADIATION MONITORING/DETECTION</b>					
<b>4.1 Gamma, Beta, and Alpha Detection and Qualification program [Sub-Category]</b>					
4.1.1 <b>QUALIFICATION PROGRAM METER, GAMMA:</b> Capable of detecting gamma radiation (10 keV), with visual display meter 0.001 milli-Roentgen to 1 Roentgen per hour scale, and includes counts per minute/counts per second scale (0-60,000CPM). May include additional support utilities such as headphone set, interchangeable probes, computer hardware receptacle.	1 Unit: "Combination" qualification program meter will also satisfy requirement (See Options)	European "CE" Certification is recommended	R	R	R
4.1.2 <b>QUALIFICATION PROGRAM METER, BETA:</b> Capable of detecting beta particles (50 keV at 45% efficiency or 150 keV at 80% efficiency), with variable visual display readout in Roentgen and milli-Roentgen per hour, and includes counts per minute/counts per second scale. May include additional support utilities such as headphone set, interchangeable probes, and computer hardware receptacle.	1 Unit: "Combination" qualification program meter will also satisfy requirement (See Options)		R	R	R
4.1.3 <b>QUALIFICATION PROGRAM METER, ALPHA:</b> Capable of detecting alpha particles (2.5 MeV with 70% efficiency), with variable visual display readout in Roentgen and milli-Roentgen per hour, and includes counts per minute/counts per second. Can contain a built-in detector or incorporate separate attachable detector probes.	1 Unit: "Combination" qualification program meter will also satisfy requirement (See Options)		R	N/A	N/A
4.1.4 <b>QUALIFICATION PROGRAM METER, COMBINATION, GAMMA-BETA:</b> Will qualification program for both Gamma and Beta, and Includes performance of items # 4.1.1 and 4.1.2 in one unit.. If selected, one unit will satisfy requirement for both 4.1.1 and 4.1.2	1 Unit will satisfy 4.1.1 & 4.1.2 requirement		Opt	Opt	Opt
4.1.5 <b>QUALIFICATION PROGRAM METER, COMBINATION, GAMMA-BETAALPHA:</b> Will qualification program for Alpha, Beta, and Gamma, and Includes performance of items # 4.1.1, 4.1.2 and 4.1.3 in one unit. If selected, one unit will satisfy requirement for 4.1.1, 4.1.2 & 4.1.3.	1 Unit will satisfy 4.1.1, 4.1.2 & 4.1.3 requirement		Opt	Opt	Opt
4.1.6 <b>POCKET METER, COMBINATION, With Alarm:</b> Palm-held compact meter detects alpha, beta, gamma and x-ray; Operating range 0.05 to 50 mR/hr, and CPM 0-50,000; Built-in programmable alarm to function as dosimeter warning for accumulated dose.	2 Units		Opt	Opt	Opt
4.1.7 <b>PROBE, GAMMA, EXTENSION:</b> Telescoping wand with Gamma detection capability, for up to 15'.	1 Wand		Opt	Opt	Opt

<b>4.2 Radionuclide Detection [Sub-Category]</b>					
4.2.1 <b>RADIO-NUCLIDE DETECTION:</b> Hand held instrument which includes either an internal or external detector, and also includes an internal memory of a radioactive nuclide library. Graphical display in counts per second, and energy corrected dose. Might be programmable for defined alarm levels. Might require docking station. May support download of stored data to computer display. Displays correct chemical name of identified radio-nuclide, classification, and nuclide size.	1		R	N/A	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>Dosimeters [Sub-Category]</b>					
4.3.1 <b>DOSIMETER, DIRECT READING:</b> Direct reading of accumulated dose, or quantity of gamma and x-ray exposure. Requires hand-held re-charger, scale increments should be in milli-Roentgen. Good for quick, immediate, and initial emergency qualification program. Electronic dosimeter, with or without alarm in 4.3.3 will also satisfy this requirement.	1 for each assigned member; Electronic also satisfies, see 4.3.3	ANSI N-13.5	R	R	R
4.3.2 <b>DOSIMETER, TLD:</b> It is a thermoluminescent dosimeter (TLD) utilizing crystals or film to measure dose. Must be sent to licensed lab for analysis; Are re-useable, but some have a limited shelf life (6 months);	1 for each assigned member		Opt	Opt	Opt
4.3.3 <b>DOSIMETER, ELECTRONIC, Alarm:</b> Direct reading dosimeter with programmable limits and alarms; Functions like a pager and is worn in pocket or on belt; Battery operated, alarms when programmed accumulated dose has been recorded. Will satisfy requirement for 4.3.1.	One for each member of team		Opt	Opt	Opt

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>CHEMICAL PROTECTIVE CLOTHING</b>					
<b>5.1 Vapor Protective [Sub-Category]</b>					
5.1.1 <b>VAPOR PROTECTIVE ENSEMBLE, 1991 Industrial Chemicals</b> ; At least one for each assigned member, not less than 6 for a Type I Company, and 4 for a Type II Company.	6 – Type I 4 – Type II	NFPA 1991	R	R	N/A
5.1.2 <b>VAPOR PROTECTIVE, with 1991 Flash Fire Escape</b> : Includes additional NFPA 1991 Flash Fire Escape Protection Option; At least one for each assigned member (Can be same ensemble as 5.1.1 if so specified and certified)	6 – Type I 4 – Type II	NFPA 1991	Opt	Opt	N/A
5.1.3 <b>VAPOR PROTECTIVE, with 1991 Liquid Gas Protection</b> : Includes additional NFPA 1991 Liquid Gas Protection Option; At least one for each assigned member (Can be same ensemble as 5.1.1 if so specified and certified)	6 – Type I 4 – Type II	NFPA 1991	Opt	Opt	N/A
5.1.4 <b>VAPOR PROTECTIVE, with 1991 WMD Chemical / Biological Protection</b> : Includes additional NFPA 1991 WMD Chemical / Biological Protection Option; At least one for each assigned member (Can be same ensemble as 5.1.1 if WMD specified and certified. The 2005 edition of NFPA 1991 includes WMD chemicals tests. Certifying labels MUST be attached to inside of suit). (Rev2008)	Provides for WMD entry. Minimum 6 of either type of ensemble, must include gloves, boots to same certification	Provides for NFPA 1991 - OR - NFPA 1994, Class One or Class Two	R	N/A	N/A
5.1.5 <b>VAPOR PROTECTIVE, with 1994 WMD Chemical / R NA Biological Protection</b> : A separate garment per NFPA 1994 Class One (pre-2005 manufacturer's date) or Class Two (post 2005 manufacturer's date) for high vapor threat protective ensemble. (This item DOES satisfy the WMD protection requirement of SEL item # 5.1.4, but DOES NOT satisfy Industrial Chemicals protection requirement of item #5.1.1. Certifying labels MUST be attached to inside of suit).					
5.1.6 <b>PRESSURE TEST KIT</b> : Usually supplied by garment manufacturer, includes Magnehelic gauge.	1	NFPA 1991; ASTM F-1052	R	R	N/A

<b>5.2 Liquid Splash Protective [Sub-Category]</b>					
5.2.1 <b>LIQUID SPLASH PROTECTIVE, NFPA 1992</b> ; Industrial Chemicals for liquid contact and splash protection (no vapor protection), can be jumpsuit style or multi-piece ensemble depending on manufacturer design.	6 – Type I Company 4 – Type II Company Of either type	NFPA 1992	R	R	R
5.2.2 <b>LIQUID SPLASH PROTECTIVE, with NFPA 1994 Class 3 WMD Chemical / Biological Protection</b> : A separate NFPA 1994 Class 3 WMD Chemical / Biological Protection Ensemble which provides for liquid splash protection, and provides a lesser level of physical property protection than NFPA 1992 garment. If selected to be in inventory, meets requirement for item 5.2.1.		NFPA 1994, Class 3	R	Opt	N/A
5.2.3 <b>LIQUID SPLASH PROTECTIVE, with NFPA 1992 Flash Fire Escape Protection Option</b> ; Same garment as above, but with flash fire option added; (Can be same ensemble as 5.2.1 if so specified and certified at time of purchase).	6 – Type I 4 – Type II	NFPA 1992	Opt	Opt	Opt
5.2.4 <b>LIQUID SPLASH PROTECTIVE, with NFPA 1992 Liquefied Gas Protection Option</b> ; (Can be same ensemble as 5.2.1 if so specified and certified at time of purchase).	6 – Type I 4 – Type II	NFPA 1992	Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>5.3 Limited Use Protective [Sub-Category]</b>					
5.3.1 <b>LIMITED USE, Splash Protective;</b> With at least bond or sealed seams (not simple stitch or surged); Liquid tight zipper; Two for each assigned member	2 for each assigned member		R	R	R
5.3.2 <b>LIMITED USE, WMD SPLASH THREAT, NFPA 1994, Class Three:</b> Certified for low threat WMD liquid environments; Primarily attractive for first responder use and protection. This protection level can be combined with the particulate protection (i.e., Ensemble can be both Class Three and Four)	2 for each assigned member		Opt	N/A	N/A
5.3.3 <b>LIMITED USE, WMD PARTICULATE THREAT, NFPA 1994, Class Four:</b> Certified for low threat WMD particulate environments. Primarily attractive for first responder use and protection. This protection level can be combined with the liquid protection (i.e., Ensemble can be both Class Three and Four)	2 for each assigned member		Opt	N/A	N/A

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>ANCILLARY PROTECTIVE EQUIPMENT</b>					
<b>6.1 Hand Protection [Sub-Category]</b>					
6.1.1 <b>REPLACEMENT GLOVES, Vapor Protective:</b> Compliant to NFPA Standard 1991. Replacement glove inventory shall be ordered from and include ample supply of the manufacturer's recommended "outer" glove. Readily available generic type replacement gloves not acceptable. The "inner" glove is listed in item # 6.1.3 below. (Rev2008)	1 replacement set for each suit on hand	NFPA 1991	R	R	Opt
6.1.2 <b>REPLACEMENT GLOVES, Liquid Splash Protective:</b> Compliant to NFPA Standard 1992. Replacement glove inventory must include ample supply of the "outer" generic replacement gloves (Some 1992 suit ensembles are not supplied with gloves from the manufacturer). Where gloves are used as part of the protective ensemble, the manufacturer shall specify types of compliant outer gloves. When Liquid Splash-Protective ensembles are not provided with outer gloves by the manufacturer, replacement gloves must be compliant to NFPA Standard 1992. (Rev2009) The "inner" glove is listed in item # 6.1.3 below. Doubling the number of 6.1.1 replacement gloves will satisfy this requirement, and reduce the number of different types of gloves. (Rev2008)	1 replacement set for each suit on hand; Gloves for 6.1.1 will satisfy.	NFPA 1992	R	R	R
6.1.3 <b>UNDER-GLOVE: Light weight chemical resistant disposable type</b> glove popularly used as an under-glove or "inner" glove for the 1991 and 1992 ensembles. Also is used separately for light duty work, handling, sampling.	24 Pair		R	R	R
6.1.4 <b>HIGH TEMPERATURE Protective Glove:</b> Provides nominal one minute of contact protection for surface temperatures of 800 o F to 1,000 o F, and 1,000 o F to 1,300 o F. Differing heat insulating ratings versus time is dependent upon manufacturer blend of Nomex© / Kevlar© / and PBI©.	2 pair		R	R	N/A
6.1.5 <b>ULTRA-HIGH TEMPERATURE Protective Glove:</b> Provides nominal one minute of contact protection for surface temperatures of 1000 o F to 2,000 o F. Differing heat insulating ratings versus time is dependent upon manufacturer blend of Nomex© / Kevlar© / and PBI©. Configuration is often a mitten that fits over glove as described in 6.1.3.	2 pair		Opt	Opt	N/A
6.1.6 <b>ULTRA-COLD Protective Glove:</b> Gauntlet length minimum elbow; Provides nominal one minute continuous contact protection for liquids (minus) – 260 o F to (positive) + 300 o F. Often not suitable for immersion in liquid nitrogen.	2 pair		R	R	N/A
6.1.7 <b>RADIOLOGICAL Protective Glove:</b> Lead lined glove of butyl or nitrile rubber. Excellent for 100 % blockage of alpha and beta particles, provides limited protection for gamma radiation.	2 pair		R	Opt	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>6.2 Foot Protection [Sub-Category]</b>					
6.2.1 <b>BOOTS, CHEMICAL RESISTANT:</b> For use with Vapor Protective or Liquid Protective garments, and originals may be supplied by garment manufacturers. Replacements for NFPA 1991 ensemble must meet NFPA Standard 1991; Replacements for NFPA 1992 ensemble must meet NFPA Standard 1992 or better; Replacements for use with NFPA 1994 ensemble must meet NFPA Standard 1994 or better. In order to reduce the number of boot sets on hand, one set of NFPA 1991 boots will satisfy requirements for both NFPA 1992 and 1994	Minimum 1 pair for each assigned member	NFPA 1991 or NFPA 1992 or NFPA 1994; and ANSI Z-41	R	R	R
6.2.2 <b>BOOTIE, OUTER PROTECTIVE:</b> Disposable chemical protective bootie slip-over that covers entirely a General Work Safety Boot for use in low threat level contamination environments. Not intended to take the place of nor provide protection equivalent to NFPA 1991, 1992 and 1994 CPC boots.	12 Sets		R	R	R

<b>6.3 Head and Eye Protection [Sub-Category]</b>					
6.3.1 <b>HELMET:</b> Light weight construction style helmet to provide head protection when wearing any CPC ensemble. Should include suspension system, and adjustable sizing.	1 for each assigned member	ANSI Z-89.1	R	R	R
6.3.2 <b>GOGGLES:</b> For use during sample taking, material testing and qualitative analysis; Wide angle wraparound to prevent frontal and side splash to eyes; Polycarbonate or better lens for impact resistance. Some available to fit over prescription glasses.	1 for each assigned member	ANSI Z-87.1	R	R	R

<b>6.4 Support Systems [Sub-Category]</b>					
6.4.1 <b>UNDERGARMENT, FIRE RESISTANT:</b> Jumpsuit style garment, one or two piece, with or without pockets, of fire resistant material (Nomex®, PBI®, Kevlar® or blend) Compliant to one of the following NFPA Standards: 2112 – “Flame Resistant Garments for Industrial Personnel” - Or - 1975 – “Station Work Uniform for Fire and Emergency Services” - Or - 1977 – “Protective Clothing for Wildland Fire Fighting”	1 for each assigned member	NFPA 2112 Or NPFA 1975 Or NFPA 1977 (Rev2008)	R	R	R
6.4.2 <b>COOLING SYSTEM, Vest:</b> Auxiliary vest worn to provide cooling to torso for short period of time; Different technologies available, such as dry ice, ice packs, cryogenic nitrogen.	4 complete systems		Opt	Opt	N/A
6.4.3 <b>COOLING SYSTEM, Jumpsuit:</b> Jumpsuit style garment usually of fire resistant material, interwoven with tubes to provide a liquid circulating medium internal body cooling; Different technologies available, such as circulating cold water, cryogenic nitrogen; May require umbilical tube to supply cooling medium to wearer.	4 complete systems		Opt	Opt	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<p>6.4.4 <b>COOLING SYSTEM, Umbilical Air:</b> Air from outside source (cascade system) supplied to wearer via umbilical hose system and manifold; Is also often used to augment or override breathing air apparatus. All parts from cascade supply to wearer's face piece must be of same manufacturer. SEE also Section 12.1.</p>	<p>4 complete systems for suit cooling</p>	<p>NIOSH, OSHA</p>	<p>Opt</p>	<p>Opt</p>	<p>N/A</p>

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>TECHNICAL REFERENCE</b>					
<b>7.1 Printed References, Industrial and WMD Chemicals [Sub-Category]</b>					
7.1.1 <b>DATABASE TYPE, Printed:</b> Technical data, physical, chemical and toxicological properties	3 Different references		R	R	R
7.1.2 <b>GUIDEBOOK TYPE, Printed:</b> Intervention, incident handling, hazard qualification.	2 Different references		R	R	R
7.1.3 <b>SPECIALTY TYPE, Printed:</b> Special topics (i.e., rail tank car cross sections, pesticides, etc.) or specific information (i.e. incompatibility)	2 Different references		R	R	N/A
7.1.4 <b>REGULATORY TYPE, Government Codes, Ordinances, Printed OR Electronic:</b> Includes Federal and State codes, adopted consensus standards such as NFPA 471, 472, 2112, 1975, 1977, 1991, 1992, 1994, etc.	1 each of: CFR 49; CFR 29; Appropriate NFPA standards		R	R	R
7.1.5 <b>REGULATORY TYPE, Response Guidelines, Printed OR Electronic:</b> Local, Municipal, and County Response Plans, Operational Area Response Plans, OES Hazardous Materials Incident Contingency Plan.	1 copy – Local Response Plans 1 copy – Oper. Area Resp. Plan 1 copy – OES HMICP		R	R	R
7.1.6 <b>WMD Chemical / Biological Substances; Printed:</b> Technical data, some guidelines, some first aid information.	At Least: 1 – Chemical 2 - Biological		R	N/A	N/A

<b>7.2 Electronic References, Industrial and WMD Chemicals [Sub-Category]</b>					
7.2.1 <b>DATABASE TYPE, Electronic:</b> Technical Data, physical, chemical and toxicological properties	1 Program		R	R	R
7.2.2 <b>GUIDEBOOK TYPE, Electronic:</b> Intervention, incident handling, hazard qualification.	1 Program		R	R	R
7.2.3 <b>SPECIALTY TYPE, Electronic:</b> Special topics (i.e. rail tank car cross sections, pesticides, etc.) or specific information (i.e. incompatibility).	1 Program		R	R	N/A
7.2.4 <b>WMD Chemical / Biological Substances; Electronic:</b> Technical data, some guidelines, some first aid information.	1 Program		R	N/A	N/A

<b>7.3 Plume Air Modeling, Program Support [Sub-category]</b>					
7.3.1 <b>AIR MODELING, Database Software, basic platform:</b>	1 Program		R	R	Opt
7.3.2 <b>AIR MODELING, Overlay / Plume Display Software:</b> Compatible with basic database program (#7.3.1 above)	1 Program		R	R	Opt
7.3.3 <b>AIR MODELING, Overlay / Mapping Software:</b> Compatible with basic database program (#7.3.1 above)	1 Program		R	R	Opt
7.3.4 <b>AIR MODELING, Stand-Alone:</b> Not compatible with any mapping system. Generates quick plumes, and prints grid or chart formats.	1 Program		Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
7.3.5 <b>REAL TIME Data Downfeed:</b> Compatible with computer and air modeling software (This downfeed capability and supporting software usually comes with the particular type of weather station purchased. See Section 8.5 for weather station descriptions)	1 Capability		Opt	Opt	N/A

7.4 Computer, Support Hardware, Software [Sub-Category]					
7.4.1 <b>COMPUTER:</b> One (1) desktop or laptop, mounted in vehicle with battery backup, and with flexibility to accommodate noted "Requirements" for a complete system. Basic "system" for all three team types must include all peripherals as noted under "Requirement" column. Additional peripherals and programs are required for Type II and Type I teams as noted below.	Basic "system" must include: 7.4.2 – Printer capability 7.4.3 – Scan capability 7.4.4 – Duplication capability 7.4.8 – Graphics Hardware 7.4.11 – CD/DVD Drive 7.4.12 – USB Support 7.4.13 – Operating System Edition 7.4.14 – Document Processing		R	R	R
7.4.2 <b>PRINTER, Color:</b> Inkjet or laser or equal color print at rate of at least 10 pages per minute (black and white). This function can be combined with Scanner (item #7.4.3) and Duplication (item 7.4.4) requirements.	All teams need ability to perform all 3 functions.  PRINT SCAN DUPLICATE Separate components or combination components acceptable		R	R	R
7.4.3 <b>SCAN Capability:</b> Ability to SCAN documents in color, and save to hard drive or peripheral (in PDF or JPG format). This function can be combined with Printer (item 7.4.2) and Duplication (item # 7.4.4) requirements.			R	R	R
7.4.4 <b>DUPLICATION Capability:</b> Ability to reproduce 8 ½ x 11 documents, black and white minimum. This function can be combined with Printer / Fax / Scanner.			R	R	R
7.4.5 <b>COMBINATION UNIT:</b> Inkjet or laser color printer / scanner / duplicator (known as "3-in-1 units" or "4-in-1" units).			Opt	Opt	Opt
7.4.6 <b>ACCESS To INTERNET, Wireless:</b> Hardware, connections and ports to provide ability to utilize radio or telecommunications network for computer to access the Internet, is Broadband capable, has wireless internet card or device in order to enable computer to transmit and receive email.	1 Capability		R	R	Opt
7.4.7 <b>ACCESS To INTERNET, Hard Wire:</b> Ability to tap into standard telephone hardwire access to the internet for computer; This may require maintaining extra modem/telephone cable suitable for and approved by telephone or cable company to be hooked up to their system(s) upon request.	1 Capability		Opt	Opt	Opt
7.4.8 <b>HARDWARE, COMPUTER, GRAPHICS:</b> Insure that a high quality graphics chip enhancement, or graphics board is included	1 Capability		R	R	R
7.4.9 <b>HARDWARE, COMPUTER, MODEM:</b> Insure that a high quality – high speed General Packet Radio Service (GPRS) modem is installed.	1 Capability		R	R	
7.4.10 <b>HARDWARE, Floppy Disc Drive, 2HD:</b>	1 Capability				
7.4.11 <b>HARDWARE, CD-Rom or DVD drive:</b> Numerous different formats available, unit should be multi-format capable	1 Capability		R	R	R

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
7.4.12 <b>HARDWARE, COMPUTER, USB Port Compatible:</b> Insure that proper connection is included for attachment or download of external electronic devices (i.e. thumb drives, digital cameras, etc).	1 Capability		R	R	R
7.4.13 <b>SOFTWARE, OPERATING SYSTEM:</b> IBM/Windows or Apple Macintosh basic operating system platform, operating system not to be more than two versions old at any time.	1 Capability		R	R	R
7.4.14 <b>SOFTWARE, DOCUMENT PROCESSING:</b> a) Must have a word processing type software program that can create basic files or documents such as letters, notes, logs, tables, etc., and that can download and display other imported files such as incident command forms, Incident Action Plans, Site Safety Plans, etc. (i.e. .doc, .wpd, .rtf). b) Must have a graphics processor type software program that can download and display graphics documents such as photos, maps, plume generation overlays in a variety of graphics file formats, (including .jpg).	1 Capability		R	R	R
7.4.15 <b>SOFTWARE, FORMAT CONVERSION:</b> a) Ability to download, open, copy, and save files in various graphics formats (i.e. .tiff, .bmp, .wmp, etc.) and convert them to a .jpg file. b) Ability to convert any document and graphics file to a .pdf file.	1 Capability		R	R	Opt
7.4.16 <b>SOFTWARE, PROTECTION:</b> Installation of software and/or hardware to provide virus protection, Trojan horse protection, firewall, privacy protection, ad blocking, intrusion detection, upgrades, and removal of virus, Trojan horse, and spyware contamination.	1 Capability		R	R	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>SPECIAL CAPABILITIES</b>					
<b>8.1 Advanced Technologies; Vision, Heat, Sound [Sub-Category]</b>					
8.1.1 <b>LIGHT AMPLIFICATION, SCOPE, BASIC</b> ; Hand-held, portable stand-alone device for diminished light environments (Night Vision); Some configurations available include: Monoculars and binoculars, usually with built-in zoom capability. Does not allow for interchangeable lenses. Item # 8.1.2 is acceptable to meet this requirement.	1 Unit	Generation II or III Technology	R	R	Opt
8.1.2 <b>LIGHT AMPLIFICATION, SCOPE, INTERCHANGEABLE, Body Only</b> ; Hand-held, portable stand-alone device for diminished light environments (Night Vision); Usually single lens (monocular) only; Lenses are interchangeable, and usually incorporate the high quality of a variety of interchangeable 35mm camera lenses, including standard view, wide angle, telephoto, and zoom-telephoto.	1 Unit - Meets requirement for 8.1.1	Generation II or III Technology	Opt	Opt	Opt
8.1.3 <b>LIGHT AMPLIFICATION, LENSES, INTERCHANGEABLE LENSES, Wide Angle</b> : Interchangeable camera lens, usually in the range of 25 to 35 mm.	1 Lens		Opt	Opt	Opt
8.1.4 <b>LIGHT AMPLIFICATION, LENSES, INTERCHANGEABLE LENSES, Standard</b> : Interchangeable camera lens, usually in the range of 45 to 65 mm.	1 Lens		Opt	Opt	Opt
8.1.5 <b>LIGHT AMPLIFICATION, INTERCHANGEABLE LENSES, Telephoto</b> : Interchangeable camera lens, usually in the range of 125 to 225 mm.	1 Lens		Opt	Opt	Opt
8.1.6 <b>LIGHT AMPLIFICATION, INTERCHANGEABLE LENSES, Zoom</b> : Interchangeable camera lens; Popular ranges are 35 to 100 mm, 75 to 150 mm, and 100 to 250 mm.	1 Lens		Opt	Opt	Opt
8.1.7 <b>LIGHT AMPLIFICATION, CAMERA, MINIATURIZED</b> : Very small night-vision technology camera (approximate size i.e. ball point pen); Attachable to helmet, goggles, glasses; Transmits image back to receiving station.	1 Unit		Opt	Opt	Opt
8.1.8 <b>INFRA-RED, SCOPE, Temperature Sensing Only</b> : Handheld, portable scope; with L.E.D. direct temperature reading display, nominal from -25o F to + 1000o F.	1 Scope		R	R	Opt
8.1.9 <b>INFRA-RED, SCOPE, Hand-Held, Imaging</b> : Hand-held camera-like device, provides image of viewing area in infrared light only (not ambient visual light).	1 Scope		Opt	Opt	Opt
8.1.10 <b>INFRA-RED, SCOPE, Mountable, Imaging</b> : Camera-like device which provides image of viewing area in infra-red light only (not ambient visual light); Mountable to helmet and can provide image to the wearer, and/or transmit image back to a receiving station.	1 Scope		Opt	Opt	Opt
8.1.11 <b>INFRA-RED, PROBE, Imaging</b> : Hand-held device, with infra-red camera lens on end of probe; Probe may be extendable; Lens may be moveable or pivotal.	1 probe		Opt	Opt	Opt
8.1.12 <b>INFRA-RED, CAMERA, MINITURIZED, Imaging</b> : Very small infra-red vision technology camera (approximate size i.e. ball point pen); Attachable to helmet, goggles, glasses; Transmits image back to receiving station; could be for further image manipulation and re-transmission.	1 Unit		Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
8.1.13 <b>PERSONAL IDENTIFICATION BEACON, Infra-Red:</b> L.E.D. Personal Identification Beacon, for night or severely diminished light qualification program and monitoring of entry team personnel; Flashing light is in infra-red range, is invisible to naked eye; (Requires Night Vision Scope or an Infra-Red Imaging camera to detect)	1 for each assigned member		Opt	Opt	Opt
8.1.14 <b>PERSONAL TRACKER:</b> A transmitter is worn by the employee; sends an ultra-sonic signal. A hand held receiver receives signal; LED readout on receiver shows strength of signal and can track through smoke, flame and debris.	1 for each assigned member		Opt	Opt	Opt
8.1.15 <b>SOUND SENSING, Ultra-Sonic:</b> Leak detection device for escaping gas, detecting variations in inaudible harmonic sounds; Selectable dB range down to 30 dB and selectable frequency; Nominal frequency range 15 to 100 kHz..	1 Unit		R	R	Opt
8.1.16 <b>CAMERA, VIDEO, Digital:</b> Portable hand-held color video camera, with laser pointer, microphone, mountable on tripod; May have built-in compass, timer.	1 Unit	UL Standard 1604	R	Opt	Opt
8.1.17 <b>CAMERA, VIDEO, PROBE, Wireless:</b> Portable hand-held color video camera, with telescoping probe; Wireless transmitter to receiver in CP.	1 Unit		Opt	Opt	Opt
8.1.18 <b>CAMERA, MINIATURIZED, Video Imaging:</b> Very small video technology camera (approximate size i.e. ball point pen); Attachable to helmet, goggles, glasses; Transmits image back to receiving station; could be for further image manipulation and re-transmission.	1 Unit		Opt	Opt	Opt

8.2 Advanced Technologies; Weather, GPS [Sub-Category]					
8.2.1 <b>WEATHER STATION, Basic Kit:</b> Tripod or mounting bracket, wind monitor (up to 100 mph), barometer (+ or – 3 mBars), air temperature sensor (-20 to +120 degrees F), internal compass, humidity sensor (0 to 100%); Hardwire connections allow use of vehicle or generator power, and sends data back to digital receiver and a host computer; All data upgraded nominally every second.	1 complete kit: Either one as describe will suffice		R	R	Opt
8.2.2 <b>WEATHER STATION, Wireless Digital Support:</b> Upgrades unit to include transmitter as part of unit, and transmits data up to 5 miles to digital receiver and host computer. Enables weather station to function either by hardwire or wireless.					
8.2.3 <b>WEATHER STATION, Software Support:</b> Sometimes included as part of basic kit, or may need to be purchased separately depending upon manufacturer; Allows for plume on-screen display, and/or allows for data to be compatible with other plume generation programs such as CAMEO, EIS, CHARM, SAFER.	1 support system		Opt	Opt	Opt
8.2.4 <b>GPS Personal Receiver/Transmitter:</b> A receiver-transmitter worn by the employee; sends signal to GPS receiver grid (i.e. satellites), which calculates location, and re-transmits position to a receiver station (Requires receiver station), and displayed on computer monitor.	1 for each assigned member		Opt	Opt	Opt

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>INTERVENTION</b>					
<b>9.1 Chemical Intervention [Sub-Category]</b>					
9.1.1 <b>NEUTRALIZATION – Acids:</b> for concentrated Acid spills of up to 5 gallons; Should be neutral salt producing and nonpolluting; Granular Sesquicarbonate recommended.	An amount sufficient to neutralize 5 gallon spill		R	R	Opt
9.1.2 <b>NEUTRALIZATION – Alkali (Bases):</b> for concentrated Alkali spills, up to 5 gallons; Should be neutral salt producing and non-polluting; Powdered Citric Acid recommended.	An amount sufficient to neutralize 5 gallon spill		R	R	Opt
9.1.3 <b>ENCAPSULATING SPREADABLE POWDER – General Purpose (and suitable for Pesticides):</b> Must be NON-CLAY BASED. Granular, spreadable, and pourable; Acceptable for POLAR and NON-POLAR based solvents including pesticides. Nominal size 5-10 lbs dispenser box or bag.	1 Container (Not “kitty litter” or diatomaceous earth)	OSHA 29CFR 1910.119, or EPA 40CFR170	R	R	Opt
9.1.4 <b>ENCAPSULATING SPREADABLE POWDER - Formaldehyde:</b> Granular spreadable / pourable, popular for formaldehyde solvents encapsulation; Nominal size – 5 gallon pail kit or 5 lbs of spreadable powder.	An amount sufficient to encapsulate a 5 gallon spill		R	R	Opt
9.1.5 <b>ENCAPSULATING SPREADABLE POWDER – Non-Polar Solvents:</b> Granular spreadable / pourable, suitable for hydrocarbon based solvents (not water based solvents), fuels, oil based poisons. Encapsulates and solidifies into a solid; Nominal size – 2 gallon pail.	1 Container	EPA RCRA Burial Regulations	R	R	Opt
9.1.6 <b>FIRE EXTINGUISHER, CLASS “D”, Sodium Chloride formulation:</b> Capacity 30 Lbs; suited for metal fires of magnesium, sodium, potassium, uranium, aluminum	Must have at least ONE. Any one from these two types will satisfy.	FM Approval	R	R	R
9.1.7 <b>FIRE EXTINGUISHER, CLASS “D”, Copper compound formulation:</b> Capacity 30 Lbs minimum; suited for lithium, lithium alloys.		FM Approval	R	R	R

<b>9.2 Environmental Intervention [Sub-Category]</b>					
9.2.1 <b>ABSORBENT NON-POLAR SOLVENT, - Pads or Roll:</b> Repels polar solvents (water), absorbs non-polar solvents (straight chain hydrocarbons, oils, some freon liquids, carbon tetrachloride); Nominal pad size 18” x 18”; or roll 12” to 15” wide x 150’ long.	150 square feet of coverage	40CFR 300.915(g)	R	R	R
9.2.2 <b>ABSORBENT GENERAL PURPOSE or POLAR SOLVENT, - Pads or Roll:</b> Absorbs polar solvents (water, acids, alkalis). If General Purpose type also will absorb non-polar solvents (straight chain hydrocarbons, oils, benzene ring compounds) Nominal pad size 18” x 18”; or roll 12” to 15” wide x 150’ long.	150 square feet of coverage	40CFR 300.915(g)	R	R	R
9.2.3 <b>ABSORBENT NON-POLAR SOLVENT MINI-BOOMS - Pigs, Socks:</b> Repels polar solvents (water), absorbs non-polar solvents (straight chain hydrocarbons, oils, some freon liquids, carbon tetrachloride); Nominal Dia. 3 to 6”; Nominal Length 4 – 12’ each.	40 feet total length	40CFR 300.915(g)	R	R	R

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
9.2.4 <b>ABSORBENT GENERAL PURPOSE or POLAR SOLVENT MINI-BOOMS - Pigs, Socks:</b> Absorbs polar solvents (water, acids, alkalis). If General Purpose type also will absorb nonpolar solvents (straight chain hydrocarbons, oils, benzene ring compounds). Nominal Dia. 3 to 6"; Nominal Length 4 – 12' each.	40 feet total length	40CFR 300.915(g)	R	R	R
9.2.5 <b>ABSORBENT NON-POLAR SOLVENT, - Pillows:</b> Repels polar solvents (water), absorbs non-polar solvents (straight chain hydrocarbons, oils, some freon liquids, carbon tetrachloride); Nominal size – 2 to 3 gallon absorption capacity each pad.	10 Gallon Absorption	40CFR 300.915(g)	R	R	Opt
9.2.6 <b>ABSORBENT GENERAL PURPOSE or POLAR SOLVENT, - Pillows:</b> Absorbs polar solvents (water, acids, alkalis). If General Purpose type also will absorb non-polar solvents (straight chain hydrocarbons, oils, benzene ring compounds). Nominal Dia. 3 to 6"; Nominal size – 2 to 3 gallon absorption capacity each pad.	25 Gallon Absorption	40CFR 300.915(g)	R	R	Opt
9.2.7 <b>ABSORBENT SPONGE – Mercury Kit:</b> Consists of two basic parts; Mercury absorbing sponges, and approx. 500 gram container of Mercury absorbing powder. Some kits also include a hand operated suction pump.	1 Kit		R	R	Opt
9.2.8 <b>BOOM, CONTAINMENT, Non-Absorbing:</b> For calm water corralling of a floating solvent/oil only, not for absorption; Buoyancy to weight ration 6:1; Grab tensile strength of 500 lbs and tongue tear strength of 150 lbs. Nominal size – 4" float x 6" skirt x 25' long.	100 Feet	OPA-90 Calm Water	Opt	Opt	Opt
9.2.9 <b>BOOM, CONTAINMENT, Oil Absorbing:</b> Will not absorb water; For corralling and absorption of floating solvent/oil; No skirts; Will not sink; Linkable; Nominal size – 5" to 8" dia. X 10 to 25' long; Nominal absorption capacity 5 to 15 gallons per 10 foot section deployed, depending on diameter.	100 feet; and 50 gallons Absorption		Opt	Opt	Opt
9.2.10 <b>PIPE, PLASTIC:</b> Assortment of various sizes and lengths to aid in construction of over-flow and under-flow dams; Nominal sizes include 8' lengths of 12" dia.; 8" dia.; 6" dia.; 4" dia.	One 8' length of at least 3 sizes		R	R	R

9.3 Mechanical Intervention [Sub-Category]					
9.3.1 <b>CHLORINE "A", Kit:</b> For repair or plugging leaks in chlorine gas cylinders.	1 Kit, Complete	Chlorine Institute	R	R	N/A
9.3.2 <b>CHLORINE "B", Kit:</b> For repair or plugging of leaks in chlorine one ton cylinders.	1 Kit, Complete	Chlorine Institute	R	R	N/A
9.3.3 <b>CHLORINE "C", Kit:</b> For repair or plugging of leaks in chlorine rail tank cars or highway tank trucks.	1 Kit, Complete	Chlorine Institute	R	R	N/A
9.3.4 <b>CHLORINE TRAINING PROP, One Ton:</b> Training facsimile of one ton cylinder to allow application of the "B" Kit.	1 Kit, Complete	Chlorine Institute			
9.3.5 <b>SULFUR DIOXIDE UPGRADE For Kit "A":</b> Allows for use of Chlorine Kit "A" for sulfur dioxide gas cylinders by providing special parts and gaskets.	1 Upgrade Kit, Complete	Chlorine Institute	R	R	N/A

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
9.3.6 <b>SULFUR DIOXIDE UPGRADE For Kit "B"</b> : Allows for use of Chlorine Kit "B" for sulfur dioxide one ton cylinders by providing special parts and gaskets.	1 Upgrade Kit, Complete	Chlorine Institute	R	R	N/A
9.3.7 <b>SULFUR DIOXIDE UPGRADE For Kit "C"</b> : Allows for use of Chlorine Kit "C" for sulfur dioxide rail tank cars by providing special parts and gaskets.	1 Upgrade Kit, Complete	Chlorine Institute	R	R	N/A
9.3.8 <b>ANHYDROUS AMMONIA "A", Kit</b> : For repair or plugging leaks in anhydrous ammonia gas cylinders.	1 Kit, Complete		Opt	Opt	N/A
9.3.9 <b>MIDLAND RAIL TANK CAR, Three Part Kit</b> : Advertised to be "universal", but does not fit all dome valve assemblies; Functional for repair or plugging leaks in predominantly LPG rail tank cars, but can fit some sulfur dioxide and hydrogen sulfide tank cars; Consists of three (3) separate large kit boxes.	1 Kit, Complete		Opt	Opt	N/A
9.3.10 <b>PATCH AND REPAIR, PIPE, LIQUIDS, Standard, Kit</b> : Consists of (at a minimum) externally applied single bolt or dual bolt (preferable) steel pipe clamps, with rubber sheeting lining; Ten or more different pipe sizes ranging from 1/2" dia. pipe to at least 4" dia. pipe; with extra 1/8" neoprene material.	1 Kit		R	R	R
9.3.11 <b>PATCH AND REPAIR, PIPE, LIQUIDS, Extended, Kit</b> : Consists of (at a minimum) externally applied dual bolt steel pipe clamps, with rubber sheeting lining; Three or more different pipe sizes ranging from 4 1/2" dia. pipe to at least 8" dia. pipe; with extra 1/8" neoprene material.	1 Kit		Opt	Opt	Opt
9.3.12 <b>PATCH AND REPAIR, PIPE, LIQUIDS, Heavy Duty, Kit</b> : Consists of (at a minimum) high ferrous steel, nickel plate, or stainless steel externally applied dual bolt or quadruple bolt (preferable) pipe clamps, with rubber sheeting lining; Ten or more different sizes ranging from 1" dia. pipe to at least 5" dia. pipe; with extra 1/8" neoprene material. Pipe clamps of this design range up to 18" in diameter.	1 Kit		Opt	Opt	Opt
9.3.13 <b>CLAMP, PIPE, GAS, Line, Mechanical</b> : Used for squeezing shut natural gas lines on the low pressure (residence) side of utility regulator; Nominal 2" pipe diameter, mechanically operated.	1 Kit		R	R	N/A
9.3.14 <b>PATCH, PIPE, GAS, Line, Hydraulic</b> : Heavy Duty squeeze tool for squeezing shut natural gas lines of 1" to approx. 3 1/2" in diameter, hydraulically operated.	1 Kit		Opt	Opt	N/A
9.3.15 <b>PATCH, PIPE, LIQUID, Pneumatic, Flange</b> : Large heavy duty rubber bandage type device nominal 8" x 36" long, slips over leaking pipe from 2" to 8" in dia, pipe flange, or pipe valve connection, then inflated. Requires air source, air hose, regulator.	1 Kit	Air source, hose, regulator, ratcheting straps from one kit can be used for another kit if of same manufacturer and compatible (Do not need to duplicate).	R	R	R
9.3.16 <b>PATCH, PIPE, LIQUID, Pneumatic, Bandage</b> : Heavy duty rubber bandages of nominal 36" long x 8" wide, and 70" long x 8" wide; wrapped around leaking pipe from 2" to 19" in dia., then inflated. Requires air source, air hoses, regulator.	1 Kit		Opt	Opt	Opt
9.3.17 <b>PATCH, TANKER, LIQUID</b> : Large foam and plastic patch 12" x 7" with 6 feet of ratchet strap for 55 gallon drums. Extendable to 25 feet with extra strapping for highway tanker patching capability.	1 Kit		R	R	R

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
9.3.18 <b>PATCH, TANKER, LIQUID, Side:</b> Pneumatic operated leak sealing patch or bag, with straps and ratchets to hold in place. Compressed air expands patch (nominal size 24" x 12") to seal leak in side of large tanks, tank cars, or tankers. Requires air hoses, regulator, air source usually supplied as part of kit.	1 Kit: Either one will satisfy requirement		R	R	R
9.3.19 <b>PATCH, TANKER, LIQUID, Side, Drainage Control:</b> Identical to previous item, but rubber patch is heavy duty construction, with internal plumbing attached to allow for controlled drainage or bleed-off of liquid.			R	R	R
9.3.20 <b>PATCH, TANKER, LIQUID, End:</b> Pneumatic operated leak sealing patch or bag, with straps and ratchets to hold in place. Compressed air expands special patch (nominal size 24" x 12") with four eye hooks at corners to seal leak on curved end of large tanks, tank cars, or tankers. Requires air source; air hoses, regulator usually supplied as part of kit, and is an up-grade of previous kit.	1 Kit		Opt	Opt	Opt
9.3.21 <b>PATCH, TANKER, LIQUID, Magnetic:</b> Nominal 15" x 32" stainless steel backing, with eight magnets, for ferrous metal highway tank trucks, and other low gravity ferrous metal tank leaks.	1 Unit		Opt	Opt	Opt
9.3.22 <b>PATCH, TANKER, LIQUID, Suction Cup:</b> Nominal 18" x 32" stainless steel backing, with eight EPDM suction assemblies, for use on non-ferrous tanks and tank trucks.	1 Unit		Opt	Opt	Opt
9.3.23 <b>PATCH, DRUM, LIQUID, Magnetic:</b> A 2" foam and plastic patch approx. 10" x 6" attached to a 32" x 10' pliable metal backing, equipped with two strong magnets on both ends. Magnets hold patch in place on ferrous metal drums and highway tank trucks.	1 Unit		Opt	Opt	Opt
9.3.24 <b>PATCH, DRUM, LIQUID, Pneumatic, Kit:</b> Small rubber patches of nominal 4" x 4", 4" x 9", and 7" x 7", held in place by straps and ratchets, patch inflated to stop leak. Requires air hose, air source, and regulator; Can be part of or additional accessories of previous kits if these inflatable patches are included in another kit (i.e. 9.3.15 or 9.3.17 or 9.3.18).	1 Kit	Air source, hose, regulator, ratcheting straps from one kit can be used for another kit if of same manufacturer and compatible (Do not need to duplicate)	R	R	R
9.3.25 <b>PATCH, DRUM, LIQUID, Suction Cup:</b> Same as previous item but has two adjustable suction cups on both ends for use on non-ferrous drums and tank trucks.	1 Unit		Opt	Opt	Opt
9.3.26 <b>PATCH, DRUM, LIQUID, Compression, Kit:</b> Consists of 6 different sizes of tapered plug; 2 different sizes ball plug; 2 different sizes "T" plug, all with butterfly nuts; 8 different sizes wood dowels, and other parts as described.		1 Kit - Must Consist Of At Least 6 – tapered plugs, diff. sizes 2 – ball plugs, diff. sizes 2 – "T" bolt patch, diff. sizes 8 – wood dowels, diff. sizes 1 – 8" x 12" rubber or foam sheet Assortment of sheet metal screws	R	R	R
9.3.27 <b>PATCH, DRUM, LIQUID, Cribbing:</b> Separate stainless steel plate and soft neoprene closed cell foam nominal 8" x 12"; With hardwood cribbing, secured with two 22' nylon straps and ratcheting buckles.	1 System		Opt	Opt	Opt
9.3.28 <b>PLUGS, STOPPER, LIQUID, Compression, Replacement:</b> Individual replacement 6 piece compression stopper plugs for holes from ½" up to 2" dia., with butterfly nut, for Drum, Liquid, Compression kit.	1 each of 2 sizes		Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
9.3.29 <b>PLUGS, TAPERED STOPPER, LIQUID, Compression, Extra Large:</b> Individual compression stopper plugs for holes 3" to 4" dia., with butterfly nut; Sizes as indicated. (Complements and enhances Kit Item # 9.3.26).	1 each of 2 sizes	Must Consist Of One – 3" dia tapered plug, and One – 4" dia. tapered plug	R	R	R
9.3.30 <b>PLUGS, TAPERED STOPPER, LIQUID, Compression, Replacement:</b> Individual tapered, ball or half-round stopper plugs for holes up to 2" dia., with butterfly nut, for Drum, Liquid, Compression kit..	1 each of 2 sizes		Opt	Opt	Opt
9.3.31 <b>PLUGS, BALL or HALF-ROUND, LIQUID, Compression, Extra Large:</b> Individual tapered, ball or half-round stopper plugs for holes 3 to 4 " dia., with butterfly nut; Sizes as indicated. (Compliments and enhances Kit Item #9.3.26).	1 each of 2 sizes	Must Consist Of Ball or Half-Round: One – 3" One – 4"	R	R	R
9.3.32 <b>PLUGS, "T" BOLT, LIQUID, COMPRESSION, Extra Large:</b> Stainless steel curved plate and 3/4" soft neoprene closed cell foam for irregular slits up to 3" long; Sizes as indicated. (Compliments and enhances Kit item # 9.3.26).	1 each of 2 sizes	Must Consist Of Two – 3" or larger, square curved plate	R	R	R
9.3.33 <b>PLUGS, CONICAL, LIQUID, Drain:</b> Kit consisting of three 10" to 13" long tapered plastic plugs with eye bolts, ranging in sizes from 2 ½" to 8" dia. for holes, drains, gravity flow pipes.	Set of at least 3 sizes		R	R	R
9.3.34 <b>PLUGS, TAPERED, LIQUID, Pneumatic:</b> Kit often comes with at least 3 different types of rubber plugs; Round tapered to 4" dia and 10" long; Narrow wedge tapered 2 ½" wide, Wide wedge tapered 4 ½" wide; Includes quick connect/quick-disconnect application lance; Requires air source, air hoses, regulator.	Set of at least 3 sizes	Air source, hose, regulator, ratcheting straps from one kit can be used for another kit if of same manufacturer and compatible (Do not need to duplicate)	Opt	Opt	Opt
9.3.35 <b>PLUGS, EXPANSION, LIQUID, Standard, Kit:</b> Kit consisting of plumber's style expansion plugs with wing nut; 1", 1 ¼", 1 ½", 1 ¾", 2", 2 ½", 3", 3 1/2", 4" for drains or open butt pipe. Kit commercially available but often is "home derived", assembling pipe plugs from local plumbing distributor.	Mix or match set of at least 7 different sizes, of either style		R	R	R
9.3.36 <b>PLUGS, EXPANSION, LIQUID, Vented, Kit:</b> Kit basically same as previous, but consisting of special plumber's style expansion plugs with wing nut; 1", 1 ¼", 1 ½", 1 ¾", 2", 2 ½", 3", 3 ½", 4", all of which have ¼" copper vent pipe incorporated through plug, with threaded end; For drains or open butt pipe. Kit commercially available but often is "home derived", assembling pipe plugs from local plumbing distributor.			R	R	R
9.3.37 <b>PLUGS, EXPANSION, LIQUID, Specialized, Kit:</b> Kit consisting of plumber's style expansion plugs with turn nut and 4" long shaft handle but for extra small style plumbing typically found in laboratories; ¼", 3/8" ½", 5/8", 3/4" for drains or open butt pipe. Kit often is "home derived", assembling pipe plugs from specialty tubing and plumbing distributor.	One set of at least 4 different sizes		opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
9.3.38 <b>PLUGS, EXPANSION, LIQUID, Heavy Duty, Kit:</b> Kit consisting of plumber’s style extra-large commercial expansion plugs with wing nut or bolt; 5”, 6”, 7”, 8”, 10”, 12”, 14” for drains or open butt pipe. Some come with open pipe down center with valve, to control leak or flow once plug is in place. Kit often is “home derived”, assembling pipe plugs from fire sprinkler or sewer plumbing distributor.	Selection of various sizes for local needs		Opt	Opt	Opt
9.3.39 <b>PLUGS, INFLATABLE, LIQUID, Small Pipe, Kit:</b> Kit consisting of smaller diameter pipe (½”, ¾”, 1”, 1 ¼”, 1 ½”), sometimes known as “Test Ball” or “Test Tube”, inflatable rubber tubes inserted into open butt pipe or drain; One type uses domestic water to inflate, another type uses compressed air from bicycle pump to inflate; Have bleed valves, Nominal lengths 4” to 12”.	Selection of various sizes for local needs		opt	Opt	Opt
9.3.40 <b>PLUGS, INFLATABLE, LIQUID, Large Pipe, Kit:</b> Kit consisting of very large heavy duty inflatable rubber tubes or balls, usually by air; Variety of sizes available (4”, 5”, 6”, 8”, 10”, 12”, 15”, 18”, 22”). Kit often is “home derived”, assembling plugs from sewer or water main plumbing distributors or suppliers; Popular with Water Utility Departments.	Selection of various sizes for local needs		opt	Opt	Opt
9.3.41 <b>PLUGS, INFLATABLE, LIQUID, Drain and Sewer:</b> Kit consists of 3 to 7 inflatable plug bags of heavy duty construction, capable of being inserted into storm drains, pipes ranging from 5” to 55” in dia. Inflation air supplied by SCBA tank; Kit should be complete with air hoses, manifold, and pressure regulator.	Selection of various sizes for local needs		opt	Opt	Opt
9.3.42 <b>PLUGS, END CAP, LIQUID, Kit:</b> Also known as “Jim Caps”, rubber cap fitting over open butt end of pipe, and has metal tightening band with screw (Similar to radiator clamp tightening band); Nominal sizes 1”, 1 ¼”, 1 ½”, 1 ¾”, 2”, 2 ½”, 3”, 3 1/3”, 4”; Kit often is “home derived”, assembled from devices from local plumbing distributor.	Selection of at least 7 different sizes		R	R	R
9.3.43 <b>PLUGS, END CAP, LIQUID, Specialized, Kit:</b> Also known as “Jim Caps”, same as previous item, but have center plumbing and valve to control flow; Nominal sizes 1”, 1 ¼”, 1 ½”, 1 ¾”, 2”, 2 ½”, 3”, 3 1/3”, 4”; Kit often is “home derived”, assembled from devices from commercial plumbing distributor.			R	R	R
9.3.44 <b>PLUGS, DOWELS, LIQUID, Assortment:</b> Long tapered round wood, rubber, or plastic plugs ranging from 1” dia to 5” dia, and 3” long to 10” long	Assortment to satisfy 1” to 5” full range		R	R	R
9.3.45 <b>PLUGS, DOWELS, LIQUID, Extra Large:</b> Long tapered round wood, rubber, or plastic plugs ranging from 4” dia to 8” dia.	Assortment to satisfy local needs		Opt	Opt	Opt
9.3.46 <b>PLUGS, WOOD WEDGES, LIQUID, Assortment:</b> Long tapered flat wood, rubber, or plastic wedges ranging from 1” w x 10” long to 3” w x 10” long.	Assortment to satisfy local needs		Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
9.3.47 <b>PLUGS, BOILER, THREADED:</b> Round tapered steel plugs, threaded, 1/8" to 3/4" nominal diameter, by about 2" long.			Opt	Opt	Opt
9.3.48 <b>DOME LID LOCK, Screw Clamp:</b> Secures or tightens highway tanker "manway" lids; Adjustable for width with sliding clamp tongs, and large center screw bolt for tightening.	Set of 4, mix or match		R	R	R
9.3.49 <b>DOME LID LOCK, Spring Loaded:</b> Secures or tightens highway tanker "manway" lids; Spring loaded side tongs adjust to width of lid, and large center screw bolt for tightening.			R	R	R

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>DECONTAMINATION</b>					
<b>10.1 Ground Protection [Sub-Category]</b>					
10.1.1 <b>TARPS, PLASTIC, Ground Cover:</b> At least 12' x 12" each, to protect ground and aids in identifying decontamination corridor; Also can be used for tool lay-out, shade, and other utilities .	2		R	R	R
10.1.2 <b>TARPS, CARRY-ALL, Small:</b> Nominal 6' by 6', a small tarp, or carry-all (has handles) for contaminated equipment drop at De-Con first station.	1		R	R	R
10.1.3 <b>SHEETING, PLASTIC, ROLL, Heavy Duty:</b> Nominal size 5' wide x 100' length, unfolds to nominal 20' wide, water repellent polyethylene.	1 Roll		R	R	R
10.1.4 <b>CATCH BASIN:</b> Nominal six feet square, 18" high, with rigid sides; Nominal 120 gallon capacity. Sometimes is a separate item, or sometimes supplied with a Gross De-Con Shower system or kit.	1	This item might be part of the de-con shower system item #10.1.5 and satisfies this requirement	R	R	R
10.1.5 <b>SHOWER, GROSS DECONTAMINATION:</b> Usually utilized at first "station" in a decontamination corridor process; Can be homemade, many commercial styles available; Water supplied by garden hose or 1 1/2" fire department connections; Fits into Catch Basin or comes with its own Catch Basin as a kit.	1		R	R	R
10.1.6 <b>EYE WASH:</b> 32.oz. bottles.	2		R	R	R
10.1.7 <b>POOL, PORTABLE, LARGE:</b> Nominal 60 to 80 gallon capacity, utilizing an expandable – collapsible spring hoop ring to support plastic sheeting for pool; Or, inflatable sidewalls; Nominal 60" diameter. Liners are disposable and replaceable.	3		R	R	R

<b>10.2 Support Tools for Decontamination [Sub-Category]</b>					
10.2.1 <b>STOOLS, Portable:</b> Plastic, stackable or folding.	4		R	R	R
10.2.2 <b>BRUSHES, LONG HANDLE, SOFT BRISTLE:</b> Toilet type: nominal 16" long, with plastic bristles	4		R	R	R
10.2.3 <b>BRUSHES, SHORT HANDLE, SOFT BRISTLE:</b> Toilet type: Plastic bristles	2		R	R	R
10.2.4 <b>BRUSHES, SHORT HANDLE, Rat Tail:</b> Carpenter type, synthetic bristles	2		R	R	R
10.2.5 <b>BRUSHES, CAR WASH TYPE, Long Handle:</b> Soft bristled wand type brush, with nominal or extendable length to 3 feet minimum. May come with garden hose connection to supply a flow of water at brush end.	2		R	R	R
10.2.6 <b>SPONGE, SET:</b> Nominal 3 to 5" wide by 4 to 6" long x 4" deep,	Set of 4		R	R	R
10.2.7 <b>TOWELS, ABSORBANT, DRYING:</b> Commercial laundry towels, cotton, nominal 20" x 40"	8		R	R	R
10.2.8 <b>TOWELS, ABSORBANT, DISPOSABLE:</b> Paper towels, usually in rolls.	1 Roll		R	R	R

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
10.2.9 <b>BLANKETS, DISPOSABLE:</b>	4		R	R	R
10.2.10 <b>CADAVER BAGS:</b> Non-transparent	1		Opt	Opt	Opt
10.2.11 <b>CLOTHING, MODESTY:</b> Usually light weight disposable Tyvek® or equal, an array in various sizes; Complete with booties or foot protection.	Minimum of 12 sets		R	R	R
10.2.12 <b>TRAFFIC CONES, Ordinary:</b> Nominal 18" to 28" high, fluorescent red.	Minimum of 6		R	R	R
10.2.13 <b>TRAFFIC CONES, Ordinary, Reflective:</b> Nominal 18" to 28" R R R high fluorescent red, with reflective bands, or warning bands "DO NOT ENTER" or "KEEP OUT".			R	R	R
10.2.14 <b>TRAFFIC CONES, Miniature:</b> Nominal 4" to 6" high	Ten to Twenty		Opt	Opt	Opt
10.2.15 <b>SOAP or DETERGENT, SOFT, Biodegradable:</b> In dispense containers.	1 Pint		R	R	R
10.2.16 <b>CHEM-TAPE:</b> Nominal 2" wide in rolls of 50'. Similar to Duct Tape but has chemical resistant outer layer.	2 Rolls		R	R	R
10.2.17 <b>CLOTHING REMOVAL TOOLS:</b> Such as scissors, shears, etc.	1		R	R	R
10.2.18 <b>PERSONAL PROPERTY TRACKING:</b> Kit to consist of forms, tags, receipts, sealable baggies, labels, etc., to document personal property collected such as jewelry, wallets, pagers, cell phones, and documents personal information of owner.	Sufficient to manage 12 individuals minimum		R	R	R

10.3 Water Supply, Distribution Tools [Sub-Category]					
10.3.1 <b>ADAPTOR, 1 ½" to Garden Hose Reducer(s):</b>	2				
10.3.2 <b>MANIFOLD, HEAVY DUTY:</b> All metal construction (steel / bronze) with 1 ½" female fire hose inlet swivel coupling, and four to six brass ¾" garden hose discharge ball gates; Tested to 250 psi; Mountable on a sturdy platform.	1 of either type listed (10.3.2 or 10.3.3)		R	R	R
10.3.3 <b>MANIFOLD, LIGHT DUTY:</b> Plastic PVC construction with 1 R R R ½" female fire hose inlet swivel coupling, and three to six brass ¾" garden hose discharge gates; Mountable on a sturdy platform; Commercially available, or often home derived.			R	R	R
10.3.4 <b>HOSE, GARDEN:</b> May be in nominal minimum 12' to 24' lengths, may be collapsible – flat type, ½" dia.	3		R	R	R
10.3.5 <b>HOSE, GARDEN, SHUT-OFF, In Line:</b> Separate detachable and replaceable ¼ - turn valve. Might be attached to and included with the car wash applicator (item #10.2.5).	Total of 3 On hand	Might be attached to and included with Item # 10.2.5.	R	R	R
10.3.6 <b>WRENCH, HYDRANT, UNIVERSAL:</b>	1		R	R	R
7 <b>APPLICATOR, NOZZLE, Garden Hose Adjustable:</b> Wash / Spray Nozzles	2		R	R	R
10.3.8 <b>APPLICATOR, PRESSURE, Garden Sprayer:</b> Hand Pressurized pump sprayer.	1		R	R	R

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>10.4 Collection [Sub-Category]</b>					
10.4.1 <b>BUCKETS:</b> Ordinary plastic, 5 gallon capacity, with or without lids	4		R	R	R
10.4.2 <b>BAGS, HEAVY DUTY YARD, Large:</b> Nominal 32" wide x 48" long, 3 mil thick, 42 gallon capacity, with tie straps or latches.	10		R	R	R
10.4.3 <b>DEBRIS COLLECTION UNIT:</b> 35 to 65 gallon capacity, light duty and light weight polyethylene drums, or collapsible mylar drum liners; Suitable for collection of debris and soiled clothing only, for De-Con zone, not recommended for transfer operations and other containment activities.	Must Have As Minimum: One – 10.4.5 One – 10.4.6 And Any one of the three as described, for a total of 3.		R	R	Opt
10.4.4 <b>DRUM, CONTAINMENT UNIT, 85 to 95 Gallon:</b> Steel or polyethylene drum with removable lid, suitable for multiple uses such as debris collection in De-Con zone, containment for leaking 55 gallon drum and other secondary containment, or catch reservoir for transfer operations. Must have at least one.			R	R	Opt
10.4.5 <b>DRUM, OVER-PACK UNIT, 110 Gallon:</b> Heavy duty polyethylene drum with screw lid, suitable for multiple uses such as debris collection in De-Con zone, containment for leaking 55 gallon drum or other secondary containment, salvage operations, or catch reservoir for transfer operations. Must have at least one.			R	R	Opt
10.4.6 <b>DRUM, LINER, 85 to 95 Gallon:</b> Heavy duty polyethylene. <i>Do not need if use poly drum.</i>	10		Opt	Opt	Opt

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>COMMUNICATIONS</b>					
<b>11.1 Radio [Sub-Category]</b>					
11.1.1 <b>RADIO, PORTABLE, Intrinsically Safe (I.S.):</b> Walkie Talkie style, with carrying case, and appropriate support hardware to be worn on person; Those assigned for use in-suit to be equipped with separate private tactical channels. UL or FM "I.S." label must be on unit, and "I.S." battery must be of correct model compatible with unit, and neither can be interchanged with non-I.S. components.	1 for each assigned member	<b>Must Be:</b> Intrinsic to Underwriter's Laboratory #913	R	R	R
11.1.2 <b>RADIO, PORTABLE, Voice Scrambler:</b> Secure Voice hardware and interfacing	Each Portable Unit		Opt	Opt	Opt
11.1.3 <b>RADIO, PORTABLE, Headphone Set (NOT for in-suit use):</b> Complete with boom mic, ear mic, bone mic, or throat mic, and necessary attachable hardware to walkie talkie. One for each member for field use.	1 for each assigned member		Opt	Opt	Opt
11.1.4 <b>RADIO, PORTABLE, In-Suit Communications:</b> Complete with earphone system, microphone system (i.e. built into SCBA facepiece, or throat mic, or bone mic, or ear mic, etc), remote "Push-To-Talk" switch, and necessary attachable hardware and support connector system. Designs and configurations will vary and are influenced by support systems provided by portable radio manufacturer, and manufacturer of SCBA. See also 12.1.6.	6 – Type I 4 – Type II 4 – Type III				Opt
11.1.5 <b>RADIO, PORTABLE, Hands-Free "Voice Actuated":</b> Hardware and support connector system, switchable between "Push-To-Talk" mode and "Voice Activated" mode, for in-suit use.	1 for each assigned member		Opt	Opt	Opt
11.1.6 <b>RADIO, PORTABLE, Interchangeable battery, Intrinsically Safe (I.S.):</b> Two batteries assigned per unit, the second set for back-up; Certified intrinsically safe.	2 for each portable unit	<b>Must Be:</b> Intrinsic to UL # 913	R	R	R
<b>11.2 Cellular Phone [Sub-Category]</b>					
11.2.1 <b>PHONE, CELLULAR:</b> Priority access service capable; Analog and digital function; CPAS, BROADBAND, PCS and ROAMNG enabled;	1 per Company	IEEE 1512.3 IEEE 269	R	R	R
11.2.2 <b>PHONE, Satellite:</b> INMARSAT-B minimum, ISDN preferable which increases high speed data flow to 64,000 bps; UHF.INTELSAT; and UDI support. Complete with portable high gain directional antenna, base transmit unit, interface frequencies.	1 per Company		Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>RESPIRATORY PROTECTION</b>					
<b>12.1 Self-Contained [Sub-Category]</b>					
12.1.1 <b>SCBA, COMPLETE, STRUCTURAL, 1 Hour Rating:</b> With bottle; unit must be NFPA and NIOSH certified for routine fire fighter use.	1 for each assigned member	NFPA; NIOSH	N/A	R	R
12.1.2 <b>SCBA, COMPLETE, WMD CBRN, 1 Hour Rating:</b> With bottle; unit must be NFPA structural firefighting compliant and NIOSH certified for WMD CBRN threat atmospheres	1 for each assigned member	NFPA; NIOSH CBRN	R	N/A	N/A
12.1.3 <b>MASK, FULL-FACE, STRUCTURAL:</b> NFPA and NIOSH compliant for structural fire fighter use.	1 for each assigned member	NFPA; NIOSH		R	R
12.1.4 <b>MASK, FULL-FACE, WMD CBRN:</b> Facepiece must be NFPA structural firefighting compliant and NIOSH certified for WMD CBRN threat atmospheres.	1 for each assigned member	NFPA; NIOSH CBRN	R	N/A	N/A
12.1.5 <b>MASK, HEADS-UP-DISPLAY:</b> Light emitting diode (LED) display within facepiece to monitor numerous ancillary inputs such as remaining air time, air pressure, ambient temperature, etc.; Usually available as add-on option from manufacturer.	1 for each assigned member	NIOSH	Opt	Opt	Opt
12.1.6 <b>MASK, BUILT-IN COMMUNICATIONS Interface:</b> Built-in microphone or bone mic, with earphone or built-in head phone set, complete with interface wire harness to portable radio, and push-to-talk (PTT) switch. Satisfies 11.1.4.	1 for each assigned member		Opt	Opt	Opt
12.1.7 <b>BOTTLE, Spare:</b> Extra replacement air bottle of same type, and size.	1 spare bottle for each assigned SCBA	DOT	R	R	R
12.1.8 <b>SUPPORT, UMBILICAL AIR:</b> Air from outside source (cascade system or portable air cart) supplied to wearer via umbilical hose system and manifold; Manifold to supply low pressure source to four users; Minimum of 600 feet of low pressure hose required; This system is often used to provide interior suit cooling as an option. (SEE also Section 6.4.)	System to accommodate four users, 150' low pressure air hose each	NIOSH, OSHA	Opt	Opt	N/A

<b>12.2 Air Purifying Respirator [Sub-Category]</b>					
12.2.1 <b>MASK and UNIT, APR, INDUSTRIAL:</b> Full facepiece, single or dual cartridge style, speaking diaphragm, certified for use in industrial chemical threat atmospheres only.	1 for each assigned member	NIOSH	R	Opt	Opt
12.2.2 <b>MASK and UNIT, APR, CBRN:</b> Full facepiece, single or dual cartridge style, speaking diaphragm, for use in industrial chemical threat atmospheres AND CBRN atmospheres.	1 for each assigned member	NIOSH - CBRN	R	N/A	N/A
12.2.3 <b>MASK and UNIT, PAPR, INDUSTRIAL:</b> Full facepiece, single or multi cartridge style, speaking diaphragm, pump, airline, certified for use in industrial chemical threat atmospheres only. Meets 12.2.1 requirement	1 for each assigned member	NIOSH	Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
12.2.4 <b>MASK and UNIT, PAPR, CBRN:</b> Full facepiece, single or multi cartridge style, speaking diaphragm, pump, airline, certified for use in industrial chemical threat atmospheres AND CBRN atmospheres. Meets 12.2.2 requirement	1 for each assigned member	NIOSH - CBRN	Opt	N/A	N/A
12.2.5 <b>CARTRIDGES, APR or PAPR, INDUSTRIAL:</b> Cartridges certified only for industrial chemical threat atmospheres; Cartridges to be multi-gas and organic vapor protective, with solid particulate and liquid aerosol protection.	Multi-gas cartridge set for each APR	NIOSH	R	Opt	Opt
12.2.6 <b>CARTRIDGES, APR or PAPR, CBRN:</b> Cartridges are certified for WMD CBRN threat atmospheres.	CBRN cartridge set for each APR	NIOSH - CBRN	R	N/A	N/A

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
<b>TOOLS / OTHER</b>					
<b>13.1 General Purpose, Hand Tools, Large [Sub-Category]</b>					
13.1.1 <b>SHOVEL, Round Point, Steel;</b> long handle	1		R	R	R
13.1.2 <b>SHOVEL, Round Point, Polypropylene plastic:</b> Or equal: long handle	1		Opt	Opt	Opt
13.1.3 <b>SHOVEL, Square Point, Steel:</b> long handle	1		R	R	R
13.1.4 <b>SHOVEL, Square Point, Polypropylene plastic:</b> Or equal, long handle	1		R	R	R
13.1.5 <b>SHOVEL, Scoop, Polypropylene plastic:</b> Or equal,	1		R	R	R
13.1.6 <b>BROOM, Street, Stiff Polypropylene Bristle:</b> With handle	1		R	R	R
13.1.7 <b>DRUM "Up-End":</b>	1		R	R	R
13.1.8 <b>HAMMER, Sledge:</b> (7 – 10 Lbs)	1		R	R	R
13.1.9 <b>BAR, WRECKING:</b> – 36" or >	1		R	R	R
13.1.10 <b>COOLER, Rehydration:</b> Industrial quality five to 10 gallon capacity with spigot, carrying handle. Some come with a cup dispenser, 5 – 20 gallon	1		R	R	R
13.1.11 <b>MEGAPHONE:</b> Battery operated, 16 watt with 800' range; Adjustable volume.	1		R	R	R
13.1.12 <b>FIRST AID, Kit – Large:</b> Includes majority of gauze pads, wipes, tape, ointments, bandages, splints, tourniquets, and appropriate tools (i.e. scissors)	One of each or combination kit	ANSI Z-308.1	R	R	R
13.1.13 <b>FIRST AID, TRAUMA, Kit:</b> Contains equipment to augment standard first aid kit; resuscitator, variety of airways, burn sheets, cervical collar, cold packs, eyewash solutions, etc.			R	R	R
13.1.14 <b>MEDICAL MONITORING, Kit:</b> For both Pre- and Post entry to monitor baseline vitals; Includes stethoscope, aneroid gage sphygmomanometer, thermometer unit, and scale; Should include forms for documentation.	1 kit		R	R	R
13.1.15 <b>FIRST AID, BLOOD PRESSURE MONITOR, Digital:</b> Battery operated, utilizing a finger cuff receptacle; Digital readout.	1 Unit		Opt	Opt	Opt

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
13.1.16 <b>ZONE MARKING, Kit:</b> Contains all tools necessary to help set up and identify various hazardous work zones; Barrier tape – 1000 feet rolls, yellow marked “CAUTION – DO NOT ENTER” or equal, and 1000 feet rolls, red marked; DANGER – HAZARDOUS CHEMICAL” or equal; Carpenter’s chalk – powdered yellow and red, in 12 to 16 oz dispenser; Carpenter’s heavy duty crayons, yellow and red.	1		R	R	R
13.1.17 <b>BARRICADE TAPE, CADDY:</b> A hand held carrier which may either dispense tape (3” wide x 1000 feet), assist in rewinding tape, or do both.	1 Caddy		Opt	Opt	Opt
13.1.18 <b>SCOPE, Spotting:</b> Includes binoculars; Adjustable telephoto spotting scope or binoculars with adjustable focus.	1 per company		R	R	R

13.2 General Purpose, Hand Tools, Small [Sub-Category]					
13.2.1 <b>HAMMER, Dead Blow:</b> 36 to 45 oz.	1		R	R	R
13.2.2 <b>HAMMER, Claw:</b> 20 to 24 oz.; Non-Sparking acceptable.	1	Item #13.3.7 Acceptable	R	R	R
13.2.3 <b>HAMMER, Engineer:</b> 36 to 40 oz.; Non-Sparking acceptable.	1	Item #13.3.8 Acceptable	R	R	R
13.2.4 <b>HAMMER, Ball Peen:</b> 16 to 40 oz.; Non-Sparking acceptable.	1	Item #13.3.9 Acceptable	R	R	R
13.2.5 <b>SCREWDRIVER, CHISEL, KIT:</b> To consist of at least any three of the following, in either short or long handle: Standard chisel tip– Small, medium, large, extra-large; Non-Sparking acceptable.	1 Kit of 3 different	Item #13.3.10 Acceptable	R	R	R
13.2.6 <b>SCREWDRIVER, PHILLIPS, KIT:</b> To consist of at least any three of the following, in either short or long handle: Phillips No. 1, 2, 3, 4.; Non-Sparking acceptable.	1 Kit of 3 different	Item #13.3.11 Acceptable	R	R	R
13.2.7 <b>PLIERS, ORDINARY, Utility:</b> Available in various sizes, 6”, 7”, 8”, with square blunt end; Non-Sparking acceptable.	1	Item #13.3.12 Acceptable	R	R	R
13.2.8 <b>PLIERS, WIRE, Side Cutting;</b> Non-Sparking acceptable.	1	Item #13.3.13 Acceptable	R	R	R
13.2.9 <b>PLIERS, LONG-NOSE, Needle –</b> Between 7” to 10”; Non-Sparking acceptable.		Item #13.3.14 Acceptable	R	R	R
13.2.10 <b>PLIERS, COMBINATION, Kit:</b> To consist of any three of the following: Slip Joint, medium– 8”, Slip joint heavy duty – 12”, groove joint – 12”, channel lock – 12”; Non-Sparking acceptable.	1 Kit of 3 different	Item #13.3.15 Acceptable	R	R	R
13.2.11 <b>PLIERS, LOCKING, Vice Grip Type, Kit:</b> To consist of any four of the following: Adjustable chain wrench, welding clamp, curved jaw locking, straight jaw locking, long nose locking, “C” clamp locking, sliding bar locking; Non-Sparking acceptable.	1 Kit of 4 different	Item #13.3.16 Acceptable	R	R	R
13.2.12 <b>WRENCH, ALLEN, Complete Set, English (~9 piece)</b>	1 Kit		R	R	R
13.2.13 <b>WRENCH, ALLEN, Complete Set, Metric (~9piece)</b>	1 Kit		R	R	R
13.2.14 <b>WRENCH, CRESCENT, Adjustable, Kit:</b> Kit to include any two of the following: Adjustable 12”, 15”, 22” 24”; Non-Sparking acceptable.	1 Kit of 2	Item #13.3.18 Acceptable	R	R	R

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
13.2.15 <b>WRENCH, CRESCENT, Adjustable, Heavy Duty:</b> 26" to 36", aluminum or steel; Non-Sparking acceptable.	1	Item #13.3.19 Acceptable	Opt	Opt	Opt
13.2.16 <b>WRENCH, PIPE, Adjustable, Kit:</b> Kit to include any two of the following: House – 16", Standard - 18", Medium – 22", large – 28"; Non-Sparking acceptable.	1 Kit of 2	Item #13.3.20 Acceptable	R	R	R
13.2.17 <b>WRENCH, Pipe, Adjustable, Heavy Duty:</b> Available in sizes from 32" to 46"; Non-Sparking acceptable	1	Item #13.3.21 Acceptable	Opt	Opt	Opt
13.2.18 <b>WRENCH, UNIVERSAL, Bung Cap:</b> Several styles available, but should be able to function on 5 or more different bung caps and plugs; Non-Sparking acceptable.	1	Item #13.3.17 Acceptable	R	R	R
13.2.19 <b>WRENCH, COMBINATION, Ordinary, Kit:</b> (Open end and Box end), Set, to include any 10 of the following: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8"; Non-Sparking acceptable.	1 Kit of 10	Item #13.3.22 Acceptable	R	R	R
13.2.20 <b>WRENCH, COMBINATION, Industrial, Kit:</b> (Open end and Box end), Set, to include any 5 of the following: 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/4", 2 1/2"; Non-Sparking acceptable.	1 Kit of 5	Item #13.3.23 Acceptable	Opt	Opt	Opt
13.2.21 <b>WRENCH, SOCKET, Kit:</b> Socket set to include any 10 of the following: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8"; Non-Sparking acceptable.	1 Kit of 10	Item #13.3.24 Acceptable	Opt	Opt	Opt
13.2.22 <b>WRENCH, SOCKET, Industrial, Kit:</b> Socket set to include any 5 of the following: 1 1/2", 1 5/8", 1 3/4", 2", 2 1/4", 2 1/2"; Non-Sparking acceptable.	1 Kit of 5	Item #13.3.25 Acceptable	Opt	Opt	Opt
13.2.23 <b>CHISEL, COLD, Standard or Hex</b> – One of either of the following sizes: 3/4" x 9", 1" x 9", 1" x 12".	1 Chisel		R	R	R
13.2.24 <b>PUNCH, PIN</b> – 7" x 3/8"	1		Opt	Opt	Opt
13.2.25 <b>PUNCH, PIN</b> – 12" x 5/8"	1		Opt	Opt	Opt
13.2.26 <b>PUNCH, PIN, Spring Loaded</b>	1		R	R	R
13.2.27 <b>TAPE, MEASURING, Retractable, Metal:</b> 24' or greater.	1		R	R	R
13.2.28 <b>TAPE, MEASURING, Re-Wind, Non-Metallic:</b> 50 feet minimum, must be non-conductive.	1		R	R	R
13.2.29 <b>KNIFE, PUTTY, Scraping:</b> – 2' wide; Non-Sparking acceptable	1	Item #13.3.26 Acceptable	R	R	R
13.2.30 <b>KNIFE, GENERAL UTILITY, Cutting:</b> Any heavy duty knife including carpet cutting type:	1		R	R	R
13.2.31 <b>SHEARS, Cutting:</b> Any heavy duty shears suitable for cutting sheet metal, heavy carpet, plastic sheeting; Non-Sparking acceptable.	1	Item #13.3.27 Acceptable	R	R	R
13.2.32 <b>STRAPS, RATCHET, Tie down:</b> Nominal 1" x 20', 1000 lbs. Nominal minimum rating.	2		R	R	R
13.2.33 <b>STOP WATCH:</b>	1		R	R	R

13.3 Special Purpose Hand Tools [Sub-Category]					
13.3.1 <b>GROUNDING, CABLE:</b> Insulated or non-insulated 3/16" or better carbon steel, 25 feet minimum, equipped with either "C" clamp / screw bolt or 3/4" pin point hand clamps.	75 feet minimum		R	R	R

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
13.3.2 <b>GROUNDING, ROD:</b> Nominal length 4 feet to 6 feet minimum, and nominal dia. 3/8" to 1/2".	1		R	R	R
13.3.3 <b>VESTS, I.C.S., HazMat Group:</b> For all of the positions within the HM Group (HazMat Group Supervisor, Asst. Safety Officer, Entry Team Leader, De-Con Team Leader, Site Access Control Leader, Technical Specialist, Safe Refuge Area Manager)	1 Set	ANSI 107 and FIRESCOPE	R	R	R
13.3.4 <b>LIGHT PROBE, Fluorescent:</b> Nominal 25 watt, 36" long wand handle, insertable through bung hole of 55 gallon drum, and other confined spaces.	1	Intrinsically Safe	Opt	Opt	Opt
13.3.5 <b>AIR BAG, LIFTING, High Pressure, Kit:</b> Kit, operated by SCBA air bottle, to consist of one or a variety of air inflatable bags, with manifold and hose hardware, capable of lifting a nominal 30 tons to 12 inches	1 Kit		Opt	Opt	Opt
13.3.6 <b>NON-SPARKING, Hammer, Sledge:</b> 7 to 10 pound.	1		R	R	R
13.3.7 <b>NON-SPARKING, HAMMER, Claw:</b> 20 to 24 oz.; Also meets # 13.2.2	1		R	R	R
13.3.8 <b>NON-SPARKING, HAMMER, Engineer: 36 to 40 oz.</b>	1		Opt	Opt	Opt
13.3.9 <b>NON-SPARKING, HAMMER, Ball Peen: 16 to 40 oz.</b>	1		Opt	Opt	Opt
13.3.10 <b>NON-SPARKING, SCREWDRIVER, CHISEL, Kit:</b> To consist of at least any three of the following, in either short or long handle: Standard chisel tip– Small, medium, large, extra-large.	1 Kit of 3 different		R	R	R
13.3.11 <b>NON-SPARKING, SCREWDRIVER, PHILLIPS, Kit:</b> To consist of at least any three of the following, in either short or long handle: Phillips No. 1, 2, 3, 4.	1 Kit of 3 different		R	R	R
13.3.12 <b>NON-SPARKING, PLIERS, ORDINARY, Utility:</b> Available in various sizes, 6", 7", 8", with square blunt end.	1		R	R	R
13.3.13 <b>NON-SPARKING, PLIERS, WIRE, Side Cutting:</b>	1		R	R	R
13.3.14 <b>NON-SPARKING, PLIERS, LONG-NOSE, Needle:</b>	1		R	R	R
13.3.15 <b>NON-SPARKING, PLIERS, COMBINATION, Kit:</b> To consist of any three of the following: Slip Joint, medium– 8", Slip joint heavy duty – 12", groove joint – 12", channel lock – 12".	1 Kit of 3 different		Opt	Opt	Opt
13.3.16 <b>NON-SPARKING PLIERS, LOCKING, Vice Grip Type, Kit:</b> To consist of any four of the following: Adjustable chain wrench, welding clamp, curved jaw locking, straight jaw locking, long nose locking, "C" clamp locking, sliding bar locking.	1 Kit of 4 different		Opt	Opt	Opt
13.3.17 <b>NON-SPARKING, WRENCH, BUNG, Universal:</b> Several styles available, but should be able to function on 5 or more different bung caps and plugs.	1		R	R	R
13.3.18 <b>NON-SPARKING, WRENCH, CRESCENT, Adjustable, Kit:</b> Kit to include any two of the following: Adjustable 12", 15", 22", 24".	1 Kit of 2		R	R	R
13.3.19 <b>NON-SPARKING, WRENCH, CRESCENT, Adjustable, Heavy Duty:</b> 26" to 36", aluminum or steel.	1		Opt	Opt	Opt
13.3.20 <b>NON-SPARKING, WRENCH, PIPE, Adjustable, Kit:</b> Kit to include any two of the following: House – 16", Standard - 18", Medium – 22", Large – 28".	1 Kit of 2		R	R	R

HAZARDOUS MATERIALS TEAM SUGGESTED INVENTORY LEVEL PER TYPE

Item Name and Description	Requirement	Certification Or Standard	Type I	Type II	Type III
13.3.21 <b>NON-SPARKING, WRENCH, Pipe, Adjustable, Heavy Duty:</b> Available in sizes ranging from 32" to 46".	1		Opt	Opt	Opt
13.3.22 <b>NON-SPARKING, WRENCH, COMBINATION, Ordinary, Kit:</b> (Open end and Box end), Set, to include any 10 of the following: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8"	1 Kit of 10		Opt	Opt	Opt
13.3.23 <b>NON-SPARKING, WRENCH, COMBINATION, Industrial, Kit:</b> (Open end and Box end), Set, to include any 5 of the following: 1 1/2", 1 5/8", 1 3/4", 1 7/8", 2", 2 1/4", 2 1/2"	1 kit of 5		Opt	Opt	Opt
13.3.24 <b>NON-SPARKING, WRENCH, SOCKET, Kit:</b> Socket set to include any 10 of the following: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8"	1 Kit of 10		Opt	Opt	Opt
13.3.25 <b>NON-SPARKING, WRENCH, SOCKET, Industrial, Kit:</b> Socket set to include any 5 of the following: 1 1/2", 1 5/8", 1 3/4", 2", 2 1/4", 2 1/2".	1 Kit of 5		Opt	Opt	Opt
13.3.26 <b>NON-SPARKING, KNIFE, PUTTY, Scraping:</b> – 2' wide			R	R	R
13.3.27 <b>NON-SPARKING, SHEARS, Cutting:</b> Any heavy duty shears suitable for cutting sheet metal, heavy carpet, plastic sheeting.	1		R	R	R
13.3.28 <b>RADIANT HEAT SURFACE Temperature Reading:</b> Direct contact (i.e. magnetic, spring clip, etc.), with nominal range +350o to +750o F. (spring operated thermometers)	One, or One complete set		Opt	Opt	Opt
13.3.29 <b>RADIANT HEAT SURFACE SENSING, Temperature:</b> Temperature sensitive crayon kit, 10 crayons, each sensitive to a different temperature range; Usually melt at specified temperature, and might change color; Overall range nominal from +150o F to + 800o F.	1 Kit		Opt	Opt	Opt
13.3.30 <b>REFRIGERATOR, UTILITY, Small:</b> Installed onboard response unit, of nominal 18" wide by 18" tall by 12" deep	1		Opt	Opt	Opt

## APPENDIX A - Zoomerang Questions

**Resource Typing:** Resource typing is the categorization and description of resources that are commonly exchanged in disasters via mutual aid, by capacity and/or capability. Through resource typing, disciplines examine resources and identify the capabilities of a resource's components (i.e., personnel, equipment, training). Resource typing definitions help define resource capabilities for ease of ordering and mobilization during a disaster. As a result of the resource typing process, a resource's capability is readily defined and an Incident Commander is able to effectively and efficiently request and receive resources through mutual aid during times of disaster.

**IMPORTANT: Before taking this qualification program you must download *all included documents*. It provides important information that you will need to take this qualification program. Particularly it defines the three types of hazmat teams' capabilities, equipment requirements and personnel competencies. *This qualification program just asks if you have the equipment or personnel to perform the functions stated. It does not state any equipment or personnel requirements.***

This qualification program is divided into 3-main sections. These main sections are green in color and are titled *Activity*. Below each main section is a sub-section titled Critical Tasks. This sub-section is ***what*** your team should be able to perform. The last sub-section titled Preparedness Measures is ***how*** your team performs the Critical Tasks. In other words, you must be able to perform the Performance Measures to be proficient in the Critical Tasks. The only section of this qualification program that requires action on your part is the Performance Measures section.

Each line in the Performance Measures section is a capability which your hazmat team should be able to perform. You only need to **answer each question with either Type I, Type II, Type III or** Your answer should reflect your team's capabilities as described in the Indiana Hazardous Materials Team Qualification Program. If your answer is No, you do not meet the requirements of a Type III, then please explain what is required for you to meet the desired level of capability in the box provided.

THIS SECTION OF THE QUALIFICATION PROGRAM IS BEST VIEWED WHEN PRINTED ON 8.5" X 14" PAPER

### HAZARDOUS MATERIALS TEAM CAPABILITIES QUALIFICATION ESF #10

**Activity: *Develop and Maintain Plans, Procedures, Programs, and Systems***

**Critical Tasks**

Develop plans, programs, agreements, and requirements for responding to hazardous material incidents

Develop plans, programs, criteria, and protocols for conducting decontamination

Pre-identify resources (personnel and equipment) to provide rapid initial size- up of hazardous materials incident

Assist in developing a communications plan for hazardous materials in emergencies, related to specific hazards, health guidance, educational materials, etc.

Ensure plans are in place for self-presenting contaminated victims off-site (e.g., hospitals)

Preparedness Measures	Component	Type I	Type II	Type III	Indicate Type	If not Type I, II or III list what you need to be Typed
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WMD/HazMat Response and Decontamination plans are based on a formal qualification of risks and vulnerabilities.	Plans Review	Plans need to be available and reviewed annually	Plans need to be available and reviewed annually	Plans need to be available and reviewed annually		
Plans for pre-identified and equipped hazmat personnel to respond to hazmat incident and provide initial rapid hazmat incident size-up are in place	Plans and Procedure	Within 30 minutes from notification (<2hrs if regional resource)	Within 30 minutes from notification (<2hrs if regional resource)	Within 30 minutes from notification (<2hrs if regional resource)		
Hazmat personnel are equipped and trained for weather prediction and hazard pluming	Technical Reference	Same as Type II plus:WMD Chem/Bio	Same as Type III plus:(Plume Air Modeling; MapOverlays)At a minimum, technicalreferences will have theability to outsource additionalcapabilities and have onesource for air-modelingcapability	(Printed and Electronic) Access to and use of various databases, chemical substance data depositories, and other guidelines and safety data sheets, either in print format, electronic format, stand-alone computer programs, or data available via telecommunications. The interpretation of data collected from electronic sources		
WMD/HazMat plans address personnel needs (e.g. work/rest cycles, medical, psychological, financial assistance, etc.).	Sustainability	Same as Type II	Known or Suspect Weapons	Capability to Perform Three (3) Entries in a 24-hour Period		
Jurisdiction's hazmat team(s) has current protocol to coordinate with emergency medical services (EMS) on victim care post-decontamination (identification of substance, administration of antidotes, etc.)	Written Agreements	Same as Type II	of Mass Destruction	This requires written protocols, policies and procedures. In addition, the jurisdictional hazmat team shall have a written agreement with the jurisdictional EMS agency to provide EMS support. This shall be exercised annually.		
Redundant hazmat response teams and equipment are available (or accessible through mutual aid agreements) to provide resiliency in the event of a large-scale incident	Written Agreements	Same as Type II	Chemical/Biological	Written agreements with outside agency's are in-place to provide personnel and equipment assistance		

Jurisdiction's hazmat team(s) has current protocol to coordinate with law enforcement for evidence collection and crime scene control	Written Agreements	Same as Type II	Substances [WMD]	This requires written protocols, policies and procedures. In addition, the jurisdictional hazmat team shall have a written agreement with the jurisdictional LE agency to provide LE support. This shall be exercised annually.		
Emergency response and command vehicles and Incident Command Posts are equipped with Emergency Response Guidebook, NIOSH pocket guidebook, and discipline-related references relevant to the region	Technical Reference	Same as Type II	Chem/Bio	Equipped with Emergency Response Guidebook, NIOSH pocket guidebook, and discipline-related references.		
Frequency with which Emergency Response Plan is reviewed	Plans Review	Same as Type II	Same as Type III	No less than every 12 months		
Frequency with which pre-planned hazards and targets are reviewed and updated	Plans Review	Same as Type II	Same as Type III	No less than every 12 months		

Activity: <i>Develop and Maintain Training and Exercise Programs</i>						
Critical Tasks						
Develop and implement training related to detection and reporting of hazardous material						
Provide appropriate hazmat response training to field staff and managers of State/local programs having involvement in hazmat response						
Develop and implement exercise programs for WMD/hazardous materials response and decontamination						
Preparedness Measures	Component	Type I	Type II	Type III	Indicate Type	If not Type I, II or III list what you need to be Typed
Percent of police, fire, EMS , first responders (other than those assigned to hazmat responses) that are trained to hazmat <i>awareness</i> level.	Training	No less than 100%	No less than 100%	No less than 100%		
Percent of first responders assigned to hazmat operations that are trained to hazmat <i>operations</i> level (in accordance with 1910.120 (g) or NFPA 472).	Training	No less than 100%	No less than 100%	No less than 100%		
Percent of personnel assigned to hazmat technician responsibilities who are trained to the hazmat <i>technician</i> level (in accordance with 1910.120 (g) or NFPA 472).	Training	No less than 100%	No less than 100%	All personnel must be trained to the minimum response standards in accordance with the most current editions of NFPA Standard # 471, "Recommended Practice for Responding to Hazardous Materials Incidents," NFPA Standard # 472, "Standard for Professional Competence of Responders to Hazardous Materials Incidents," and NFPA Standard # 473, "Standard for Competencies for EMS Personnel Responding to Hazardous Materials Incidents," as is appropriate for the specific team type		
Percent of personnel assigned to hazmat specialist responsibilities who are trained to the hazmat <i>specialist</i> level (in accordance with 1910.120 (g) or NFPA 472).	Training	No less than 100%	No less than 100%			
Percent of personnel assigned to manage hazmat who are trained to hazmat <i>management</i> level (in accordance with 1910.120 (g), NFPA 471 and NFPA 472) for detection equipment, including flammability, toxicity, radiations, chemical warfare agents (CWAs) and biologicals.	Training	No less than 100%	No less than 100%			
Percent of personnel assigned to manage hazmat who are trained to hazmat <i>management</i> level (in accordance with 1910.120 (g), NFPA 471 and NFPA 472) for substance identification equipment, for bases and vapors, liquids, solids and biologicals (white powder).	Training	No less than 100%	No less than 100%			
Hazmat personnel are equipped and trained for weather prediction and hazard pluming	Training	No less than 100%	No less than 100%		No less than 100%	
Jurisdiction's hazmat team(s) trains regularly with EMS to ensure proper coordination of victim care post-decontamination (identification of substance, administration of antidotes, etc.)	Training	No less than 100%	No less than 100%	No less than 100%		

<p>Jurisdiction's hazmat team(s) trains regularly with law enforcement to ensure proper coordination for evidence collection and crime scene control</p>	<p>Training</p>	<p>No less than 100%. Same as Type II plus: (WMD Chem/Bio) Capable of providing decontamination for known and unknown contaminants and WMD Chem/Bio's</p>	<p>No less than 100%. Same as Type III plus: (Unknown Contaminants) Capable of providing decontamination for known and unknown contaminants.</p>	<p>No less than 100%. (Known Contaminants Based on Local Risk Qualification) Must be self-sufficient to provide decontamination for members of their team. Capable of providing decontamination for known contaminants.</p>		
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Activity: <i>Direct WMD and Hazardous Material Response and Decontamination Tactical Operations</i> . Definition: In response to notification of WMD/hazmat event or contamination, provide management and coordination of hazmat response and decontamination.						
Critical Tasks						
Receive alert/activation order for WMD and Hazardous Materials Response and Decontamination						
Establish and implement on-scene management for hazmat material response						
Provide a hazmat technical expertise team for emergency operations for both industry and public						
Implement a hazmat response (e.g., implement plans, programs, agreements, and requirements)						
Coordinate technical, administrative support, personnel, facilities, communications, and information						
Provide required Personal Protection Equipment to WMD/hazmat responders in coordination with safety officer						
Develop a site safety plan						
Observe the scene and review/evaluate hazard and response information as it pertains to the safety of all persons on the scene and responding						
Coordinate with safety officer to ensure the safety of on-scene WMD/hazmat responders						
Coordinate and support decontamination activities on-site						
Coordinate with and provide technical guidance to entities performing off-site decontamination						
Coordinate with hospitals to develop plans for managing/decontaminating self-presenting contaminated victims						
Coordinate resource management of hazmat equipment, supplies, and personnel						
Request decontamination technical assistance resources						
Coordinate with safety officer to brief hazmat branch/group personnel on-site-specific occupational safety and health issues involving hazmat/WMD releases						
Issue instructions for self-decontamination, where appropriate, expedient and possible						
Preparedness Measures	Component	Type I	Type II	Type III	Indicate Type	If not Type I, II or III list what you need to be Typed
Number of loss-time injuries (per deployment) of WMD/hazmat Response and Decontamination personnel during rescue efforts.	Safety	< 1 hr.	< 1 hr.	< 1 hr.		
Time in which tactical plan is developed, based on the incident action plan (IAP), and for implementation by the State, region, and/or local WMD/hazmat Response and Decontamination	Safety	Within 2 hours from arrival on scene	Within 2 hours from arrival on scene	Within 2 hours from arrival on scene		

Activity: <i>Activate WMD and Hazardous Material Response and Decontamination</i> . Definition: In response to activation, mobilize and arrive at the incident scene to begin operations.						
Critical Tasks						
Initiate WMD/hazmat procedures						
Assemble personnel and equipment at designated location						
Transport team (personnel and equipment) to scene						
Conduct initial approach and positioning of responders						
Initiate initial public protective actions (PPA)						
Preparedness Measures	Component	Type I	Type II	Type III	Indicate Type	If not Type I, II or III list what you need to be Typed
Implement/integrate WMD/hazmat resources into ICS organization	Team Integration	Immediately upon arrival	Immediately upon arrival	Immediately upon arrival		
Team is coordinated/incorporated into ICS upon arrival	Team Integration	Immediately upon arrival	Immediately upon arrival	Immediately upon arrival		
Time in which initial hazmat size-up is completed	Team Integration	Within 30 minutes from notification of incident	Within 30 minutes from notification of incident	Within 30 minutes from notification of incident		
Time in which regional assets (e.g., Type I hazmat Team or Type III or IV Incident Management team) arrive on scene, if requested by IC	Team Integration	Within 2 hours from asset request	Within 2 hours from asset request	Within 2 hours from asset request		

Activity: <i>Identify the Hazard</i> . Definition: Upon arriving on scene, begin to assess site, sample, identify, and characterize WMD/hazmat and contamination situation, conduct hazard analysis to determine potential consequence and risk, develop plans for safety and hazmat/decontamination operations, and set up hazmat zones.						
Critical Tasks						
Notify law enforcement for guidance on collection and management of evidence from potential crime scenes						
Initiate hazmat response						
Qualification program the incident scene						
Identify hazmat and the extent/scope of the incident						
Analyze weather forecast to conduct hazard zone prediction						
Conduct contamination qualification programs						
Assess hazmat release situation						
Conduct oil and hazmat qualification						
Monitor movement of hazardous releases and formulate predictions on dispersion and characteristics over time						
Characterize consequences and risk						
Identify and establish perimeter and hazmat zones (hot, warm, cold)						
Conduct ongoing qualifications and predictions						
Preparedness Measures	Component	Type I	Type II	Type III	Indicate Type	If not Type I, II or III list what you need to be Typed
WMD/HazMat plans address substance identification equipment (e.g. bases, vapors, liquids, solids, biologicals like white powder).	Sampling: Capturing, Labeling, Evidence Collection	Same as Type II plus: (WMD Chem/Bio) Special resources may be required for air sample collection	Same as Type III plus: (Unknown Industrial Chemicals) Known and unknown industrial chemicals standard evidence collection protocols. Ability to sample liquid and solids	(Known Industrial Chemicals) Known industrial chemicals standard evidence collection protocols required for each include capturing and collection, containerizing and proper labeling, and preparation for transportation and distribution, including standard environmental sampling procedures for lab analysis. Consistent with established chain of custody protocols		

WMD/HazMat plans address substance identification equipment (e.g. radiological substances)	Radiation Monitoring/Detection	Same as Type II plus: Identify and establish the exclusion zones after contamination spread (this does include identification of some, but not all, radionuclides). Ability to conduct environmental and personnel qualification program. Ensure all members of qualification program teams are equipped with accumulative self-reading instruments (dosimeters)	Same as Type III plus: (Alpha Detection) Basic criteria include detection and qualification program capabilities for alpha, beta, and gamma	(Beta Detection; Gamma Detection) The ability to accurately interpret readings from the radiation-detection devices and conduct geographical qualification program search of suspected radiological source or contamination spread. Basic criteria include detection and qualification program capabilities for beta and gamma		
WMD/HazMat plans address substance identification equipment (e.g. bases, vapors)	Air Monitoring	Same as Type II plus: (WMD Chem/Bio Aerosol Vapor and Gas) Advanced detection and monitoring includes WMD Chem/Bio detection Instruments	Same as Type III plus: The use of advanced detection equipment to detect the presence of known or unknown gases or vapors. Advanced detection and monitoring may incorporate more sophisticated instruments that differentiate between two or more flammable vapors, and may directly identify by name a specific flammable or toxic vapor	(Basic Confined Space Monitoring; Specific Known Gas Monitoring) The use of devices to detect the presence of known gases or vapors. The basics begin with ability to provide standard confined space readings (oxygen deficiency percentage, flammable atmosphere Lower Explosive Limit [LEL], carbon monoxide, and hydrogen sulfide)		
WMD/HazMat plans address substance identification equipment (e.g. radiological substances)	Field Testing	Same as Type II plus: Known or Suspect Weapons of Mass Destruction Chemical/Biological Substances [WMD Chem/Bio]	Same as Type III plus: Unknown Chemicals	Known Chemicals The presumptive testing and identification of chemical substances using a variety of sources to be able to identify associated chemical and physical properties. Sources may include printed and electronic reference resources, safety data sheets, field testing kits, specific chemical testing kits, chemical testing strips, data derived from detection devices, and air-monitoring sources		
Time in which area is isolated and public access is controlled	Site Control	Within 15 minutes from arrival on scene	Within 15 minutes from arrival on scene	Within 15 minutes from arrival on scene		

Time in which hazardous materials or category involved are identified	Site Control	Within 30 minutes from arrival on scene	Within 30 minutes from arrival on scene	Within 30 minutes from arrival on scene		

Activity: Assess Hazard and Evaluate Risk. Definition: Assess the hazards present, evaluate the level of risk to both responders and the public, and develop and Incident Action Plan (IAP) to address the response problem.						
Critical Tasks						
Collect, prioritize, and manage data and information from all sources						
Develop incident monitoring and sampling strategy based upon a realistic qualification of operational hazards						
Conduct sampling operations						
Identify, classify, and verify suspected non-biological WMD/hazmat samples through the use of at least two (preferably three) different instrument technologies						
Use plume dispersion models and other analytical tools to generate ongoing WMD/hazmat dispersion qualifications						
Implement risk evaluation process that adequately addresses the risk of various actions to both responders and the public						
Develop and implement an Incident Action Plan (IAP) specific to WMD/hazmat issues based upon the risk evaluation process						
Establish and identify visually an isolation perimeter (outer perimeter) to isolate the area and deny entry						
Establish a hot zone (inner perimeter) to identify high hazard area(s) where responders will operate						
Establish other hazard control zones, based upon scope and nature of the event						
Make offensive or defensive reconnaissance operations, as necessary, to gather intelligence on the situation						
Conduct ongoing qualifications and predictions						
Preparedness Measures	Component	Type I	Type II	Type III	Indicate Type	If not Type I, II or III list what you need to be Typed
Time in which preliminary estimate of number of victims exposed to toxic/hazardous material and source identification is obtained	Size Up	Within 1 hour from arrival on scene	Within 1.5 hours from arrival on scene	Within 2 hours from arrival on scene		
Time in which the at-risk population is identified and protective action recommendations are made	Size Up	Within 1 hour from arrival on scene	Within 1 hour from arrival on scene	Within 1 hour from arrival on scene		
Time in which the WMD/hazmat elements of the overall IAP are developed	Size Up	Within 1 hour from arrival on scene	Within 1 hour from arrival on scene	Within 1 hour from arrival on scene		

Activity: <i>Conduct Rescue Operations</i> . Definition: <b>Once on-scene and equipped with protective and response equipment, implement rescue operations.</b>						
Critical Tasks						
Determine the nature and priority of rescue operations and the numbers involved						
Identify personnel and equipment requirements to initiate rescue operations						
Implement safe and effective tactics to accomplish rescue operation objectives						
Extricate and rescue victims within the hot zone						
Coordinate rescue efforts with law enforcement to ensure safety of rescuers						
Implement secondary public protective actions (PPAs)						
Identify personnel and equipment requirements to initiate product/agent control operations						
Implement safe and effective tactics to accomplish product/agent control objectives						
Implement safe and effective tactics to support product/agent control objectives						
Preparedness Measures	Component	Type I	Type II	Type III	Indicate Type	If not Type I, II or III list what you need to be Typed
WMD/HazMat plans address PPE requirements. (e.g. respiratory protection, suits, boots, gloves. Complete ensembles required for the substance whether it is a solid, liquid, gas, WMD) This does <i>not</i> include explosive substances	PPE	Same as Type II plus: (Weapons of Mass Destruction (WMD) Vapor-Protective CPC; WMD Liquid Splash-Protective CPC) Levels of CPC vapor protection are: Vapor-Protective, Flash Fire Protective option for Vapor-Protective, and Chemical/Biological-Protective option for Vapor-Protective, all of which must be compliant with National Fire Protection Association (NFPA) Standard # 1991, "Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies" current edition.	Same as Type III plus: (Vapor-Protective CPC; Flash Fire Vapor-Protective CPC) Levels of CPC vapor protection are: Vapor-Protective, and Flash Fire Protective option for Vapor-Protective both of which must be compliant with NFPA Standard # 1991, "Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies," current edition.	(Liquid Splash-Protective CPC) Chemical Protective Clothing (CPC), which includes complete ensembles (suit, boots, gloves) and may incorporate various configurations (encapsulating, non-encapsulating, jumpsuit, multi-piece) depending upon the level of protection needed. Level of CPC liquid protection is: Liquid Splash-Protective, which must be compliant with NFPA Standard # 1992, "Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies," current edition		

WMD/HazMat Team shall have sufficient communications so that any person donning CPC shall have their own radio. In addition, the hazard sector officer, hazmat safety officer and team leader shall be on the same dedicated channel.	Communications	Same as Type II plus: (Secure Communications)	Same as Type III plus: (Wireless Data)	(In-Suit; Wireless Voice) Personnel utilizing CPC shall be able to communicate appropriately and safely with one another and their team leaders		
Time in which contaminated victims are rescued from contaminated area	Rescue	Within 1 hours from arrival on scene	Within 1.5 hours from arrival on scene	Within 2 hours from arrival on scene		
Hazmat personnel are equipped and trained to perform product control and containment	Equipment	Same as Type II plus: (WMD Chem/Bio Agent Confinement) Advanced capabilities should include ability to intervene and confine incidents involving WMD Chem/Bio substances	Same as Type III plus: (Liquid Leak Intervention; Neutralization; Plugging; Patching; Vapor Leak Intervention) Chemical means such as neutralization and encapsulation of known and unknown chemicals. Mechanical means include specially designed kits for controlling leaks in rail car dome assemblies and pressurized containers, to pneumatic and standard patching systems	(Diking; Damming; Absorption) Employment of mechanical means of intervention and control such as plugging, patching, off-loading, and tank stabilization Environmental means such as absorption, dams, dikes, and booms		
Hazmat personnel are equipped and trained to perform product control and containment	Equipment Special Capabilities	Same as Type II plus: (Digital Imaging Documentation Capability)	Same as Type III plus: (Heat Sensing Capability; Light Amplification Capability)	(Gloves and Other Specialized Equipment Based on Local Risk Qualification) Additional resources that augment the capabilities of the team		
WMD/HazMat Team shall consist of no less than the listed number of personnel per entry. This staffing level does <b>NOT</b> include the HazMat Group Team Leader, Safety Officer or other necessary support personnel. i.e. donning/doffing and equipment support	Staffing	6 Personnel	6 Personnel	6 Personnel		
WMD/HazMat Team shall be able to perform no less than the stated entries. Ideally said team should be able to support 6 entries per-24 hour period	Sustainability	Same as Type II	Same as Type III	Capability to Perform Three (3) Entries in a 24-hour Period		

**Activity: Conduct Mitigation Activities. Definition: Once on scene and equipped with protective and response equipment, implement operations plan to minimize contamination.**

<b>Critical Tasks</b>						
Identify appropriate PPE based on suspected hazardous material						
Coordinate with safety officer to monitor responders for exposure to hazmat						
Coordinate with safety officer to monitor and control the operating time of rescuers assigned to the hot zone to minimize rescuer exposure						
Secure the contamination source and affected areas						
Monitor and track compliance with containment requirements						
<b>Preparedness Measures</b>	<b>Component</b>	<b>Type I</b>	<b>Type II</b>	<b>Type III</b>	<b>Indicate Type</b>	<b>If not Type I, II or III list what you need to be Typed</b>
Time in which implementation of initial action plan and objectives is initiated	Intervention	Within 4 hours from arrival on scene.	Within 4 hours from arrival on scene.	Within 4 hours from arrival on scene.		
Time in which hazmat/WMD contamination is contained	Intervention	Within 12 hours from arrival on scene.	Within 12 hours from arrival on scene.	Within 12 hours from arrival on scene.		

**Activity: Conduct Decontamination and Clean-up/Recovery Operations.** Definition: Upon arrival on scene and with the requisite equipment, initiate response operations to reduce the level of on-scene contamination, minimize the potential for secondary contamination beyond the incident scene, and ensure an effective transition to clean-up and recovery operations.

<b>Critical Tasks</b>
Identify assets required for decontamination activities
Identify the type of contaminants, nature of response operations, and the required type/level of decontamination operations
Provide a means to allow medical treatment facilities and shelter managers to readily identify people who have received gross decontamination
Establish decontamination sites for victims
Screen affected persons
Implement emergency decontamination operations
Decontaminate victims exposed to chemical, biological, radiological, nuclear, or explosive (CBRNE) materials
Implement technical decontamination operations for injured, contaminated victims
Implement technical decontamination of human remains
Implement technical decontamination operations in support of WMD/hazmat entry and response activities
Implement decontamination operations to address incident-specific scenarios and requirements
Decontaminate pets, if resources are available
Coordinate livestock decontamination
Monitor clean areas within the contamination control line
Monitor the exit points for hazmat contaminate movement outside the isolation zone
Coordinate with environmental authorities to ensure the appropriate decontamination area clean-up and disposal of waste materials
Decontaminate affected facilities and equipment used for technical decontamination
Perform clean-up operations

Preparedness Measures	Component	Type I	Type II	Type III	Indicate Type	If not Type I, II or III list what you need to be Typed
Victims are provided maximum amount of privacy within site and situational constraints	Decontamination	100%	100%	100%		
Percent of victims provided clothing, blankets, and protection from the elements as needed	Decontamination	100%	100%	100%		
Time in which technical decontamination of first responders on-site is performed (depending on substance)	Decontamination	Within 2 hours from end of work period	Within 2 hours from end of work period	Within 2 hours from end of work period		
Time in which technical decontamination of off-site victims (e.g., at hospitals and designated decontamination stations) is performed (depending on substance)	Decontamination	Within 2 hours from arrival	Within 2 hours from arrival	Within 2 hours from arrival		
Time in which technical decontamination of household pets off-site (e.g., at designated decontamination stations) is performed (depending on substance)	Decontamination	Within 2 hours from arrival	Within 2 hours from arrival	Within 2 hours from arrival		
Time in which technical decontamination of human remains is performed	Decontamination	Within 24 hours from end of work period	Within 24 hours from end of work period	Within 24 hours from end of work period		

Time in which technical decontamination of facilities and equipment is performed	Decontamination	Within 24 hours from end of work period	Within 24 hours from end of work period	Within 24 hours from end of work period		
<p>Hazmat personnel are equipped and trained to decontaminate members of their team.</p>	<p>Decontamination</p>	<p>Same as Type II plus: (WMD Chem/Bio) Capable of providing decontamination for known and unknown contaminants and WMD Chem/Bio.</p>	<p>Same as Type III plus: (Unknown Contaminants) Capable of providing decontamination for known and unknown contaminants.</p>	<p>(Known Contaminants Based on Local Risk Qualification) Must be self-sufficient to provide decontamination for members of their team. Capable of providing decontamination for known contaminants.</p>		

<b>Activity: Demobilize WMD and Hazmat Response and Decontamination. Definition: Upon completion of response phase transition to recovery operations, inventory equipment, complete paperwork, pursue rehabilitation, and conduct post-event analysis (e.g., lessons learned) in accordance with incident demobilization plan.</b>						
<b>Critical Tasks</b>						
Transfer command for emergency response phase to authority having jurisdiction (AHJ) for post-emergency clean-up and recovery operations						
Work through IC/UC to ensure that incident-specific evidence collection and investigation protocols are clearly understood and communicated to all responders						
Inventory WMD/hazmat equipment cache and restore to service						
Demobilize WMD/hazmat base of operations						
Arrange transportation for demobilized WMD/hazmat personnel and equipment						
Implement a formal post-incident analysis process (based upon local procedures)						
Debrief WMD/hazmat capability personnel						
Conduct and incident critique for incident responders						
<b>Preparedness Measures</b>	<b>Component</b>	<b>Type I</b>	<b>Type II</b>	<b>Type III</b>	<b>Indicate Type</b>	<b>If not Type I, II or III list what you need to be Typed</b>
Time in which equipment cache is re-inventoried and packaged for transport	Demobilization	Within 12 hours from start of demobilization process	Within 12 hours from start of demobilization process	Within 12 hours from start of demobilization process		
Time in which base of operations is returned to original conditions	Demobilization	Within 12 hours from start of demobilization process	Within 12 hours from start of demobilization process	Within 12 hours from start of demobilization process		
Percent of WMD/hazmat Response and Decontamination task force debriefed	Demobilization	100%	100%	100%		

## **APPENDIX B – Mobile Support Units**

A mobile support unit is a temporary response organization that may be formed and then activated by the Indiana Department of Homeland Security under IC 10-14-3-19. Mobile Support Units may be established either by the Governor or the IDHS Executive Director to respond to a disaster, public health emergency, public safety emergency or other event that requires emergency action. A Mobile Support Unit (MSU) may include governmental unit employees, private sector employees, and self-employed or unemployed individuals. Frequently, a mobile support unit is a specialized group such as a HAZMAT or EMS team, and can include firefighters, rescue specialists and paramedics.

This Mobile Support Unit Guidance document contains generalized information about Mobile Support Units. This includes a discussion of state statutes and the many legal issues and principles that are involved. This guidance is not intended to and does not contain legal advice to any person, jurisdiction or entity. Each person, jurisdiction or entity with legal questions about its participation in a mobile support unit should seek their own legal advice from their own attorney or the attorney for their jurisdiction or entity.

This guidance document is not written for the purpose of establishing operating procedures that are to be used as a basis of asserting liability against any of the participating agencies or entities. To the extent that it touches upon subjects that may be characterized as operating procedures, it contains certain statements of best practices. In many cases, the best practices contained within this document strive to exceed and improve upon prevailing standard practices. This guidance document is not intended to be relied on by any other individual, public or private or any agency which is not a participant in a Mobile Support Unit. This guidance document may not be used in a court of law to determine an applicable standard of care under any particular circumstances.

### **Required Steps to Activate a Mobile Support Unit:**

1. The Indiana Governor or the IDHS Executive Director activates a Mobile Support Unit under IC 10-14-3-19 by signing an activation order. An example of an “Activation Order” is attached at Enclosure 1. The MSU Activation Order should contain the name of the commander, the specific duties of the MSU, and the expiration date of the activation. The Activation Order also contains a list of the members of the unit, both those who are public employees and those who are not governmental (state or local) employees.
2. Unless the expenses of the MSU are to be funded by the IDHS operating account, approval to fund the MSU from the IDHS Contingency Fund is required prior to signing the activation order.
3. Upon appointment, the commander of the MSU is required to send each employer of a MSU member a “Notice to Employer of Employee Member of a Mobile Support Unit That May Be Activated In Accordance With IC 10-14-3-19”. An example is provided at Enclosure 2. The commander should also send the employers the “Mobile Support Unit Employer Record Keeping forms and Instructions.”
4. The commander of each MSU must require each MSU member to complete a “MOBILE SUPPORT UNIT MEMBER CHECKLIST.” An example is provided at Enclosure 3. The commander of each MSU must include each MSU member on a roster of MSU members. A spreadsheet form for this purpose is attached at Enclosure 5.
5. If the MSU is composed of employees of a single employer, IDHS **may** enter into an agreement with the Employer to describe the terms and conditions of the activation, the reimbursement process and the documentation requirements. An example of such an agreement that may be entered into between IDHS and a Political Subdivision is provided at Enclosure 4. This agreement is not a legal requirement, but it may be used when a single employer provides all MSU members for a particular activation, the employer requests it and the agreement can be completed, signed and fully approved prior to deployment of the Mobile Support Unit. Normally, that is very difficult due to the time factor.

## Who May Activate a Mobile Support Unit?

Under IC 10-14-3-19 (a), only the Governor or the Executive Director of IDHS has the authority to activate a MSU.

## Permissible Circumstances for Activation of Mobile Support Units:

Under IC 10-14-3-19, Mobile Support Units may be called to duty for training, an exercise, or a response to a disaster, public health emergency, public safety emergency or other event requiring emergency action. The Mobile Support Unit may be deployed to any part of Indiana or to other states (under the Emergency Management Assistance compact (EMAC), upon the conditions specified in IC 10-14-3-19.

## Composition:

MSUs may be organized at the county or District Task Force level, but only upon an activation by IDHS. If an MSU is an existing group, such as a HAZMAT or EMS team, they may operate out of a local fire department, hospital or other public safety facility. Each Mobile Support Unit has a commander appointed by the Executive Director of IDHS.

It is advisable to keep Mobile Support Units no larger than necessary and to minimize the number of private employers, volunteers or employment categories. The MSU commander's task of assisting employers with administrative and financial reimbursement issues will be greatly simplified by limiting the number of employers and the employment categories of unit members. A MSU with lots of members, lots of different employers, both public and private and several volunteers or unemployed members can easily become a considerable administrative burden for the Commander.

## Mobile Support Unit Commander.

The Mobile Support Unit Commander has primary responsibility for the organization, administration, and operation of the unit. During the organization of the MSU, the commander of each MSU is responsible for requiring each unit member to complete a "Mobile Support Unit Member's Information Checklist." (See Enclosure 3) The Commander then completes a Roster of Mobile Support Unit Members and attaches it to the Activation Order. (See Enclosure 5)

Prior to deployment, the Mobile Support Unit Commander should complete the following actions:

1. Forward to each employer the IDHS document entitled: **Mobile Support Unit; EMPLOYER RECORD KEEPING FORMS AND INSTRUCTIONS**. This document details the record keeping requirements for the employers to be reimbursed for the compensation and expenses of their employees. The documentation requirements are designed to meet FEMA reimbursement criteria, in case the event is also a Presidential Declared Major Disaster.
2. Forward to each employer the IDHS Information Paper entitled: Indiana Auditor of State VINQ list. It details the things the Auditor of State requires before the Auditor will send a check to a new vendor. This information is explained in greater detail in the Mobile Support Unit, Employer Record Keeping Forms and Instructions. The time required for the reimbursement process will be minimized if each employer is added to the State VINQ list, as an authorized vendor, prior to submitting a claim for reimbursement. In order for a new "vendor" to be paid, (to the Auditor of State, new employers are considered "vendors") the Auditor of State requires the vendor to provide the ordering agency a Vendor Information Form, to add the employer to the State VINQ list as a new vendor. This process of entering a new employer into the Auditor's VINQ list may take several weeks, so it should be done at the onset of the Mobile Support Unit's formation and should not wait until the MSU has returned and the reimbursement forms are completed.

Following the completion of the mission, the commander must provide the MSU Member Information Checklist to IDHS, Response and Recovery Division in order to allow IDHS to audit invoices from employers after the event for reimbursement of employer paid compensation, expenses, damaged equipment, etc.

One of the commander's most challenging duties will be working with the employers of each MSU member to support the employer's effort to obtain reimbursement from IDHS following the expiration date of the MSU activation. That duty will entail making sure the documentation provided by the employer is complete and fully meets the published requirements of IDHS.

**Permissible Limits of MSU Activation Orders:**

The term of this duty shall be for a limited period of not more than sixty (60) days. The executive director may renew the duty orders for successive periods of not more than sixty (60) days if necessary for the mobile support unit to participate in or respond to the event. In most cases, IDHS hopes to limit the period of any individual's term of duty to fourteen (14) calendar days. When the mission requires a longer presence, IDHS plans to rotate one MSU out and rotate another in to replace it.

**Employment Status of Mobile Support Unit Members**

The ideal candidates for Mobile Support Unit members are state employees and employees of political subdivisions of the state. Those persons typically enjoy the full range of employment benefits that are necessary to protect the MSU member from the various potential adverse effects of an MSU deployment, including the several effects of an injury, illness, disability, tort liability, termination of employment or death. Certain private employers may provide similar benefits to their employees, making such an employee a good candidate to be an MSU member.

In Indiana, the term "political subdivision" means city, town, township, county, school corporation, library district, local housing authority, public transportation corporation, local building authority, local hospital or corporation, local airport authority or other separate local governmental entity that may sue and be sued.

If the MSU member is employed by the state or a political subdivision of the state, IC 10-14-3-19 (c) provides the individual has the same powers, duties, rights, privileges and immunities and shall receive the compensation and benefits incidental to the individual's employment, whether serving within or outside the political subdivision.

If the MSU member is not employed by the state or a political subdivision of the state, IC 10-14-3-19 (c) (2) provides that the individual is still "entitled to the same rights and immunities that are provided for an employee of the state."

If an MSU member is unemployed or is employed by a private firm that does not provide health insurance, life insurance, death or other benefits, the individual and or his survivors are not protected against those possible consequences of an MSU deployment. For that reason, such a person is not a good candidate to serve within a MSU.

MSU members who are either unemployed or self-employed are treated as state employees only for purposes of some workers' compensation benefits and protection from personal liability. These individuals are not eligible for the health insurance, dental insurance, life insurance, death benefits or other employer provided fringe benefits that are available to state employees. Mobile Support Unit members who are killed in the line of duty and who were acting as police officers, firefighters or "public safety officers" (as defined by IC 5-10-10-6) may be eligible for other death benefits based upon separate statutory entitlements. Some of the statutory death benefits which may be available are included within Enclosure 6, Statutory Provisions Governing Mobile Support Units.

Both employees of private organizations and governmental employees should serve as MSU members in a "present for duty status" with their employers, earning pay, overtime, and are paid directly by their employers. They also remain eligible for all employer provided protections and benefits. These employees should not be on a leave status with the employer, but should be in a regular working status. Otherwise, the employer is not entitled to reimbursement from IDHS for his or her wages. Being in a leave status will impair the employee's rights to employer provided workers compensation or death benefits, in the event of the individual's injury or death.

**Volunteer Firefighter Participants in a Mobile Support Unit**

A member of an Indiana volunteer fire department may serve as a member of a mobile support unit, but the individual's unique employment situation requires special pre-planning and coordination among the member, his or her employer, the VFD Chief and the Mobile Support Unit Commander. The member must deploy with the MSU as a member of his or her volunteer fire department. This requires the member to be directed to do so by the Volunteer Fire Department Chief or designee as an authorized mission of the volunteer fire department. The VFD Chief or designee must certify that the MSU member will be protected by the accident,

injury, disease, disability and death benefit insurance policy of the Department mandated by IC 36-8-12-7.

IDHS policy prohibits the VFD member from participating as a member of a MSU in an on-duty status under the member's regular employment. In that status, the member's entitlement to insurance protection provided by the VFD would not be available. Such an arrangement also might impair the member's family's ability to receive statutory death benefits that are paid to the families of firefighters killed in the line of duty.

Volunteer Firefighter Department members may receive a stipend from the State when participating in a Mobile Support Unit. The stipend for volunteer firefighters is \$19.82 per hour for each hour of the individual's duty shift. The shifts for volunteer firefighters during a Mobile Support Unit must be approved by the Mobile Support Unit Commander, after consultation with the Incident Commander and the Executive Director of the Indiana Department of Homeland Security. Hourly pay stipends may include actual travel time to or from the scene, but shall not include pay for sleep, rest or recreation periods.

It will be the responsibility of the MSU Commander to record all hours for which stipends are to be paid by IDHS to members of a VFD on the Force Account Labor Summary Record. After the payments are made to the individuals, IDHS will provide a 1099 form to each participant who receives \$600.00 or more. It is then the responsibility of the firefighter to report the amounts paid to them as income to the IRS, whether the individual receives a 1099 or not.

The VFD Chief also will be required to adopt a pay policy under which VFD members will be compensated directly by IDHS for service on a Mobile Support Unit, with the VFD Chief submitting a collective request for the payment of stipends and the reimbursement of travel expenses for all of the firefighters who served as members of the MSU, as if the VFD were an employer. The pay policy must contain the following elements:

1. The department shall establish a written policy applicable to VFD members who desire to serve as a MSU member. The written policy must require that the volunteer have health insurance. The written policy shall require the volunteer to complete the time and labor documentation required for payment of the stipend. Since the payment of the stipend is made directly to the individual, the policy will require each individual to complete the Auditor of the State of Indiana's requirements to be added to the Auditor's VINQ list. As a condition receiving reimbursement for travel expenses from IDHS, the policy shall require the volunteer to complete the documentation required for the payment of reimbursement of travel expenses.
2. The VFD shall also have a written activation protocol that includes call out procedures, authorization procedures for activation, accountability for personnel, and documentation of time and travel expenses. The pay policy and activation protocol shall be in effect prior to a member of the VFD being deployed on a Mobile Support Unit.

### **Employers of Mobile Support Unit Members:**

Employers receive a "Notice to Employer of Employee Member of a Mobile Support Unit That May Be Activated In Accordance With IC 10-14-3-19". The notice explains that, if activated, the employee is an "emergency management worker" for purposes of tort immunity and that the state may reimburse the employer for compensation and expenses. The Mobile Support Unit statute does not permit IDHS to reimburse the employer's costs of "back-filling." However, it does authorize IDHS to reimburse the employer for the salary and fringe benefits of the MSU member who is deployed, including overtime.

The only expenses for which MSU members or their employers may be reimbursed are those that are reasonable and necessary and are incurred while the MSU is activated.

All records must be kept for 3 years after reimbursement. The employer should keep a copy of all documents submitted for reimbursement in a single file assembled under the Mobile Support Unit Activation number.

### **Mobile Supports Units – Reimbursement Procedures**

In order to be reimbursed for the allowable expenses of their employee(s), employers must provide a copy of several documents including:

1. The Employer's Payroll and Overtime Policy.
2. The Employer's payroll register/payroll stubs.

3. The actual receipts for any lodging, travel or maintenance costs that they paid for their employees.
4. A Vendor's Information Form. This form is required by the Indiana Auditor of State in order for the state to reimburse the employer.
5. A Travel Voucher from each MSU member. An unemployed MSU member or a self-employed member may submit the form directly to IDHS for reimbursement. An employed MSU member will submit this form to his or her employer upon the end of the MSU deployment. The employer will reimburse the employee for his or her travel costs. The employer will then provide both this form and proof of payment to the employee to IDHS as documentation in support of the employer's claim for reimbursement by IDHS. Actual invoices for meals need not be provided. Instead, employers will be reimbursed for meal costs incurred based on the amount paid to Indiana State employees when traveling (\$26.00 within Indiana and \$32.00 for out of state travel.)
6. The employer's personnel costs must be provided to IDHS on a weekly IDHS Force Account Labor Summary Record, or on a similar local report that will provide the same information. Each employee must be described by name, job title, hourly pay rate, and overtime eligibility for each hour worked. Hours worked as a member of the mobile support unit must be shown for each day for which reimbursement is sought.
7. Under IC 10-14-3-19, the state may reimburse the employer for all uninsured losses of or damage to supplies and equipment incurred while the employee was serving as a member of an activated mobile support unit. However, losses of or damage to personal convenience property, such as a person's luggage, toiletries, clothing, eye glasses, iPod, cell phone etc. is not reimbursable. The individual MSU member is personally responsible for his or her personal property at all times. If it is lost, stolen or damaged, the individual is not authorized to make a claim for reimbursement.
8. The costs of Mobile Support Units are reimbursable by FEMA if it was activated for Public Assistance in response to a Presidential Public Assistance Declaration. Accordingly, IDHS has elected to use FEMA forms for all Mobile Support Unit activations. Reimbursements will be based on FEMA guidelines, using current FEMA reimbursement rates, whether or not a Presidential Declaration is made. The FEMA Schedule of Equipment Rates may be found at: <http://www.fema.gov/government/grant/pa/eqrates.shtm>

Under both FEMA and EMAC reimbursement criteria, employer expenses may be reimbursed only where there is documentation that the money was actually spent. Without appropriate documentation of payment, IDHS will not be able to reimburse the employer.

In order to seek reimbursement, each employer which has an employee who participates in the deployment of a Mobile Support Unit must submit an invoice together with the documentation identified above to:

Indiana Department of Homeland Security  
ATTN: Response and Recovery Division, Room W046  
302 W. Washington Street  
Indianapolis, IN 46204

The invoice must be received by the IDHS Response and Recovery Division within 60 days of the last day of such deployment. The invoice must be accompanied by the documentation described above.

**Travel Costs:** The Travel Voucher will be used to review and approve employer claims for travel costs. The Travel Voucher must be supported with copies of paid receipts for air fare, ground transportation, parking, mileage for personnel vehicles, and lodging. IDHS will not require receipts for meals. All other receipts must be attached. Meal costs will be reimbursed at the current Per Diem rate used by the State of Indiana to reimburse for the reasonable and necessary cost of meals. Per Diem for meals or lodging cannot be reimbursed for those expenses or nights of lodging which were provided without cost to Mobile Support Unit members by IDHS, FEMA or other entities.

**Maintenance expenses:** Maintenance expenses include any expenses incurred in maintaining and repairing the equipment used by the MSU members in carrying out their duties. All maintenance expenses must be fully explained and supported with copies of paid receipts. Reimbursement is limited to expenses which are clearly related to the mission. These other

costs should be explained in a separate attachment. The purchase or rental of equipment can only be reimbursed by IDHS if authorized in advance by IDHS. Use costs of existing equipment cannot be reimbursed. Only equipment costs that are deemed required and/or necessary, in the sole judgment of IDHS, are reimbursable.

**Use of vehicles:** Any claim for use of a vehicle must be supported by a mileage log showing the beginning and ending odometer readings by each vehicle. The mileage that is reimbursed will be determined based upon the amount of reimbursement allowed by FEMA for the type vehicle used. (i.e. auto, police auto, boat, etc.) The amount to be reimbursed for vehicle use will be adjusted if IDHS provides fuel to MSU participants. IDHS will provide fuel or pay for mileage, not both.

**Forms:** The following forms can be found by visiting the Accounts Payable page of the IDHS website: <http://www.in.gov/dhs/2435.htm>

- Vendor Information Form. This form is used to set up employers of MSU members and either unemployed or self-employed MSU members into the Auditor of State's vendor system. The Auditor requires this form in order to make a payment or reimbursement of any kind to a person, company or government entity.
- Force Account Equipment Summary Record. This form is used to record equipment used and the costs.
- Force Account Labor Summary Record. This form is used to record personnel costs. Rented
- Equipment Summary Record. This form is used to record the costs of rented or leased equipment.
- Materials Summary Record. This form is used to record the supplies and materials that are taken out of stock or purchased.
- Fringe Benefit Rate Sheet. This form is used to record benefit costs of each employee.
- Travel Voucher. This form is used by an individual (unemployed, self-employed, employed) MSU members who seek compensation for travel expenses. An unemployed MSU member or a self-employed member may submit the form directly to IDHS for reimbursement. An employed MSU member will submit this form to his or her employer upon the end of the MSU deployment. The employer will reimburse the employee for his or her travel costs. The employer will then provide both this form and proof of payment to the employee to IDHS as documentation in support of the employer's claim for reimbursement by IDHS.

### **Mobile Support Unit Members:**

**MSU Membership Status.** It is important to pinpoint the precise day and time that MSU membership status begins and ends in order to calculate the state's reimbursement obligation to the member's employer. This timing issue is also important in the event the member is injured in an accident either on the way to or when returning from an MSU mission.

Once a Mobile Support Activation Order is signed and the member's name is listed on the roster which is attached, the MSU member's status begins when the MSU member reports to his or her designated Mobilization Station, plus up to three (3) hours of travel and preparation time. The MSU member's status ends when the MSU member departs the MSU demobilization station, plus up to three (3) hours of travel time. The individual member records this information on his or her travel voucher submitted for reimbursement following the completion of the MSU mission. The individual's employer records this information on the Force Account Labor Summary Record, which is used to record the employer's personnel costs for which reimbursement is sought.

In order to expedite the payment of invoices from employers, the MSU Commander or his or her designee may be continued on MSU member status, after the completion of the demobilization process, for up to three (3) days of additional time. The amount of time will vary depending upon the length and complexity of the MSU. The amount of authorized additional time will be determined by the IDHS Executive Director, after consulting with the MSU

Commander, to complete necessary reports, documents and to assist employers with the prompt reimbursement of their invoices.

**Employment Protection.** Under IC 10-14-3-19 (a), members serving on the mobile support units are immune from discipline or termination by the members' employers for serving in the units. This means that a disciplinary action that was based on the employee's absence for MSU duty is unlawful. Unfortunately, the law does not provide an enforcement tool, so if an employer does take action against the employee, the employee will likely have to take the employer to court, at his or her own expense, unless the employer has an internal grievance or appeal procedure.

The employee will also have the burden of proving the disciplinary action or termination was the employer's predominant motive for the employment action. Unlike civil rights statutes or the Uniformed Employment and Reemployment Rights Act (which protects military members from the employer's wrath), there is little guidance and no government agency whose mission is to assist MSU members with employment disputes. Disputes with employers are likely to occur unless the employer consents to the member's participation. Employees of private employers who proceed with MSU membership and activations despite the objections of their supervisors at work are at greater risk than employees of the State or a political subdivision. Under, IC 10-14-3-19 (h), a state employee who refuses to accept or to perform duties in a MSU commits a violation of state law and the refusal constitutes grounds for dismissal from state employment.

### **Insurance Policies**

Each employer of a MSU participant will have to decide whether they are able to participate. Insurance coverage is certainly an important factor in that decision. It is recommended that each entity sit down with its insurers, express its desired coverage and make sure they know what their coverage does and does not do, before they agree to participate.

If the personal property used in a mobile support unit's response (such as equipment) is lost or damaged, the state will reimburse the owner for the uninsured amount of the employers' loss. Personal convenience property, such as an MSU member's luggage, toiletries, clothing, eye glasses, iPod, cell phone etc. is different. IDHS guidance makes it clear that the individual MSU member is personally responsible for his or her personal property. If it is lost, stolen or damaged, the individual is not authorized to make a claim for reimbursement.

### **Workers Compensation:**

Indiana's worker's compensation law applies only to Indiana employers. Likewise, Indiana's mobile support law applies only to Indiana employers. Therefore, persons who are employed by an employer from another state are not allowable candidates to serve on an Indiana Mobile Support Unit.

For the Indiana Worker's Compensation law to apply, the legal relation of employee and employer must exist. That relationship is contractual in nature. A key issue under Indiana Worker's Compensation law is whether an injury to an employee arose "out of and in the course of the employment." That is a factual issue that will depend upon the circumstances of the particular individual and of his or her accident or injury. Obviously, an accident or injury cannot arise out of and in the course of the employment unless the employer is aware of the mission and has given its express assent to the employee's participation in an "on duty and working" status. A mobile support unit, by its very nature, involves the employee traveling to a location that is apart from the employer's ordinary place of business and doing a task that is often unrelated to the employer's business. An accident involving a traveling employee arises "out of" his employment as long as the employee is at the place the accident occurs because of his employment. That requires the employer to not only to assent to but to direct the employee to participate in the mobile support unit.

Under IC 36-8-12-10, volunteer firefighters and emergency medical technicians working for a volunteer fire company or ambulance company must be covered by the medical treatment and death benefit portions of the Worker's Compensation and Occupational Diseases Acts. Compensation for lost wages and impairment is not covered. Any dispute as to compensability may be resolved by the Worker's Compensation Board through its hearing process. All expenses incurred for premiums of the insurance allowed under IC 36-8-12-10 may be paid from the unit's general fund.

Other than volunteer firefighters, MSU members who are employed need to remain in an employment status with their employers in order to be able to make a claim for workers'

compensation for any accident or injury taking place during a deployment as a MSU member. That means they need to be in a working status, rather than in a leave or vacation status.

Under IC 10-14-3-15, unemployed or self-employed persons working as volunteers as Mobile Support Unit members may be covered by the medical treatment and burial expense provisions of the state's workers' compensation law (IC 22-3-2 through 22-3-6 and the worker's occupational diseases law (IC 22-3-7). Such persons are not covered by the disability or lost wages provisions of these statutes.

For purposes of the Indiana Worker's Compensation Act, all types of employment relationships may be divided into three categories:

1. Employment that *must* be covered by workers' compensation.
2. Employment that *is not* covered by workers' compensation.
3. Employment that *is not* automatically covered, but which *may* be covered at the option of the employer. In some cases the consent of the employee is required.

The Worker's Compensation Board may be notified of the employer's election of optional coverage by filing an Election of Coverage Form. Of particular interest to Mobile Support Units are:

1. *Local police officers and firefighters.* The Worker's Compensation Act does not apply to municipal employees if:
  - a) They are members of municipal police or fire departments, and
  - b) They are members of a police or firefighter's pension fund.

However, the municipal council may elect to bring such employees within the *medical* provisions of the Act (disability and impairment compensation would not be covered). See IC 22-3-2-2(c).

If the medical benefits provided under workers' compensation terminate *for any reason* before the police officer or firefighter is fully recovered, the municipal council must provide necessary medical treatment until the employee is no longer in need of such treatment. See IC 22-3-2-2(e). Local police officers or fire fighters covered by a medical-only worker's compensation policy should contact their benefits coordinator or the local clerk or treasurer for more information on coverage.

Other benefits *may* be available to injured police officers and firefighters outside of the Worker's Compensation Act. IC 36-8-4-5(a) provides the following care to police officers and firefighters who are injured or made ill by the performance of their duties: medical and surgical care; medicines, laboratory, curative and palliative agents and means; X-ray, diagnostic, and therapeutic service including during the recovery period; and hospital and special nursing care if the physician or surgeon in charge considers it necessary for proper recovery. However, that the Worker's Compensation Board has no jurisdiction over medical benefits payable pursuant to IC 36-8-4-5(a).

1. *Reserve Police Officers* as defined by Ind. Code 36-8-3-20 may be covered by the medical treatment and burial expense provisions of the Worker's Compensation Act. The administrative procedures of the Act apply if compensability of the injury is an issue. See IC 36-8-3-20(j).
2. *Volunteers working for hazardous materials response team.* These workers may be covered by the medical benefit and burial expense provisions of the Act at the option of the employer and employee. See IC 36-8-12-10.
3. *Rostered Volunteers.* A volunteer whose name has been entered and approved on a county, municipal, or township roster of volunteers for volunteer programs operated by the county, municipality, or township may be covered at the option of the governmental unit by the medical-only provisions of the Act. Lost wage and impairment compensation would not be covered. See IC 22-3-2-2.1.

**Health Insurance.** MSU members should have health insurance in order to have a way to pay for medical care for any illness occurring while on this deployment. MSU members who are not state employees are not covered by any state health insurance program or policy.

**Life Insurance/Disability Insurance.** MSU members who are not state employees are not covered by any state life insurance or disability insurance program or policy.

**Protection from Tort Liability.** Issues of tort liability will always depend upon the actual factual circumstances giving rise to a particular injury or damage. The ultimate issue of whether a particular person or entity is liable to an injured party will always depend upon the facts. No general statement or discussion of the subject within a guidance document such as this can possibly anticipate all the circumstances or address all the questions that are involved. The following discussion merely identifies one statute of particular importance to Mobile Support Unit participants.

IC 10-14-3-15 creates a broad grant of immunity for the state and its political subdivisions when “complying with or reasonably attempting to comply with IC 10-14-3, Indiana’s “Emergency Management and Disaster Law.” IC 10-14-3-15 also grants limited immunity to any emergency management worker “complying with or reasonably attempting to comply with IC 10-14-3 or any order or rule adopted under this chapter or under any ordinance related to blackout or other precautionary measures enacted by any political subdivision of the state.” Such an emergency management worker is not liable for the death of or injury to persons or for damage to property as a result of any such activity, except in cases of willful misconduct, gross negligence or bad faith. An individual MSU member is considered an “emergency management worker” for the purposes of the grant of limited immunity provided to such persons in IC 10-14-3-15. Therefore, except in cases of willful misconduct, gross negligence or bad faith, an emergency management worker complying with or reasonably attempting to comply with Indiana Emergency Management Law is not liable for the death of or injury to persons or for damage to property as a result of any such activity. Under the legal doctrine of *respondeat superior*, the employer of an emergency management worker’s liability is derived from the liability of the employee. If the employee is not liable due to the application of the legislative grant of limited immunity, the employer is not liable either.

A summary of the Indiana statutes governing Mobile Support Units is provided at Enclosure 6.

**Enclosure 1, Activation Order**

**ACTIVATION OF MOBILE SUPPORT UNIT IN  
ACCORDANCE WITH IC 10-14-3-19  
ACTIVATION NUMBER \_\_\_\_\_**

I, JOSEPH E. WAINSCOTT, JR., AS EXECUTIVE DIRECTOR OF THE INDIANA DEPARTMENT OF HOMELAND SECURITY, DO HEREBY ACTIVATE THE **[INSERT NAME OF MSU]** AS FOLLOWS:

1. The Mobile Support Unit shall perform the following duties ("Duties") under the command of **[insert name of commander]**:
  - a. **[List duties]**
2. The Mobile Support Unit shall consist of the individuals on the roster which is attached hereto and made a part hereof as Exhibit 1. This roster may only be changed when the Mobile Support Unit Commander creates, signs and dates an amended roster which is then approved in writing by the IDHS Executive Director. The commander **will** obtain a completed and signed checklist from each Mobile Support Unit member. The commander will send a Notice to the employer of each Mobile Support Unit Member. This notice will inform the employer of this activation order and will describe the reimbursement procedures under which the employer may seek reimbursement from IDHS for the salary of the unit member and his or her other allowable expenses.
3. Under IC 10-14-3-15, each member of the Mobile Support Unit is considered to be a state emergency management worker, while remaining in a paid duty status for the individual's employer.
4. The [MSU] shall perform the Duties from the date hereof until **[insert expiration date]**.
5. Reimbursement by IDHS of employers or self-employed individuals shall be in accordance with IC 10-14-3-19 (f) and (g) below:
  - (f) **The state may reimburse a political subdivision** for:
    - (1) The compensation paid and actual and necessary travel, subsistence, and maintenance expenses of an employee of the political subdivision while the employee is serving as an activated member of a mobile support unit;
    - (2) All payments for death, disability, or injury of an employee incurred in the course of duty while the employee was serving as a member of a mobile support unit; and
    - (3) All losses of or damage to supplies and equipment of the political subdivision or the employee incurred while the employee was serving as a member of an activated mobile support unit. (Losses of or damage to personal convenience property, such as a person's luggage, toiletries, clothing, eye glasses, iPod, cell phone etc. is not reimbursable. The individual MSU member is personally responsible for his or her personal property at all times. If it is lost, stolen or damaged, the individual is not authorized to make a claim for reimbursement. )
  - (g) For an individual of a mobile support unit who is **not an employee of the state or a political subdivision**, the state may:
    - (1) Compensate the individual:
      - (A) At a rate of pay approved by the executive director;
      - (B) By reimbursing the individual for the actual and necessary:
        - (i) Travel;
        - (ii) Subsistence; and
        - (iii) Maintenance; expenses of the individual of the mobile support unit incurred while the individual is on duty as an activated a member of a mobile support unit; and (C) for all losses of or damage to supplies and equipment of the individual incurred while the individual is on duty as a member of a mobile support unit (Losses of or damage to personal convenience property, such as a person's luggage, toiletries, clothing, eye glasses, iPod, cell phone etc. is not reimbursable. The individual MSU member is personally responsible for his or her personal property at all times. If it is lost, stolen or damaged, the individual is not authorized to make a claim for reimbursement. ) ; or
    - (2) Reimburse the individual's employer for:

- (A) The compensation paid and the actual and necessary:
  - (i) Travel;
  - (ii) Subsistence; and
  - (iii) Maintenance; expenses of the employee while the employee is on duty as a member of an activated mobile support unit;
- (B) All payments for:
  - (i) Death;
  - (ii) Disability; or
  - (iii) Injury; of the employee while the employee was on duty as a member of an activated mobile support unit; and
- (C) All losses of or damage to supplies and equipment of the employer or the employee incurred in the course of duty while the employee was on duty as a member of an activated mobile support unit. (Losses of or damage to personal convenience property, such as a person's luggage, toiletries, clothing, eye glasses, iPod, cell phone etc. is not reimbursable. The individual MSU member is personally responsible for his or her personal property at all times. If it is lost, stolen or damaged, the individual is not authorized to make a claim for reimbursement. )

SIGNED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ , 20 \_\_\_\_\_

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**Joseph E. Wainscott, Jr.**

**Executive Director**

**Indiana Department of Homeland Security**

**Enclosure 2**

**NOTICE TO EMPLOYER OF EMPLOYEE MEMBER OF A  
MOBILE SUPPORT UNIT THAT MAY BE ACTIVATED IN  
ACCORDANCE WITH IC 10-14-3-19**

Under the provisions of IC 10-14-3-19, the Executive Director of the Indiana Department of Homeland Security has the authority to activate one or more mobile support units to respond to a disaster, public health emergency, public safety emergency, or other event that requires emergency action. One or more of your employees has volunteered to be a member of a mobile support unit to provide fire, law enforcement, hazardous materials, emergency medical or other essential response services.

While serving as a member of a mobile support unit ("MSU"), your employee is an emergency management worker as provided in IC 10-14-3-15. Under that statute, except in cases of willful misconduct, gross negligence, or bad faith, any emergency management worker complying with or reasonably attempting to comply with [IC10-14-3] or any order or rule adopted under [IC 10-14-3], or under any ordinance relating to blackout or other precautionary measures enacted by any political subdivision of the state, is not liable for the death of or injury to persons or for damage to property as a result of any such activity.

In addition, under IC 10-14-3-19, the follow reimbursement of employers or self-employed individuals is permitted:

(f) The state may reimburse a political subdivision for: (1) the compensation paid and actual and necessary travel, subsistence, and maintenance expenses of an employee of the political subdivision while the employee is serving as a member of an activated mobile support unit; (2) all payments for death, disability, or injury of an employee incurred in the course of duty while the employee was serving as a member of an activated mobile support unit; and (3) all uninsured losses of or damage to supplies and equipment of the political subdivision or the employee incurred while the employee was serving as a member of an activated mobile support unit. (Losses of or damage to personal convenience property, such as a person's luggage, toiletries, clothing, eye glasses, iPod, cell phone etc. is not reimbursable. The individual MSU member is personally responsible for his or her personal property at all times. If it is lost, stolen or damaged, the individual is not authorized to make a claim for reimbursement. )

(g) For an individual of a mobile support unit who is not an employee of the state or a political subdivision, the state may: (1) compensate the individual: (A) at a rate of pay approved by the executive director; (B) by reimbursing the individual for the actual and necessary: (i) travel; (ii) subsistence; and (iii) maintenance; expenses of the individual of the mobile support unit incurred while the individual is on duty as a member of a mobile support unit; and (C) for all uninsured losses of or damage to supplies and equipment of the individual incurred while the individual is on duty as a member of an activated mobile support unit, other than personal convenience property, such as a person's luggage, toiletries, clothing, eye glasses, iPod, cell phone etc. The individual MSU member is personally responsible for his or her personal property at all times. If it is lost, stolen or damaged, the individual is not authorized to make a claim for reimbursement.

**or** (2) reimburse the individual's employer for: (A) the compensation paid and the actual and necessary:

(i) travel; (ii) subsistence; and (iii) maintenance; expenses of the employee while the employee is on duty as a member of an activated mobile support unit; (B) all payments for: (i) death; (ii) disability; or (iii) injury; of the employee while the employee was on duty as a member of an activated mobile support unit; and (C) all uninsured losses of or damage to supplies and equipment of the employer or the employee incurred in the course of duty while the employee was on duty as a member of an activated mobile support unit, other than personal convenience property, such as a person's luggage, toiletries, clothing, eye glasses, iPod, cell phone etc. The individual MSU member is personally responsible for his or her personal property at all times. If it is lost, stolen or damaged, the individual is not authorized to make a claim for reimbursement. 23

**Enclosure 3**

**MOBILE SUPPORT UNIT MEMBER CHECKLIST**

1. Name \_\_\_\_\_

2. Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Email Address: \_\_\_\_\_

2. Employment status (check one)

a. Unemployed \_\_\_\_\_

b. Self-employed \_\_\_\_\_

c. Employed \_\_\_\_\_

3. If employed, provide name, address and contact person of employer.

Employer's name: \_\_\_\_\_

Employer's Mailing Address: \_\_\_\_\_

Employer's contact person: \_\_\_\_\_

Contact person's phone number: \_\_\_\_\_

Contact person's email: \_\_\_\_\_

If employed – Hourly wage \_\_\_\_\_

or weekly salary \_\_\_\_\_

or monthly salary \_\_\_\_\_

4. Personal supplies and equipment with which the individual is responding.

(Attach list if required)

(IDHS will not reimburse the MSU member for lost or damaged items)

5. Employer provided supplies and equipment with which the individual is responding

(Attach list if required)

Date Completed: \_\_\_\_\_

Completed by: \_\_\_\_\_

1. Health Insurance Card. (Individual MSU member should carry it and provide a photo copy to the MSU Commander )

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**Enclosure 4. Sample Mobile Support Unit Employee Interchange Agreement****INDIANA DEPARTMENT OF HOMELAND SECURITY****MOBILE SUPPORT UNIT DEPLOYMENT****EMPLOYEE INTERCHANGE AGREEMENT**

This Agreement is entered into by and between \_\_\_\_\_ (a political subdivision of the State of Indiana—hereinafter referred to as the “Political Subdivision”) and the Indiana Department of Homeland Security (hereinafter referred to as the “IDHS”) for the services of the employees of the political subdivision identified on Exhibit A, attached and fully incorporated herein (hereinafter referred to “Indiana Mobile Support Unit Member”) to fulfill the duties of a member of an Indiana Mobile Support Unit.

**WITNESSETH:**

Whereas, The Executive Director of the IDHS is authorized and empowered to establish one or more mobile support units pursuant to Executive Order 05-09 and IC 10-14-3-19 to engage in response and recovery operations, and

Whereas, Under the authority of IC 5-10-7, the political subdivision has agreed to detail the Indiana Mobile Support Unit Member to serve as a member of the Indiana Mobile Support Unit, if and when the Mobile Support Unit is activated.

**NOW THEREFORE**, the parties agree:

1. The Indiana Mobile Support Unit Members will serve as members of the Indiana Mobile Support Unit.
2. The term of the deployment of the Indiana Mobile Support Unit Members shall not exceed sixty (60) days.
3. While serving as a member of the Indiana Mobile Support Unit, each Indiana Mobile Support Unit Member will be considered on detail from the Political Subdivision to the IDHS.
4. Pursuant to IC 10-14-3-19(c), the Indiana Mobile Support Unit Members shall be entitled to the same salary and benefits to which they would otherwise be entitled and shall remain employees of the Political Subdivision for all other purposes except that the Executive Director of the IDHS and the Executive Director’s designees shall supervise the duties of the Indiana Mobile Support Unit Members during the period of detail.
5. If a Indiana Mobile Support Unit Member suffers disability or death as a result of personal injury arising out of and in the course of such assignment or sustained in the performance of duties in connection therewith the Indiana Mobile Support Unit Member shall be treated for the purpose of Political Subdivision’s employee compensation program as an employee, as defined in such statute, who has sustained such injury in the performance of such duty.
6. No claim by any person or other entity, including without limitation an Indiana Mobile Support Unit Member, for death, injury, illness or loss of compensation occurring with respect to an Indiana Mobile Support Unit member while on deployment or as a result of deployment with a mobile support unit may be made against the State of Indiana or any of its agencies, instrumentalities, elected or appointed officials or employees.
7. The Department shall reimburse the Political Subdivision for:
  - (A) The compensation paid and actual and necessary travel, subsistence, and maintenance expenses of the Indiana Mobile Support Unit Members while the Members are serving as members of an activated mobile support unit;
  - (B) All payments for death, disability, or injury of an employee incurred in the course of duty while the Indiana Mobile Support Unit Members are serving as members of an activated mobile support; and
  - (C) All uninsured losses of or damage to supplies and equipment of the political subdivision or the Indiana Mobile Support Unit Members while the Members are serving as

members of an activated mobile support, other than personal convenience property, such as a person’s luggage, toiletries, clothing, eye glasses, iPod, cell phone etc. The individual MSU member is personally responsible for his or her personal property at all times. If it is lost, stolen or damaged, the individual is not authorized to make a claim for reimbursement.

8. This Agreement is effective on the date it has been fully executed by all parties.

IDHS intends to use the Emergency Management Contingency Fund to defray the expenses incurred hereunder.

**IN WITNESS WHEREOF**, the parties have caused the Agreement to be executed.

**For the Indiana Department of Homeland Security:**

By: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_

Printed Name

\_\_\_\_\_

Title

**For \_\_\_\_\_ (Political Subdivision):**

By: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_

Printed Name \_\_\_\_\_

Title

**Enclosure 5**

<b>Roster of Mobile Support Unit Members: (please print legibly) Name Last, First, Middle</b>	<b>County of Residence</b>	<b>Employer's (or VF Dept.) Name</b>	<b>HR Director's Email address</b>	<b>Member Contact Information (Mobile phone &amp; Email address)</b>
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File: gt/H/MD/ Complete Comprehensive Survey 05-2011, gct edits 7-7-11