



# Special Operations Validation Procedure: HAZMAT

Michigan Mutual Aid Box Alarm System (MIMABAS)

10/17/19



## Introduction

The Michigan Mutual Aid Box Alarm System (MI-MABAS) Hazardous Materials validation process has been established to identify MABAS resources that are capable of effectively mobilizing personnel and resources across geographic regions, to respond to, and manage an event requiring a Hazardous Materials response. MI-MABAS Hazardous Materials Typing is based on FEMA's Fire/Hazardous Material Resource Typing Definitions. The resource typing can be based on the requirements for Type I, Type II or Type III resources.

The three steps for validation are:

1. **Self-Audit/Application:** Requesting team must complete an application and a self-audit demonstrating management, logistics and operational readiness support documentation. A letter of acknowledgement (See Attached) with supporting documents must be sent to Michigan MABAS for review;
2. **Demonstration of knowledge, skills and abilities:** Operational readiness will be evaluated based on team performance during hands on incident specific scenarios; and
3. **Memorandum of Understanding with MI-MABAS:** The special operations resource will become deployable when a signed MOU executed by both parties.

The three areas evaluated during the validation process are:

1. **Management Readiness:** Consists of systems (records, plans, agreements, processes, and procedures) to support immediate deployment of current hazardous materials resources based on NFPA 471 General Requirements.
2. **Logistical Readiness:** Readiness of an equipment cache, equipment housing, and other logistic resources needed to support an immediate deployment.
3. **Operational Readiness:** Readiness of the requisite number of deployable, trained, exercised, and qualified personnel that meet NFPA 471 criteria.

Upon completion, the resource will be included in the MI-MABAS Response Plan and can be deployed by MI-MABAS anywhere in the state based on incident needs.

Re-submittal of documentation will occur every 3 years and re-evaluation of team capabilities will occur every 5 years.



# Hazardous Materials Typing

MI-MABAS Hazardous Materials Typing is based on FEMA’s Fire/Hazardous Material Resource Typing Definitions. The resource typing can be based on the requirements for Type I, Type II or Type III as described below:

Components	Type I	Type II	Type III
<b>Field Testing</b>	Known Chemicals	Known Chemicals	Known Chemicals
	Unknown Chemicals	Unknown Chemicals	
	WMD Chem / Bio		
<b>Air Monitoring</b>	Combustible Gas Oxygen Carbon Monoxide Hydrogen Sulfide	Combustible Gas Oxygen Carbon Monoxide Hydrogen Sulfide	Combustible Gas Oxygen Carbon Monoxide Hydrogen Sulfide
	Specialty Gases Hydrocarbon Liquid Vapors	Specialty Gases Hydrocarbon Liquid Vapors	
	WMD Chem / Bio		
<b>Sampling: Capturing Labeling Evidence Collection</b>	Known Chemicals	Known Chemicals	Known Chemicals
	Unknown Chemicals	Unknown Chemicals	
	WMD Chem / Bio		
<b>Radiation Monitoring and Detection</b>	Gamma	Gamma	Gamma
	Beta	Beta	Beta
	Alpha Radionuclide	Alpha	
<b>Chemical Protective Clothing: Ensembles</b>	Liquid-Splash Protective	Liquid-Splash Protective	Liquid-Splash Protective
	Vapor Protective	Vapor Protective	
	Flash Fire Vapor Protective	Flash Fire Vapor Protective	
	WMD Chem / Bio Vapor Protective		
	WMD Chem / Bio Liquid Splash Protective		
<b>Chemical Protective Clothing: Gloves - Boots</b>	NFPA Compliant Replacement	NFPA Compliant Replacement	NFPA Compliant Replacement
	Hi-Temp. Protective Gloves Cryogenic Protective Gloves	Hi-Temp. Protective Gloves Cryogenic Protective Gloves	
	Radiation Protection Gloves		



Components	Type I	Type II	Type III
Technical Reference	Printed and Electronic	Printed and Electronic	Printed and Electronic
	Plume Air Modeling, Map Overlays	Plume Air Modeling, Map Overlays	
	WMD Chem / Bio Sources		
Special Capabilities	Heat Sensing	Heat Sensing	
	Night Vision	Night Vision	
	Digital Photo	Digital Photo	
	Digital Video		
Intervention	Diking, Damming, Absorption	Diking, Damming, Absorption	Diking, Damming, Absorption
	Liquid, Solid Leak Intervention	Liquid, Solid Leak Intervention	Liquid, Solid Leak Intervention
	Vapor Leak Intervention	Vapor Leak Intervention	
	Neutralization, Plugging, Patching	Neutralization, Plugging, Patching	
	WMD Chem / Bio Spill Containment		
Decontamination	Known Chemicals	Known Chemicals	Known Chemicals
	Unknown Chemicals	Unknown Chemicals	
	WMD Chem / Bio		
Communications	In-Suit	In-Suit	In-Suit
	Cell Phone	Cell Phone	Cell Phone
	Wireless Fax, Copy, Web Access	Wireless Fax, Copy, Web Access	Wireless Fax, Copy, Web Access
Respiratory Protection	SCBA	SCBA	SCBA
	APR or PAPR, WMD Chem / Bio Compliant		



## Self-Audit

**MANAGEMENT** readiness involves administrative oversight of personnel and resources before, during and after a deployment.

- Inter-Agency Agreement (More than one jurisdiction participating)
- A two-deep roster for the requested validation including the training levels of all personnel. A Team of 18 members x 2 deep = 36-member roster or a Company of 7 members x 2 deep = 14-member roster;
- A financial support policy that identifies how the team will be supported when deployed for an interdivisional response that may last up to 48 hours (i.e. Credit/Debit card, Cash, Fuel Cards, etc.);
- A mobilization (MOB) plan that specifies steps for activation and deployment for team. The MOB plan must include an estimated deployment time and distance the team is willing to travel;
- An activation policy that describes how team members receive advisories, alerts and activations if requested by another MI-MABAS division or the MI-MABAS Red Center;
- A communications plan describing how members will communicate with each other, from time of activation until time of deactivation. The plan shall also include communication capabilities for statewide communications (i.e. MPSCS radio capability);
- Operational Standard Operating Policies or Guidelines that describe how members will accomplish the MI-MABAS Hazardous Materials Typing operational objectives.
- An accountability policy that describes the accountability system used during deployments.

**LOGISTICAL** readiness requires the availability of a complete equipment cache that supports the immediate deployment and sustained operations before, during and after a 12-hour deployment.

- An inventory listing, location of the equipment cache and transportation assets ready for immediate deployment. The inventory should be broken down according to mission and listed as broad description and quantity;
- A description of the management inventory system used to track, test, maintain and monitor the equipment cache



**OPERATIONAL** readiness assesses the current availability of trained, exercised, and qualified members for immediate deployment. Members that are certified Firefighter I and II by the Michigan Firefighters Training Council (MFFTC) and are active members of a Michigan fire department will be exempt from providing individual certifications.

- Each member shall have current certifications for HazMat Operations level certification, CPR/AED, Blood borne Pathogens, Critical Incident Stress Debriefing (CISD), and NIMS 100, 200, 700 and 800.
- Members that are certified Firefighter I and II by the MFFTC and is an active member of a Michigan fire department will be exempt from providing individual certifications.
- Hazmat Specialists are required to achieve NFPA 472 and NFPA 1072 training requirements consistent with the MI-MABAS Hazardous Materials Typing;
- Hazmat Officers must meet the hazmat specialist requirements and achieve Company Officer I requirements for their department, MFFTC Company Officer I certification or demonstrate capabilities through field experience acceptable to the AHJ;
- Hazmat Team Leaders must achieve Company Officer II requirements for their department, MFFTC Company Officer II certification or demonstrate capabilities through field experience acceptable to the AHJ;
- Safety Officers are required to meet NFPA 472 training requirements or certification acceptable to the AHJ;
- Members must meet MIOSHA PART 432. HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE and PART 451. RESPIRATORY PROTECTION